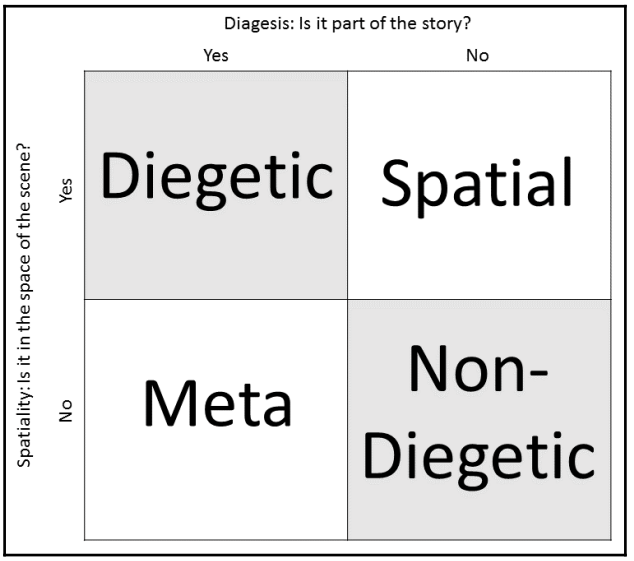
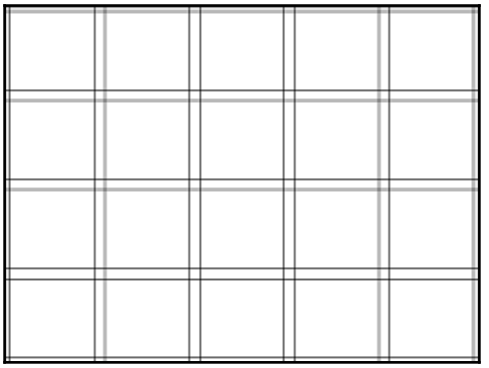
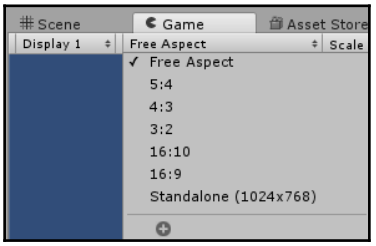
Chapter 1: Designing User Interfaces

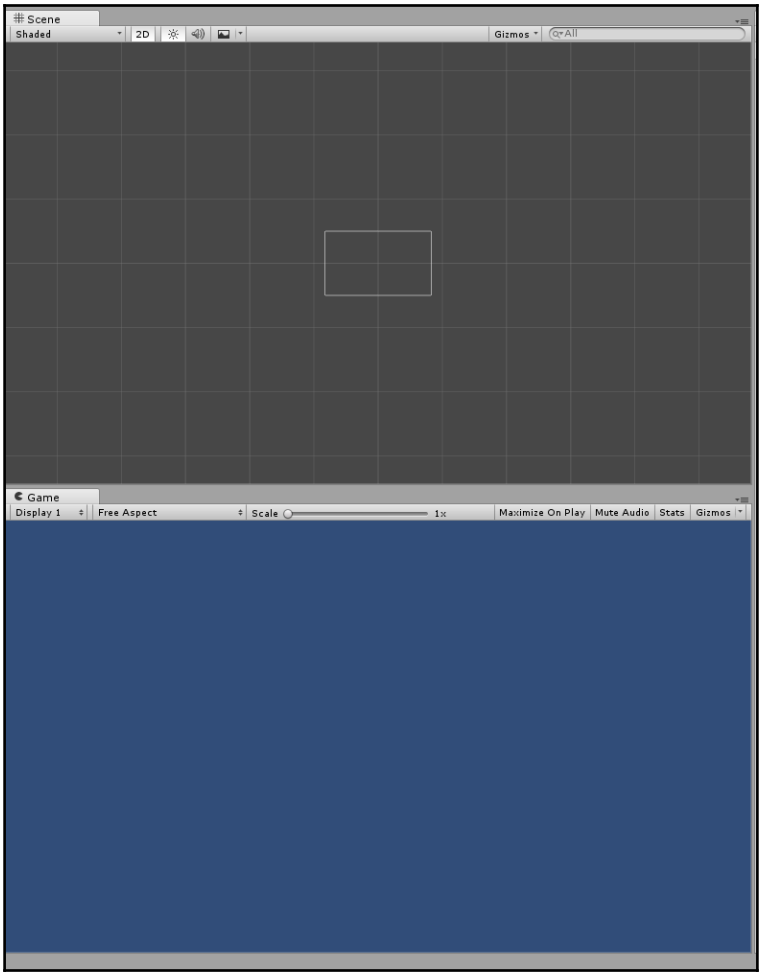


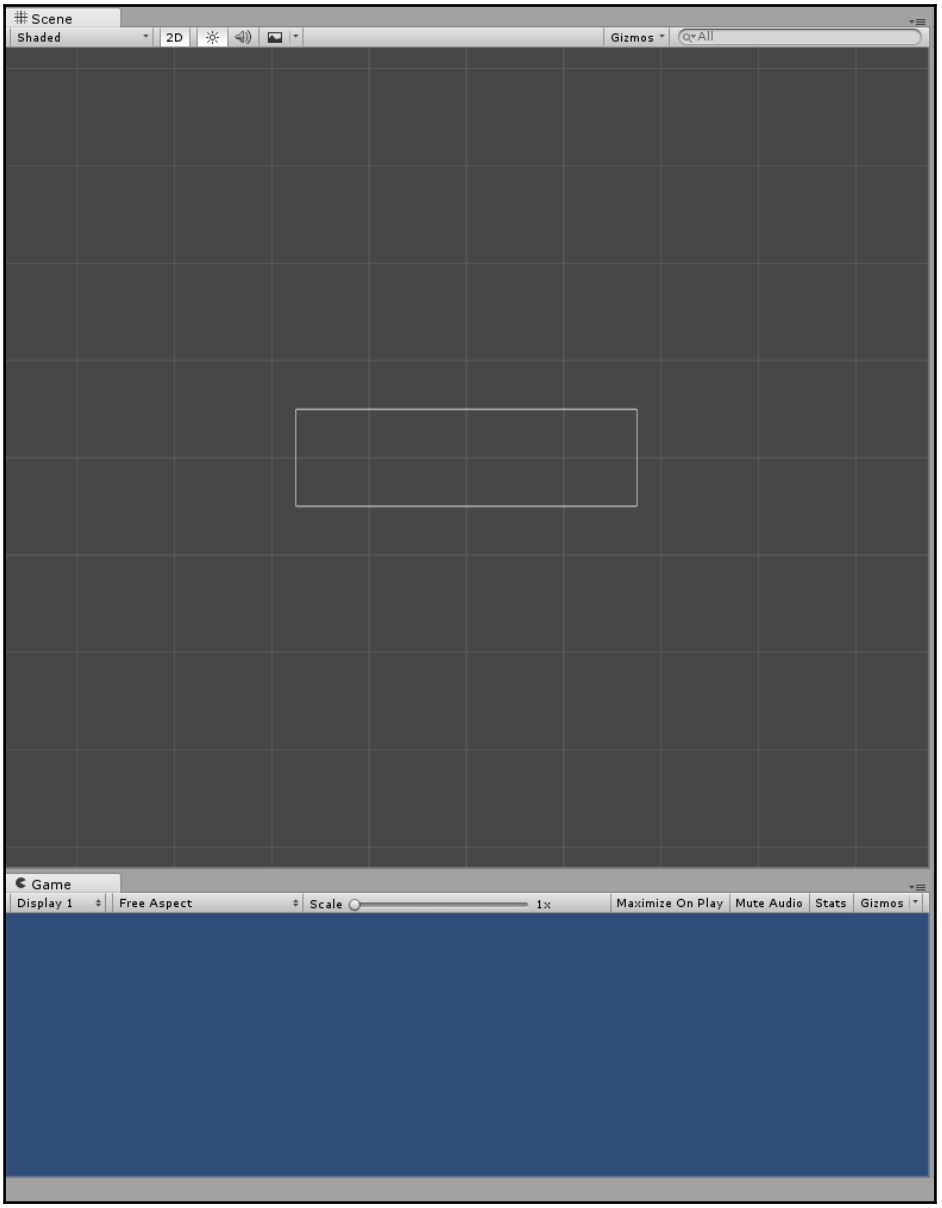


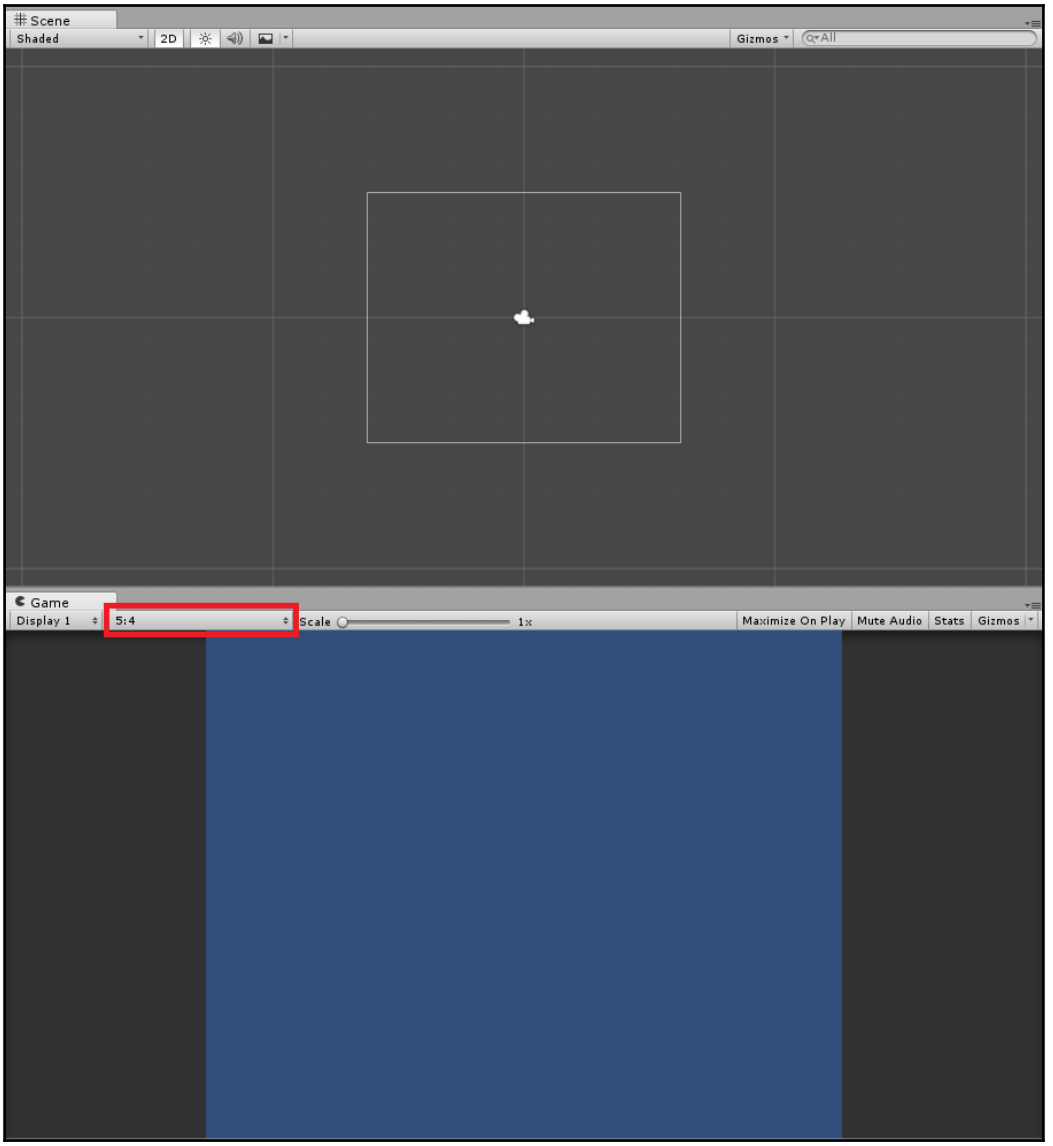
$$\frac{1024px}{768px} = \frac{4}{3}$$

Aspect Ratio	Resolution			
3:2	720x480 1152x768	1280x854	1440x960	2880x1920
4:3	640x480 800x600 960x720	1024x768 1280x960 1400x1050	1440x1080 1600x1200 1856x1392	1920x1440 2048x1536
5:3	1280x768	3000x1800		
5:4	1280x1024	2560x2048	5120x4096	
16:9	1024x576 1152x648	1280x720 1366x768	1600x900 1920x1080	2560x1440 3840x2160
16:10	640x400 1280x800	1440x900 1680x1050	1920x1200 2560x1600	3840x2400

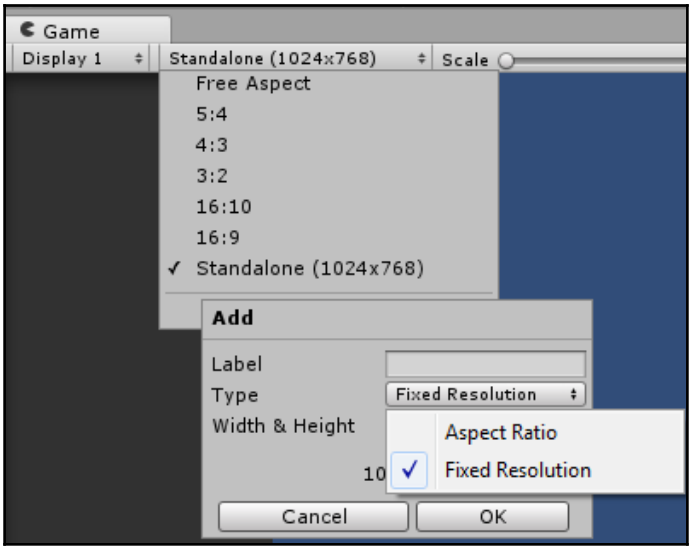


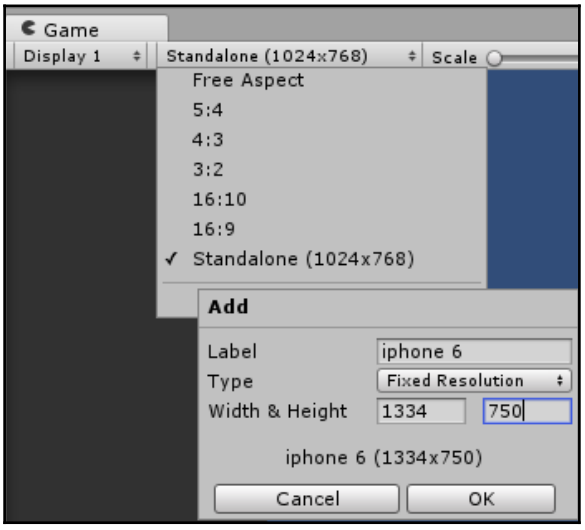

Scene
Shaded
2D
Gizmos
Game
Display 1
Free Aspect
Scale
1x
Maximize On Play
Mute Audio
Stats
Gizmos

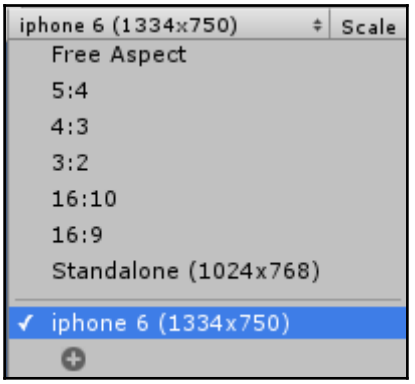

Scene
Shaded
2D
Gizmos
Q▾All
Game
Display 1
Free Aspect
Scale
1x
Maximize On Play
Mute Audio
Stats
Gizmos

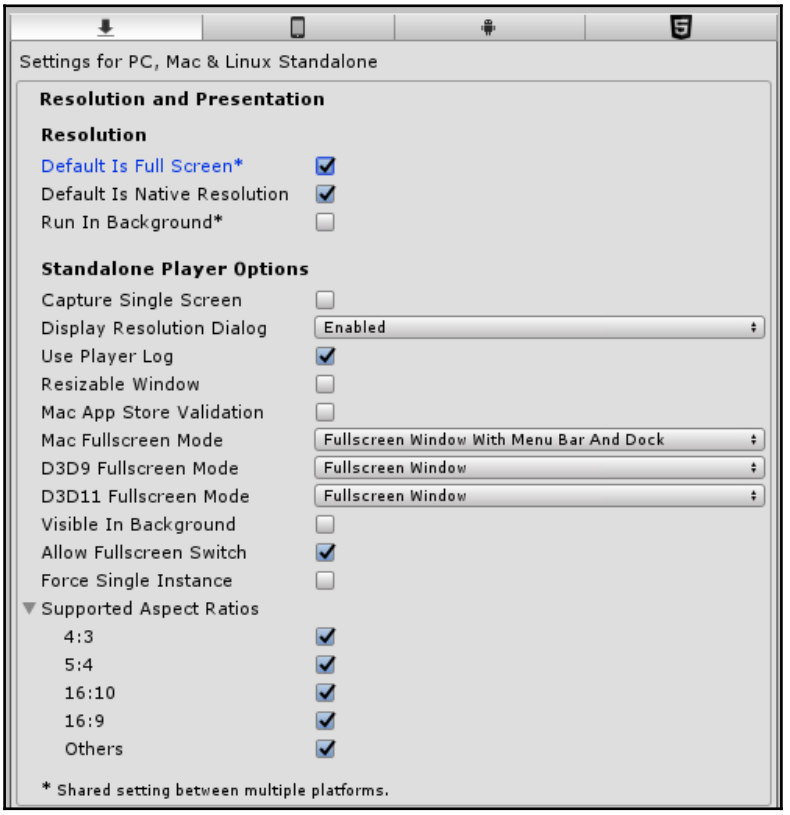

Scene
Shaded
2D
Gizmos
Game
Display 1
5:4
Scale
1x
Maximize On Play
Mute Audio
Stats
Gizmos

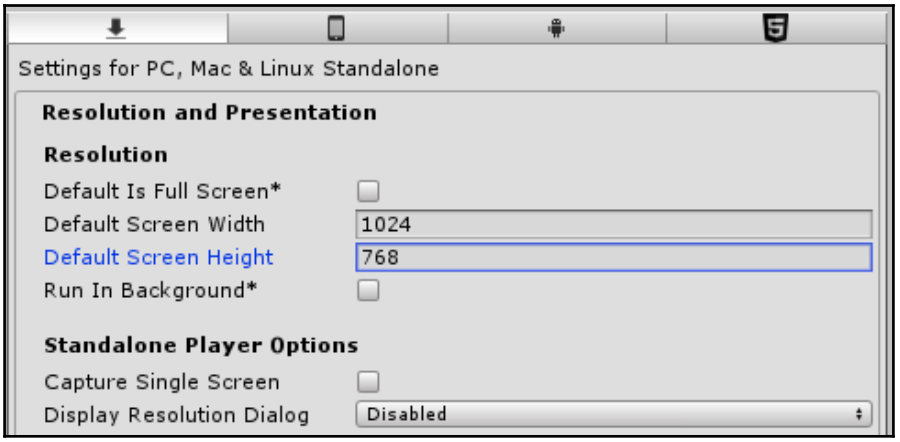
Game
Display 1
Standalone (1024x768)
Scale
0.58:

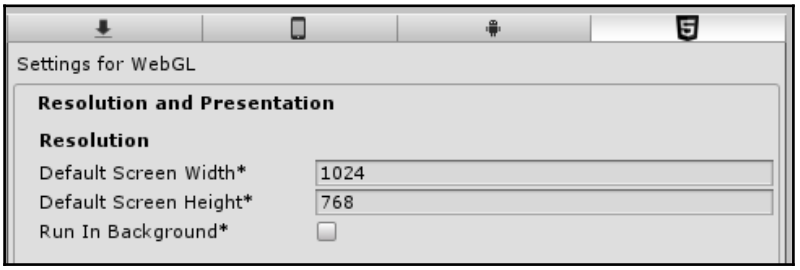

Game
Display 1
Standalone (1024x768)
Scale
Free Aspect
5:4
4:3
3:2
16:10
16:9
✓ Standalone (1024x768)
Add
Label
Type
Fixed Resolution
Width & Height
Aspect Ratio
10
✓
Fixed Resolution
Cancel
OK

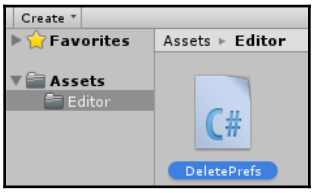

Game
Display 1
Standalone (1024x768)
Scale
Free Aspect
5:4
4:3
3:2
16:10
16:9
✓ Standalone (1024x768)
Add
Label
iphone 6
Type
Fixed Resolution
Width & Height
1334
750
iphone 6 (1334x750)
Cancel
OK

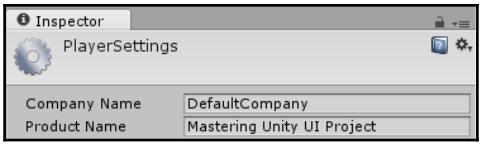

iphone 6 (1334x750)
Scale
Free Aspect
5:4
4:3
3:2
16:10
16:9
Standalone (1024x768)
iphone 6 (1334x750)

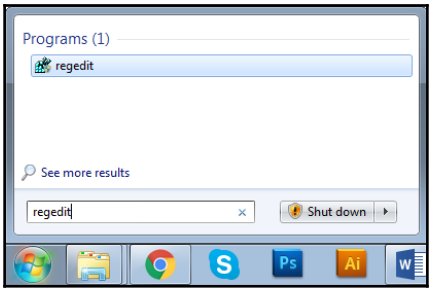

Settings for PC, Mac & Linux Standalone
Resolution and Presentation
Resolution
Default Is Full Screen*
Default Is Native Resolution
Run In Background*
Standalone Player Options
Capture Single Screen
Display Resolution Dialog
Enabled
Use Player Log
Resizable Window
Mac App Store Validation
Mac Fullscreen Mode
Fullscreen Window With Menu Bar And Dock
D3D9 Fullscreen Mode
Fullscreen Window
D3D11 Fullscreen Mode
Fullscreen Window
Visible In Background
Allow Fullscreen Switch
Force Single Instance
Supported Aspect Ratios
4:3
5:4
16:10
16:9
Others
* Shared setting between multiple platforms.

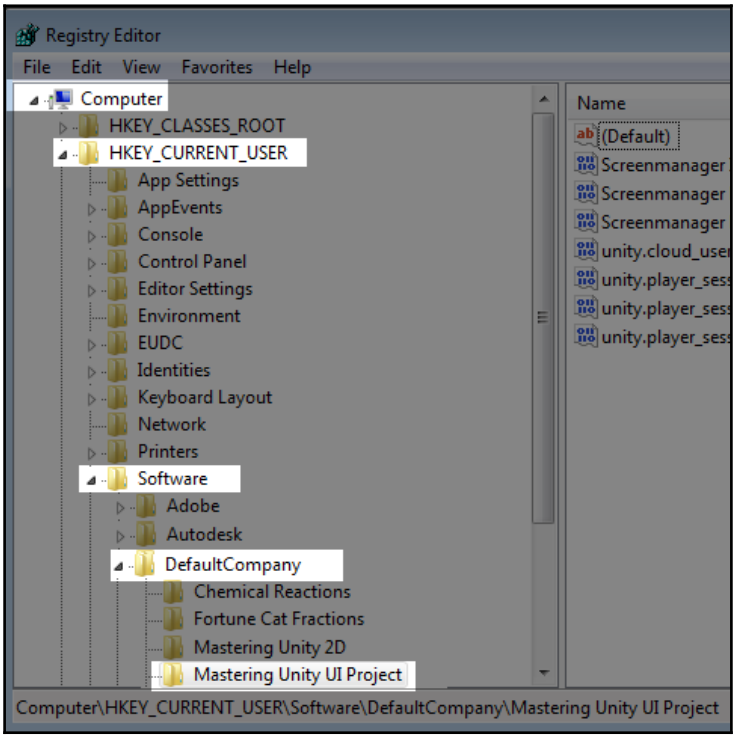

Settings for PC, Mac & Linux Standalone
Resolution and Presentation
Resolution
Default Is Full Screen*
Default Screen Width
1024
Default Screen Height
768
Run In Background*
Standalone Player Options
Capture Single Screen
Display Resolution Dialog
Disabled

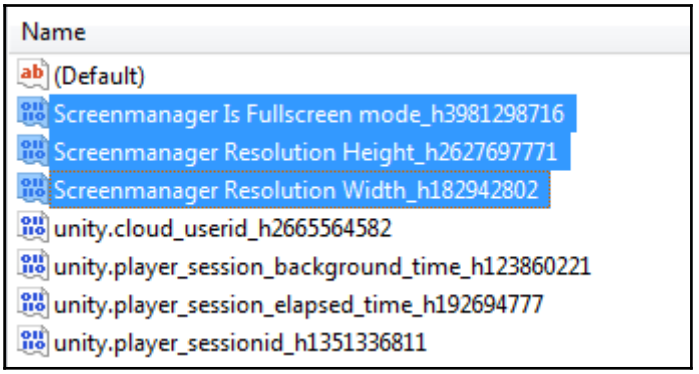

Settings for WebGL
Resolution and Presentation
Resolution
Default Screen Width*
1024
Default Screen Height*
768
Run In Background*

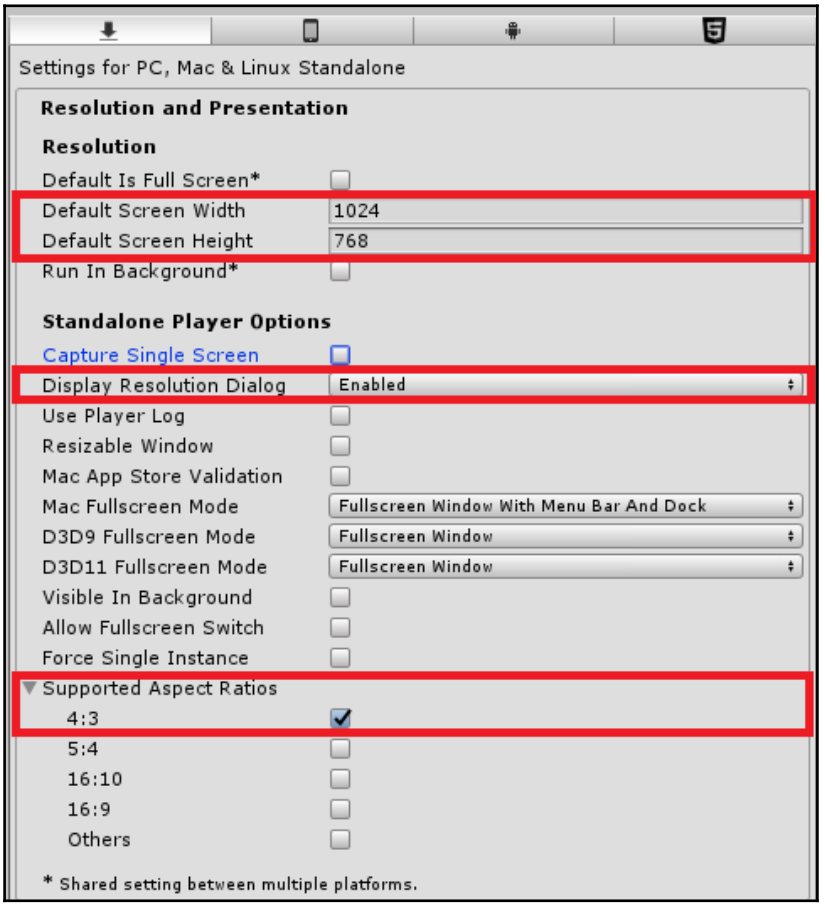

Create
Favorites
Assets
Editor
Assets ▸ Editor
C#
DeletePrefs

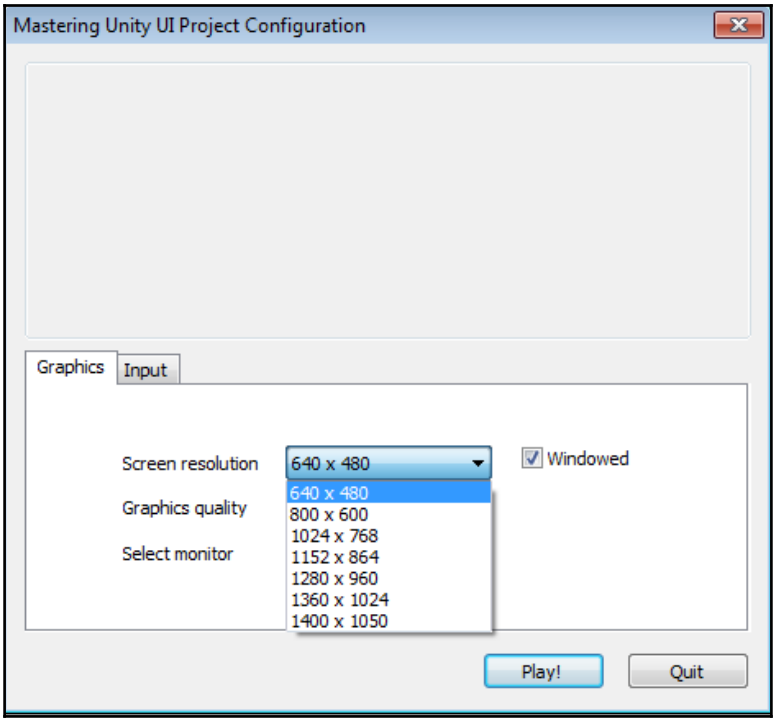

Inspector
PlayerSettings
Company Name
DefaultCompany
Product Name
Mastering Unity UI Project

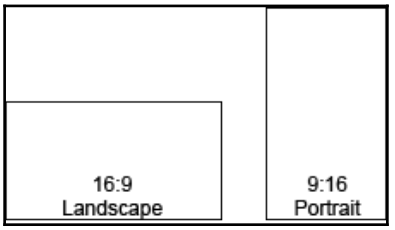

Programs (1)
regedit
See more results
regedit
Shut down

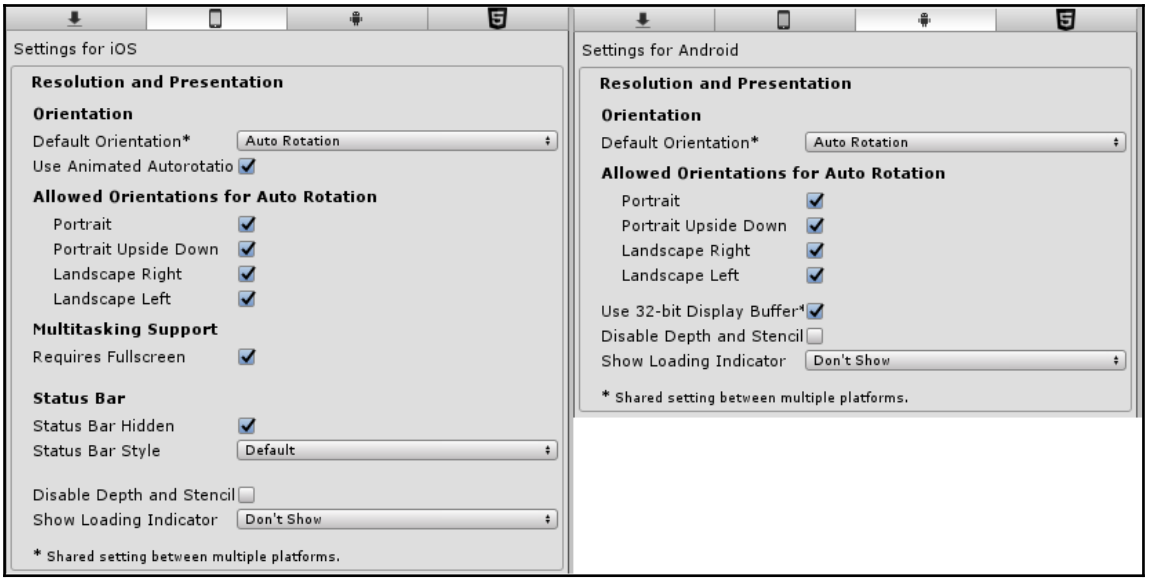

Registry Editor
File Edit View Favorites Help
Computer
HKEY_CLASSES_ROOT
HKEY_CURRENT_USER
App Settings
AppEvents
Console
Control Panel
Editor Settings
Environment
EUDC
Identities
Keyboard Layout
Network
Printers
Software
Adobe
Autodesk
DefaultCompany
Chemical Reactions
Fortune Cat Fractions
Mastering Unity 2D
Mastering Unity UI Project
Name
(Default)
Screenmanager
Screenmanager
Screenmanager
unity.cloud_user
unity.player_sess
unity.player_sess
unity.player_sess
Computer\HKEY_CURRENT_USER\Software\DefaultCompany\Mastering Unity UI Project

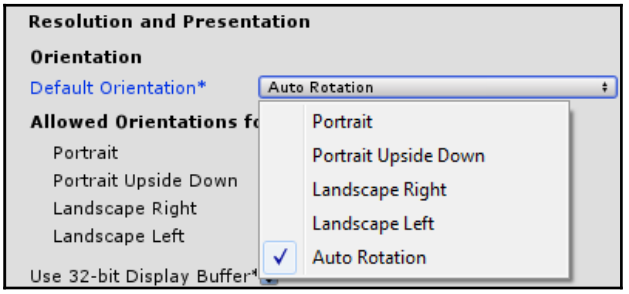

Name
(Default)
Screenmanager Is Fullscreen mode_h3981298716
Screenmanager Resolution Height_h2627697771
Screenmanager Resolution Width_h182942802
unity.cloud_userid_h2665564582
unity.player_session_background_time_h123860221
unity.player_session_elapsed_time_h192694777
unity.player_sessionid_h1351336811

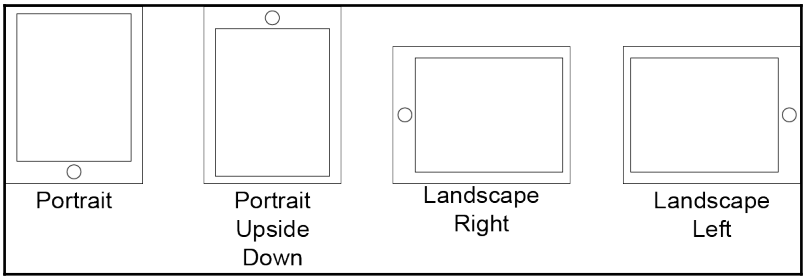

Settings for PC, Mac & Linux Standalone
Resolution and Presentation
Resolution
Default Is Full Screen*
Default Screen Width
1024
Default Screen Height
768
Run In Background*
Standalone Player Options
Capture Single Screen
Display Resolution Dialog
Enabled
Use Player Log
Resizable Window
Mac App Store Validation
Mac Fullscreen Mode
Fullscreen Window With Menu Bar And Dock
D3D9 Fullscreen Mode
Fullscreen Window
D3D11 Fullscreen Mode
Fullscreen Window
Visible In Background
Allow Fullscreen Switch
Force Single Instance
Supported Aspect Ratios
4:3
5:4
16:10
16:9
Others
* Shared setting between multiple platforms.


Mastering Unity UI Project Configuration
Graphics
Input
Screen resolution
640 x 480
Windowed
Graphics quality
Select monitor
640 x 480
800 x 600
1024 x 768
1152 x 864
1280 x 960
1360 x 1024
1400 x 1050
Play!
Quit


16:9
Landscape
9:16
Portrait

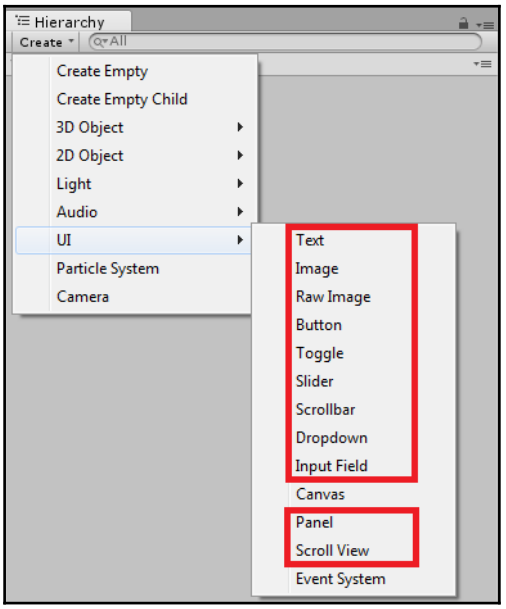

Settings for iOS
Resolution and Presentation
Orientation
Default Orientation*
Auto Rotation
Use Animated Autorotatio
Allowed Orientations for Auto Rotation
Portrait
Portrait Upside Down
Landscape Right
Landscape Left
Multitasking Support
Requires Fullscreen
Status Bar
Status Bar Hidden
Status Bar Style
Default
Disable Depth and Stencil
Show Loading Indicator
Don't Show
* Shared setting between multiple platforms.
Settings for Android
Resolution and Presentation
Orientation
Default Orientation*
Auto Rotation
Allowed Orientations for Auto Rotation
Portrait
Portrait Upside Down
Landscape Right
Landscape Left
Use 32-bit Display Buffer*
Disable Depth and Stencil
Show Loading Indicator
Don't Show
* Shared setting between multiple platforms.

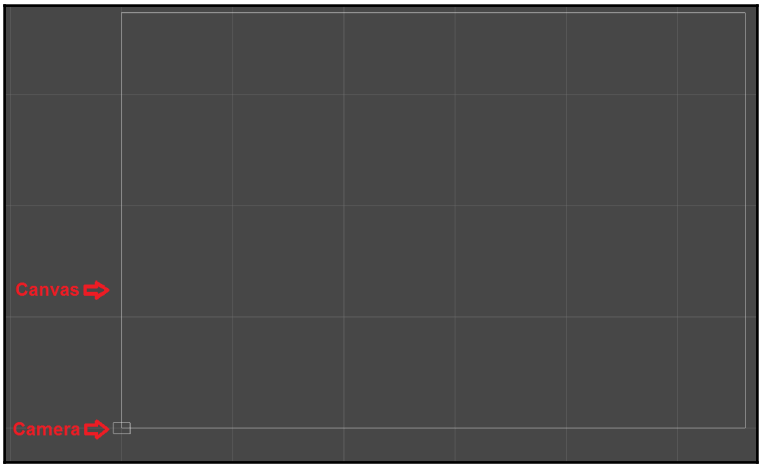

Resolution and Presentation
Orientation
Default Orientation*
Auto Rotation
Portrait
Portrait Upside Down
Landscape Right
Landscape Left
Auto Rotation

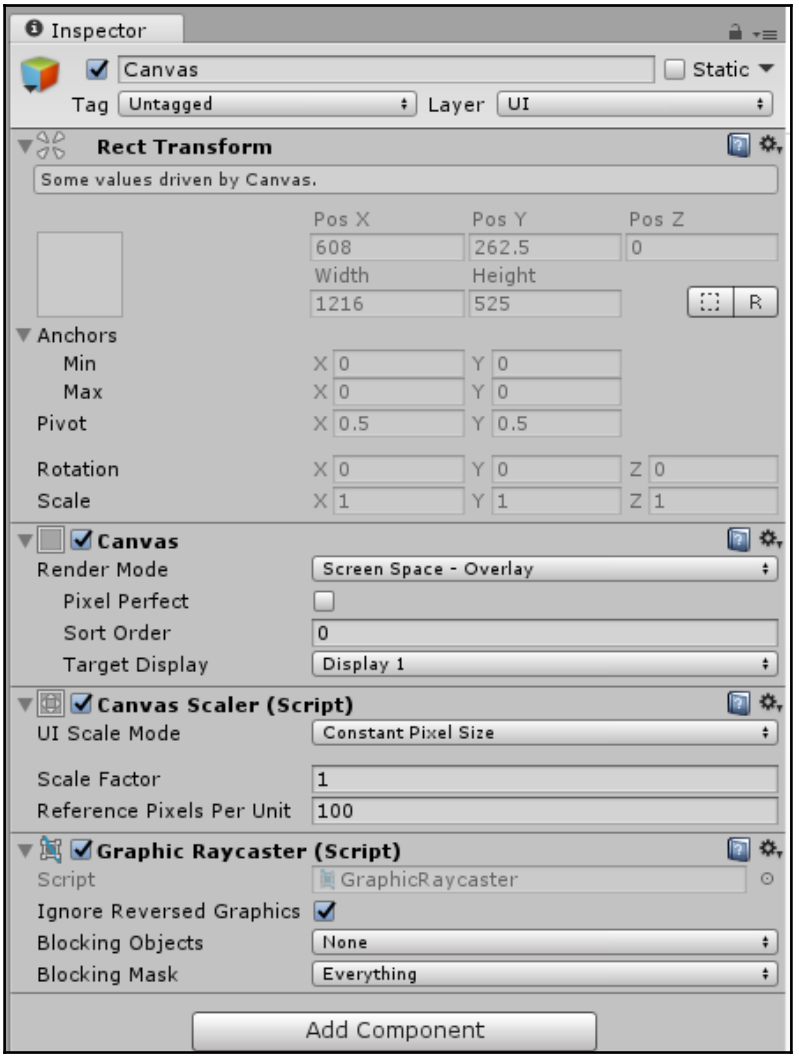

Portrait
Portrait Upside Down
Landscape Right
Landscape Left

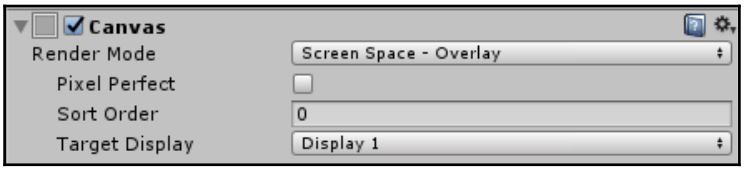
Allowed Orientations for Auto Rotation
Portrait
Portrait Upside Down
Landscape Right
Landscape Left

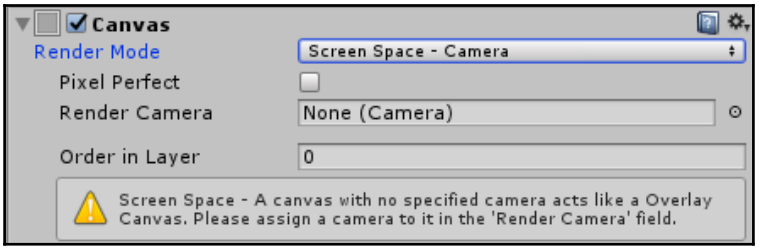
Chapter 2:
Canvases, Panels, and Basic Layouts

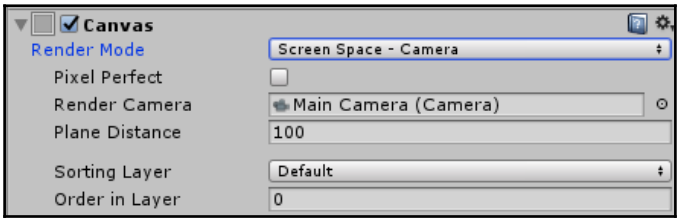


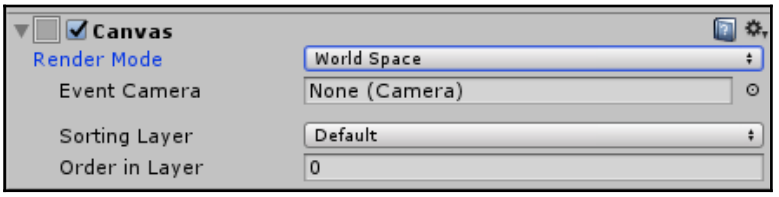


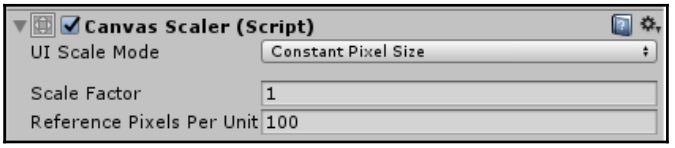

Inspector
Canvas
Static
Tag
Untagged
Layer
UI
Rect Transform
Some values driven by Canvas.
Pos X
Pos Y
Pos Z
608
262.5
0
Width
Height
1216
525
R
Anchors
Min
X 0
Y 0
Max
X 0
Y 0
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas
Render Mode
Screen Space - Overlay
Pixel Perfect
Sort Order
0
Target Display
Display 1
Canvas Scaler (Script)
UI Scale Mode
Constant Pixel Size
Scale Factor
1
Reference Pixels Per Unit
100
Graphic Raycaster (Script)
Script
GraphicRaycaster
Ignore Reversed Graphics
Blocking Objects
None
Blocking Mask
Everything
Add Component

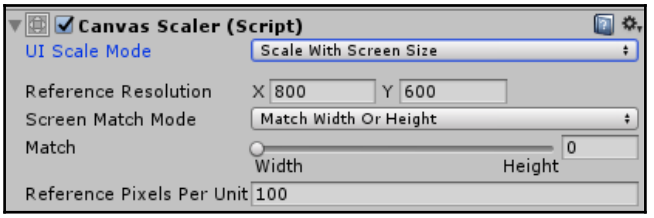

Canvas
Render Mode
Screen Space - Overlay
Pixel Perfect
Sort Order
0
Target Display
Display 1

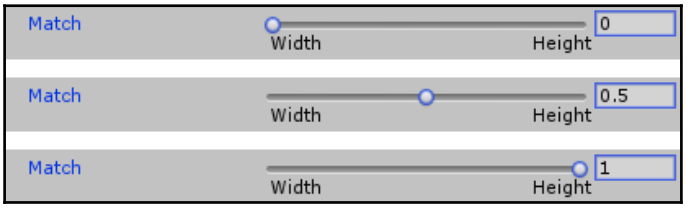

Canvas
Render Mode
Screen Space - Camera
Pixel Perfect
Render Camera
None (Camera)
Order in Layer
0
Screen Space - A canvas with no specified camera acts like a Overlay Canvas. Please assign a camera to it in the 'Render Camera' field.

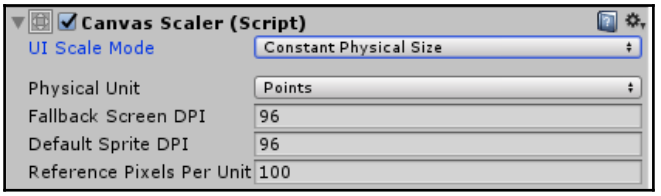

Canvas
Render Mode
Screen Space - Camera
Pixel Perfect
Render Camera
Main Camera (Camera)
Plane Distance
100
Sorting Layer
Default
Order in Layer
0

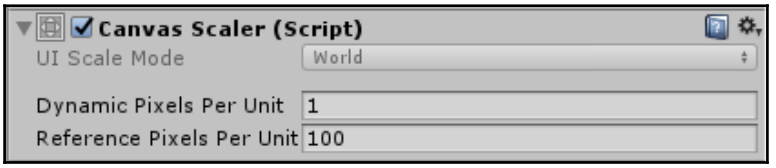

Canvas
Render Mode
World Space
Event Camera
None (Camera)
Sorting Layer
Default
Order in Layer
0

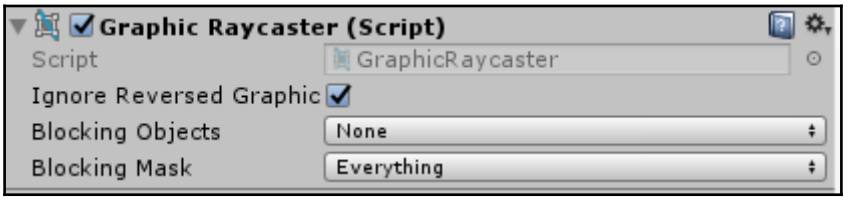

Canvas Scaler (Script)
UI Scale Mode
Constant Pixel Size
Scale Factor
1
Reference Pixels Per Unit
100

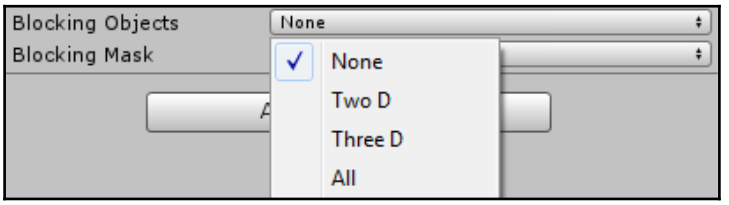

Canvas Scaler (Script)
UI Scale Mode
Scale With Screen Size
Reference Resolution
X 800
Y 600
Screen Match Mode
Match Width Or Height
Match
0
Width
Height
Reference Pixels Per Unit
100

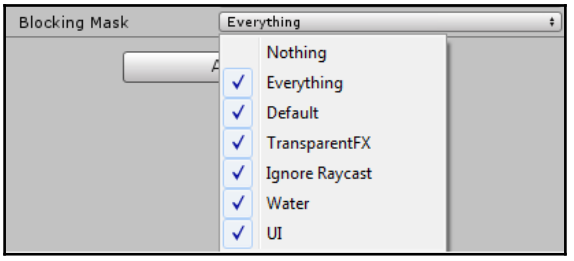

Match
0
Width
Height
Match
0.5
Width
Height
Match
1
Width
Height

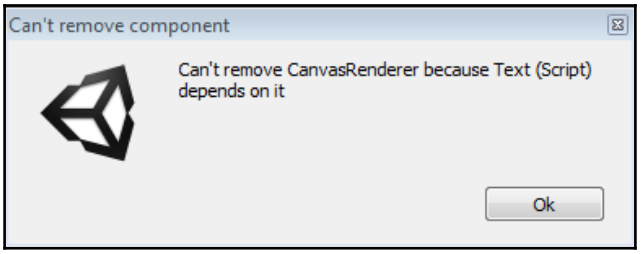

Canvas Scaler (Script)
UI Scale Mode
Constant Physical Size
Physical Unit
Points
Fallback Screen DPI
96
Default Sprite DPI
96
Reference Pixels Per Unit
100

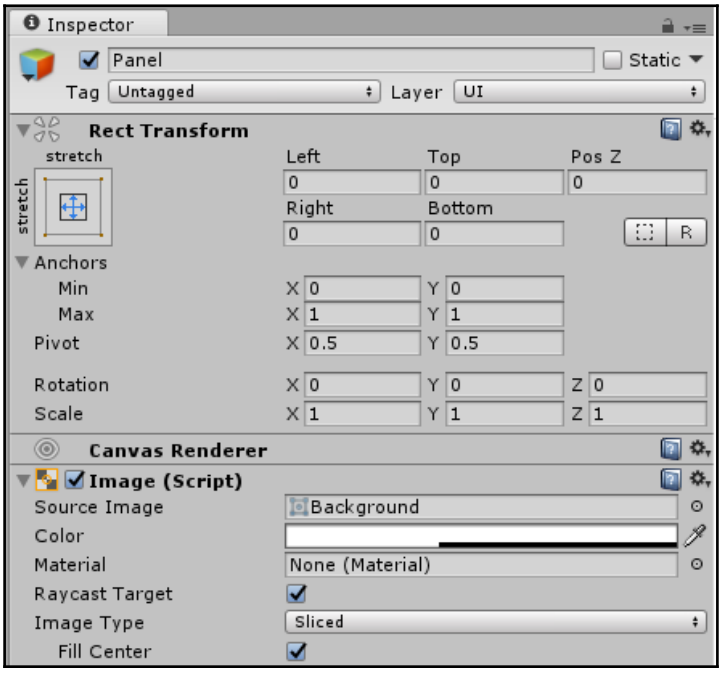

Canvas Scaler (Script)
UI Scale Mode
World
Dynamic Pixels Per Unit
1
Reference Pixels Per Unit
100


Graphic Raycaster (Script)
Script
GraphicRaycaster
Ignore Reversed Graphic
Blocking Objects
None
Blocking Mask
Everything

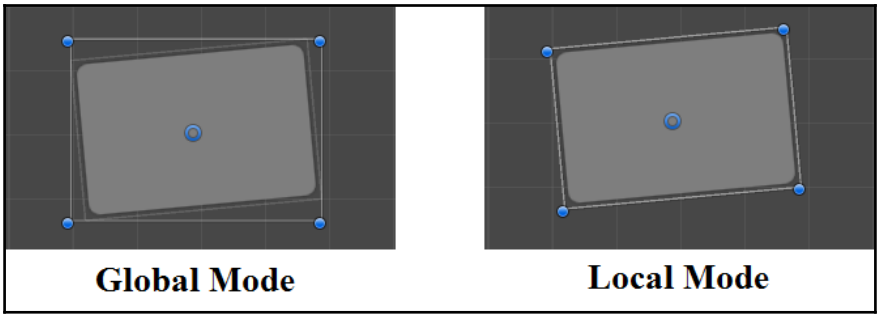

Blocking Objects
None
Blocking Mask
None
Two D
Three D
All

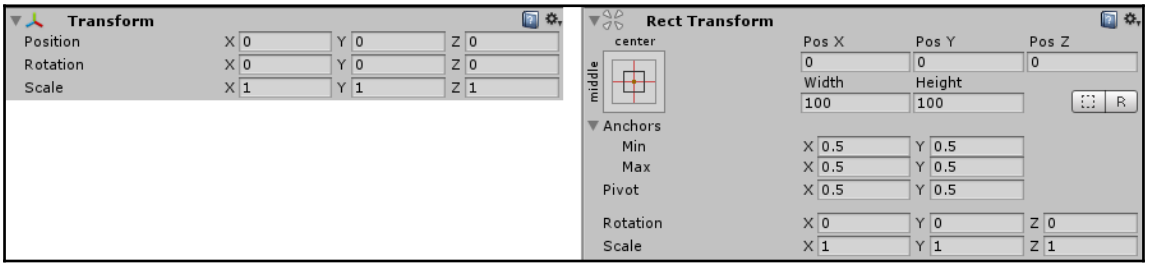

Blocking Mask
Everything
Nothing
Everything
Default
TransparentFX
Ignore Raycast
Water
UI

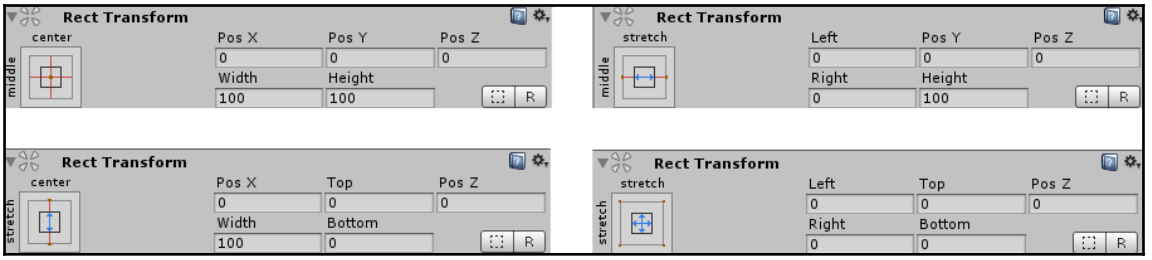

Can't remove component
Can't remove CanvasRenderer because Text (Script) depends on it
Ok

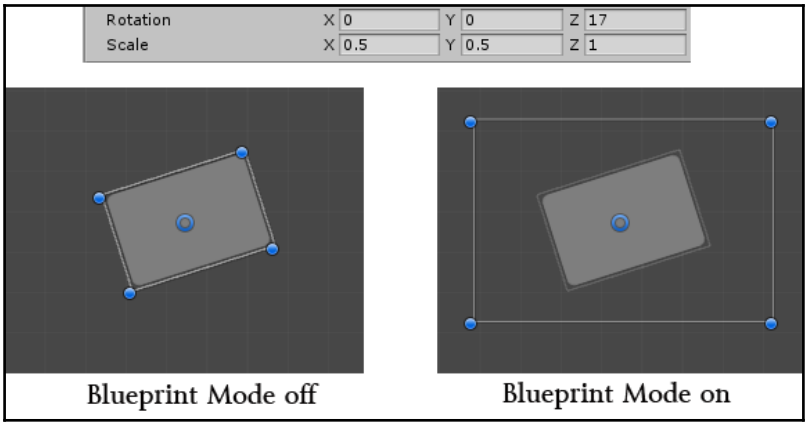

Inspector
Panel
Static
Tag
Untagged
Layer
UI
Rect Transform
stretch
Left
Top
Pos Z
Right
Bottom
Anchors
Min
Max
Pivot
Rotation
Scale
Canvas Renderer
Image (Script)
Source Image
Background
Color
Material
None (Material)
Raycast Target
Image Type
Sliced
Fill Center

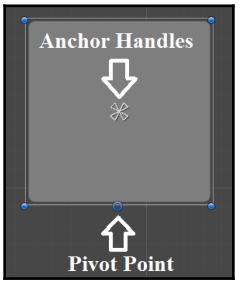
Center
Global
Pivot
Local

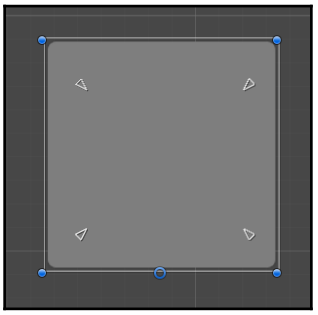

Global Mode
Local Mode

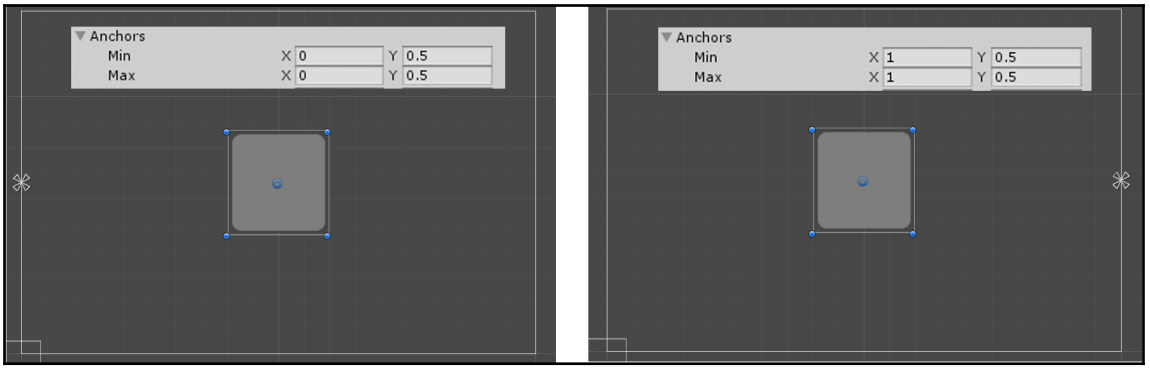

Transform
Position
Rotation
Scale
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
Width
Height
Anchors
Min
Max
Pivot
Rotation
Scale

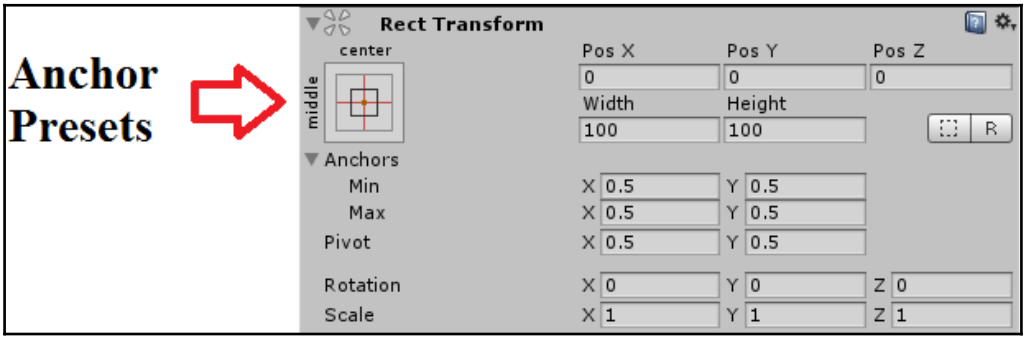

Rect Transform
center
middle
Pos X
Pos Y
Pos Z
Width
Height
Rect Transform
stretch
middle
Left
Pos Y
Pos Z
Right
Height
Rect Transform
center
stretch
Pos X
Top
Pos Z
Width
Bottom
Rect Transform
stretch
stretch
Left
Top
Pos Z
Right
Bottom

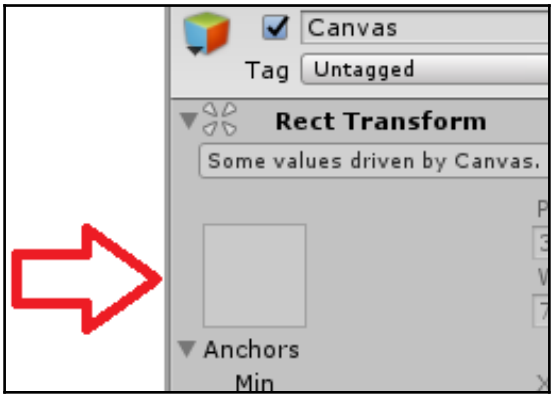

Rotation
X 0
Y 0
Z 17
Scale
X 0.5
Y 0.5
Z 1
Blueprint Mode off
Blueprint Mode on

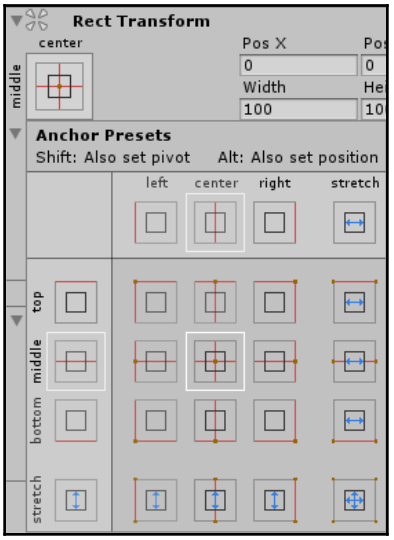

Anchor Handles
Pivot Point

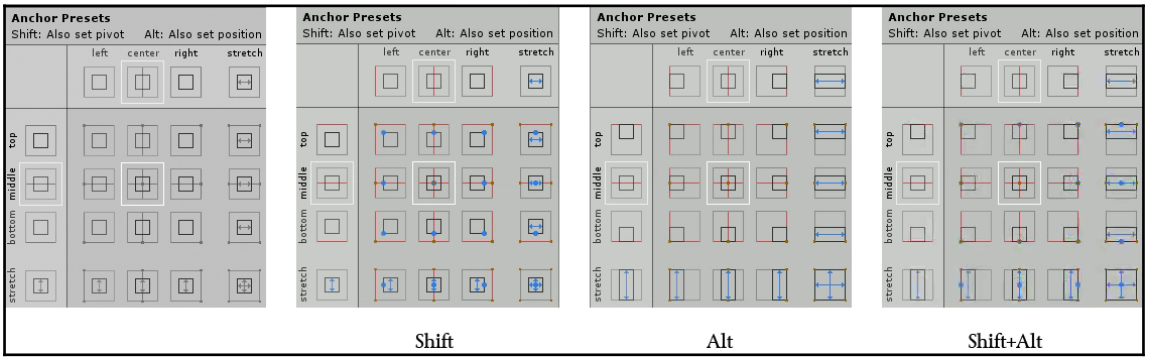


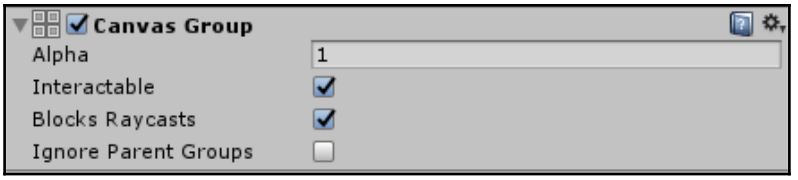

Anchors
Min X 0 Y 0.5
Max X 0 Y 0.5
Anchors
Min X 1 Y 0.5
Max X 1 Y 0.5

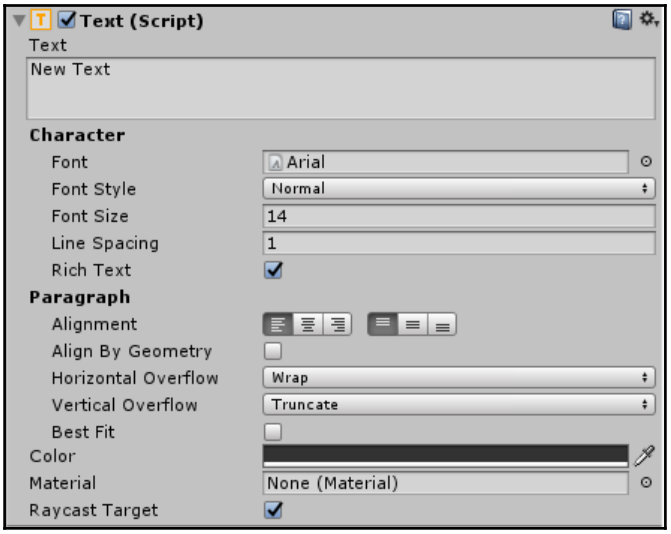

Anchor Presets
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
100
100
R
Anchors
Min X 0.5 Y 0.5
Max X 0.5 Y 0.5
Pivot X 0.5 Y 0.5
Rotation X 0 Y 0 Z 0
Scale X 1 Y 1 Z 1


Canvas
Tag Untagged
Rect Transform
Some values driven by Canvas.
Anchors
Min


Rect Transform
center
middle
Pos X
0
Width
100
Anchor Presets
Shift: Also set pivot
Alt: Also set position
left
center
right
stretch
top
middle
bottom
stretch


Anchor Presets
Shift: Also set pivot
Alt: Also set position
Shift
Alt
Shift+Alt


Canvas Group
Alpha
1
Interactable
Blocks Raycasts
Ignore Parent Groups


Text (Script)
Text
New Text
Character
Font
Arial
Font Style
Normal
Font Size
14
Line Spacing
1
Rich Text
Paragraph
Alignment
Align By Geometry
Horizontal Overflow
Wrap
Vertical Overflow
Truncate
Best Fit
Color
Material
None (Material)
Raycast Target

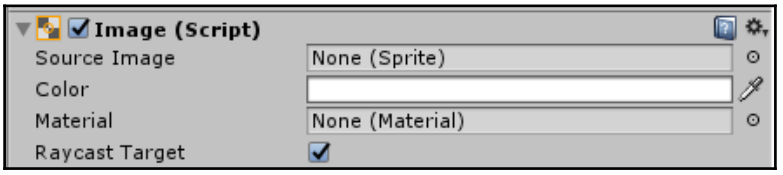
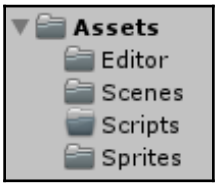
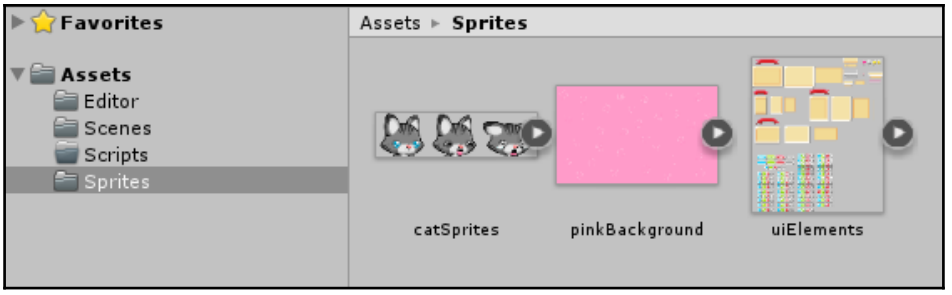
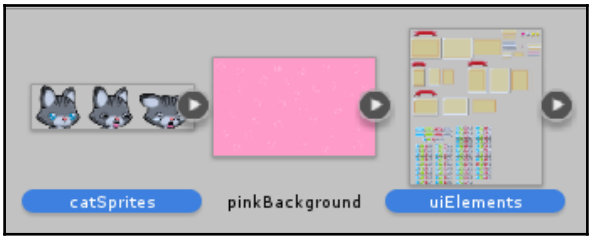
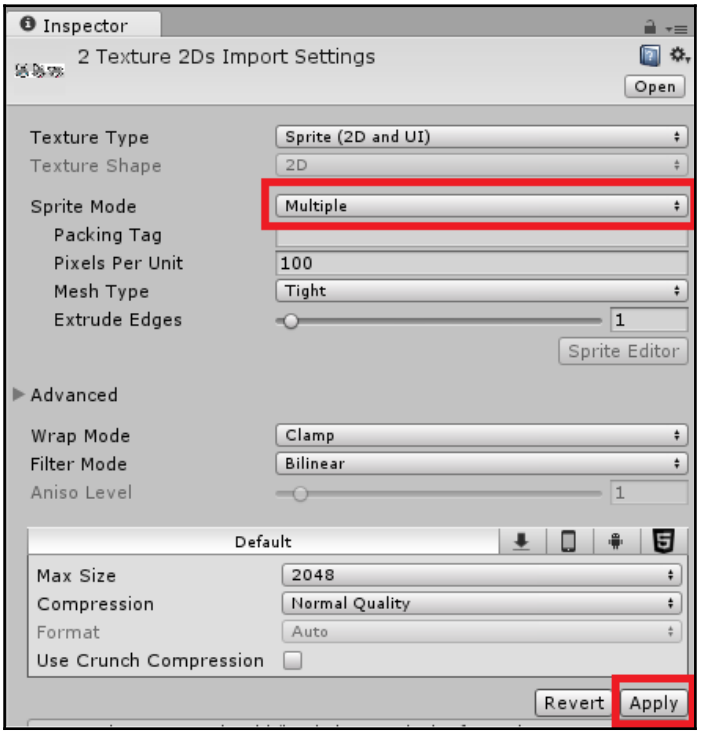


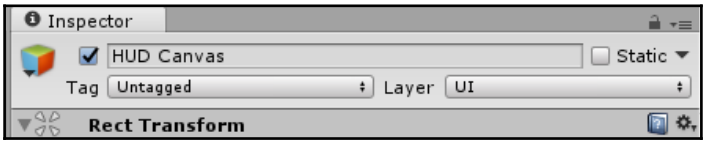
Image (Script)
Source Image
None (Sprite)
Color
Material
None (Material)
Raycast Target

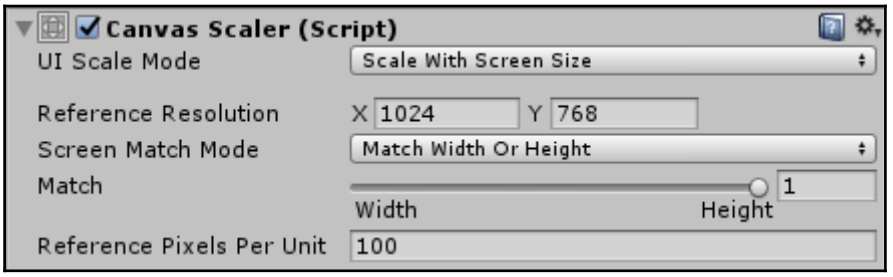

Assets
Editor
Scenes
Scripts
Sprites

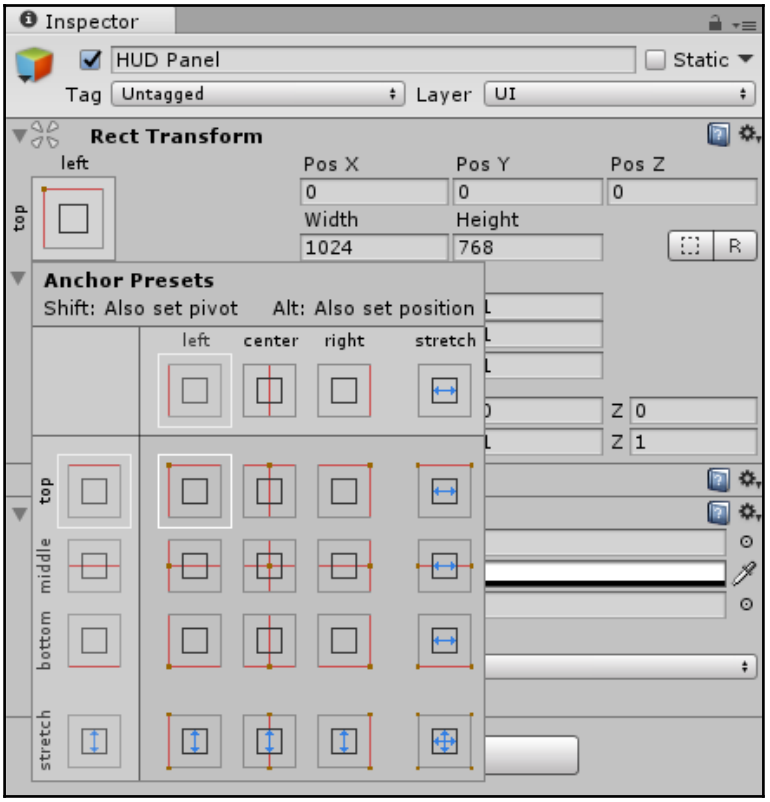

Favorites
Assets
Editor
Scenes
Scripts
Sprites
Assets ▸ Sprites
catSprites
pinkBackground
uiElements


catSprites
pinkBackground
uiElements


Inspector
2 Texture 2Ds Import Settings
Open
Texture Type
Sprite (2D and UI)
Texture Shape
2D
Sprite Mode
Multiple
Packing Tag
Pixels Per Unit
100
Mesh Type
Tight
Extrude Edges
1
Sprite Editor
Advanced
Wrap Mode
Clamp
Filter Mode
Bilinear
Aniso Level
1
Default
Max Size
2048
Compression
Normal Quality
Format
Auto
Use Crunch Compression
Revert
Apply


Inspector
HUD Canvas
Static
Tag
Untagged
Layer
UI
Rect Transform


Canvas Scaler (Script)
UI Scale Mode
Scale With Screen Size
Reference Resolution
X 1024
Y 768
Screen Match Mode
Match Width Or Height
Match
1
Width
Height
Reference Pixels Per Unit
100


Inspector
HUD Panel
Static
Tag
Untagged
Layer
UI
Rect Transform
left
top
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
1024
768
R
Anchor Presets
Shift: Also set pivot
Alt: Also set position
left
center
right
stretch
top
middle
bottom
stretch
Z 0
Z 1

Assets ▸ Sprites
catSprites
pinkBackground
uiElements
uiElements_0
uiElements_1

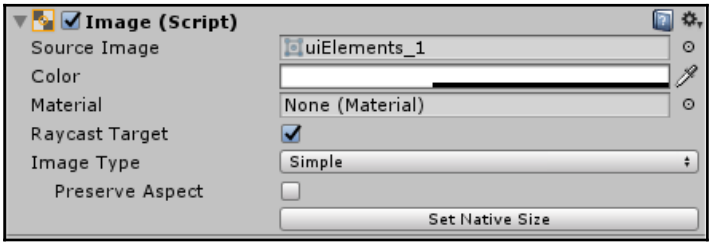
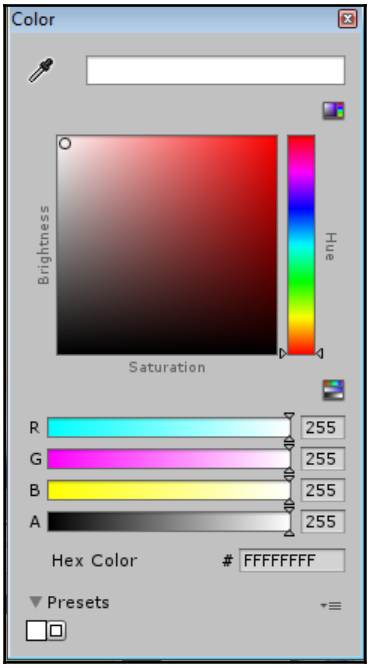
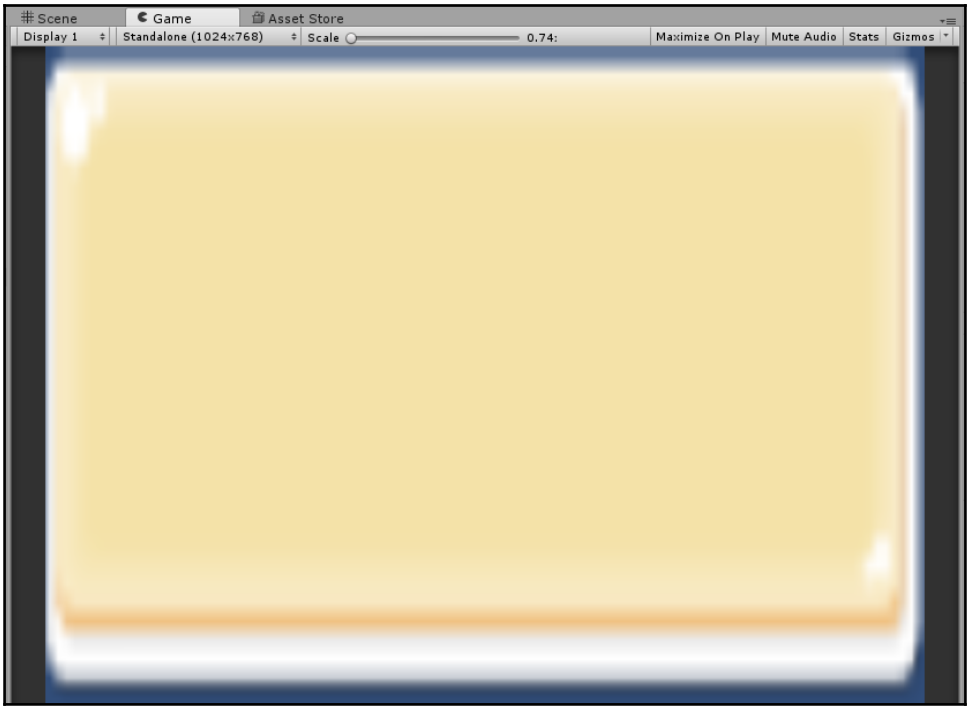


Image (Script)
Source Image
uiElements_1
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size


Color
Brightness
Hue
Saturation
R
255
G
255
B
255
A
255
Hex Color
#
FFFFFFFF
Presets


Scene
Game
Asset Store
Display 1
Standalone (1024x768)
Scale
0.74:
Maximize On Play
Mute Audio
Stats
Gizmos

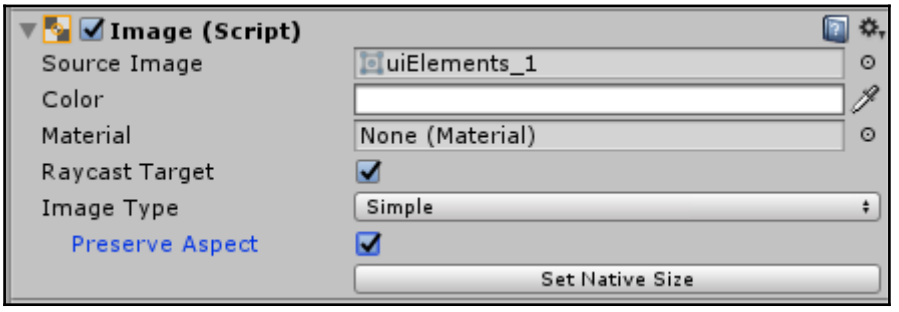
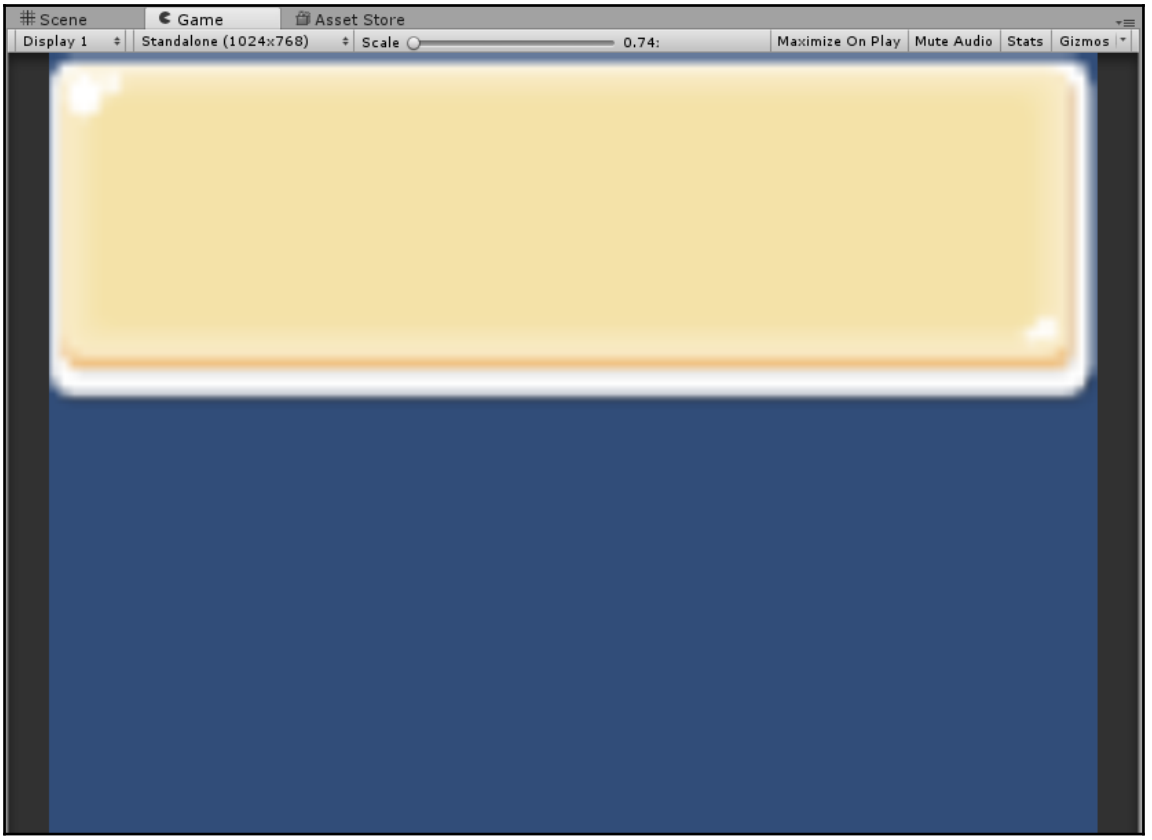
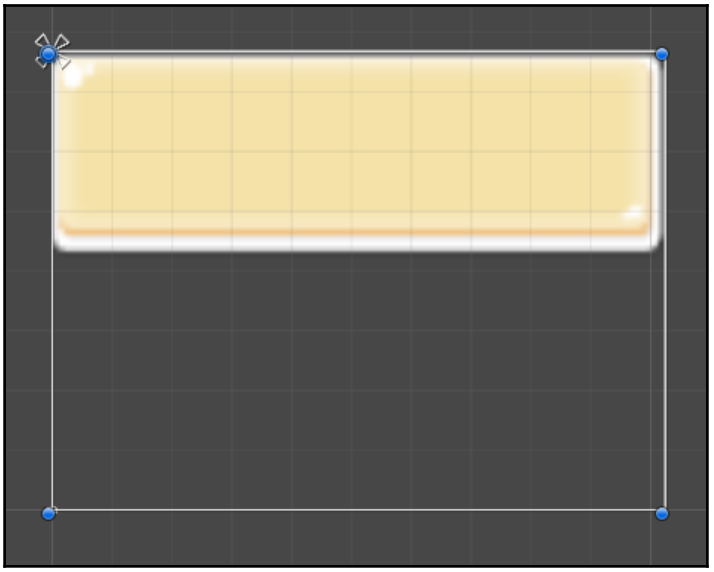
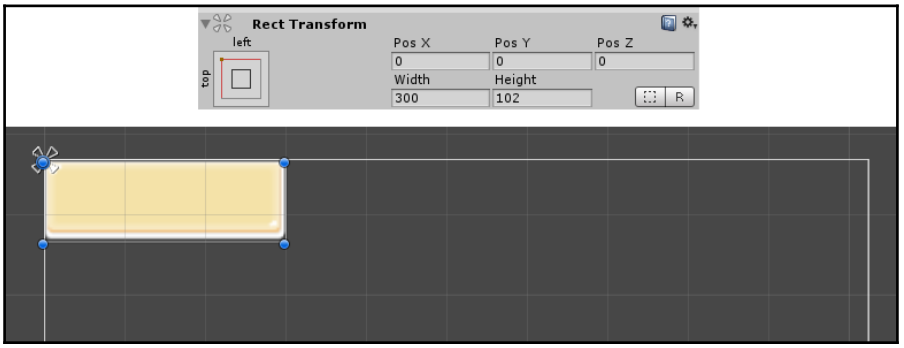
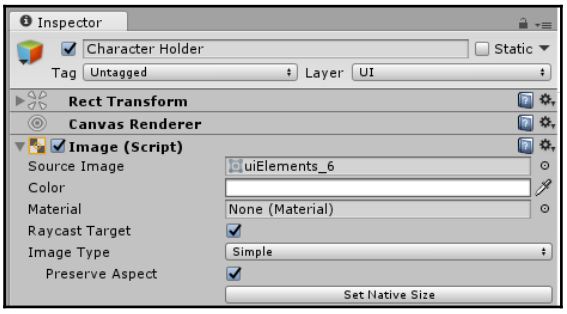


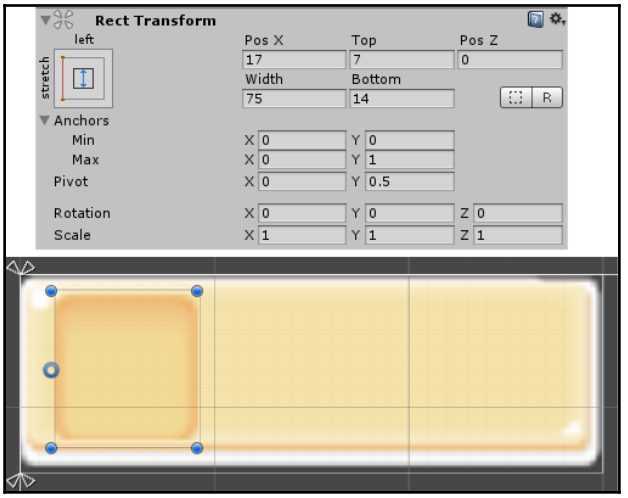
Image (Script)
Source Image
uiElements_1
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

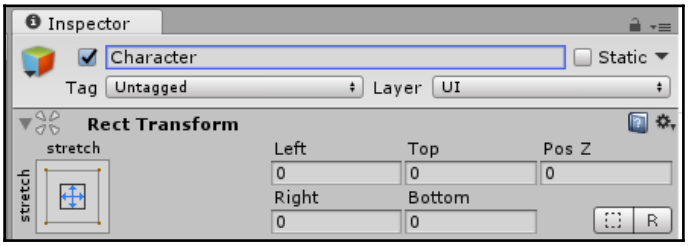

Scene
Game
Asset Store
Display 1
Standalone (1024x768)
Scale
0.74:
Maximize On Play
Mute Audio
Stats
Gizmos

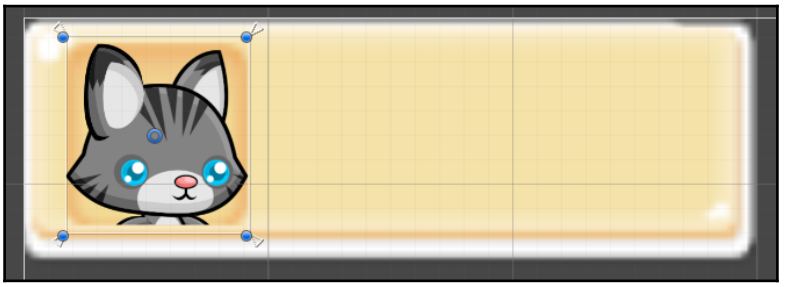


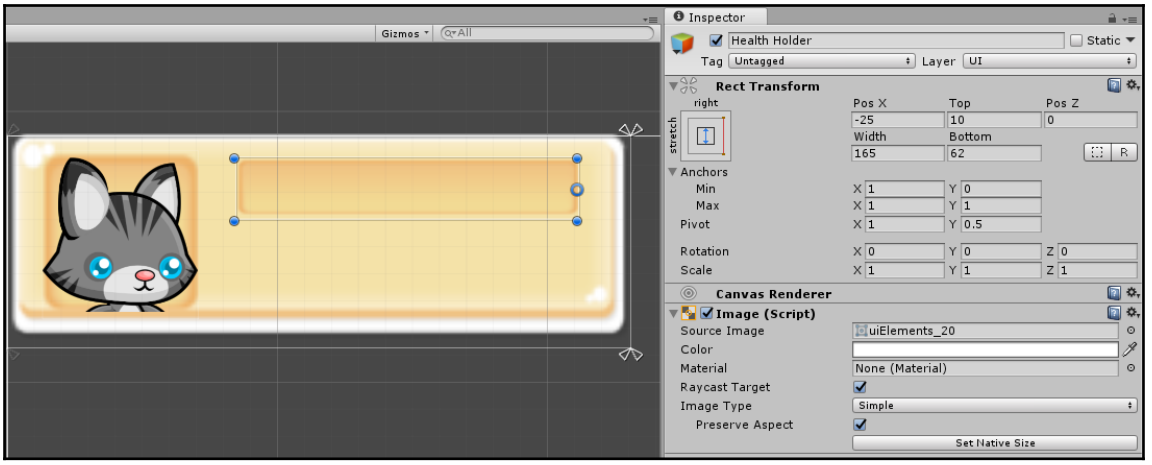

Rect Transform
left
top
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
300
102
R

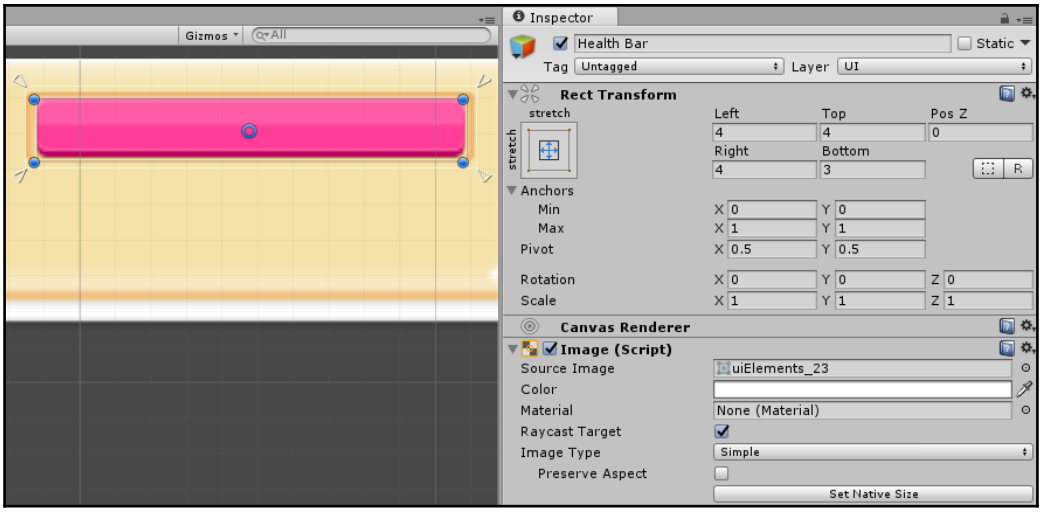

Inspector
Character Holder
Static
Tag
Untagged
Layer
UI
Rect Transform
Canvas Renderer
Image (Script)
Source Image
uiElements_6
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

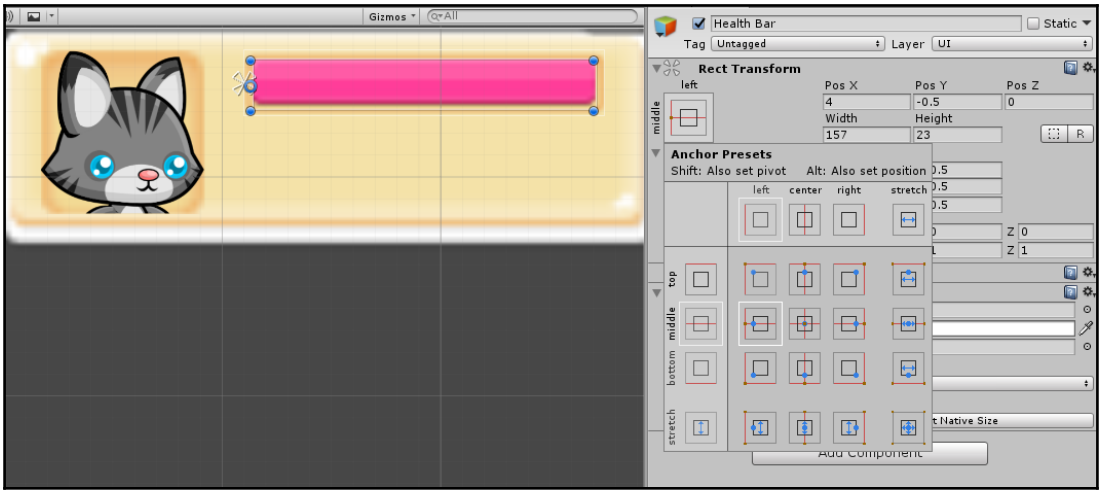

Rect Transform
left
stretch
Pos X
Top
Pos Z
17
7
0
Width
Bottom
75
14
R
Anchors
Min
X 0
Y 0
Max
X 0
Y 1
Pivot
X 0
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1

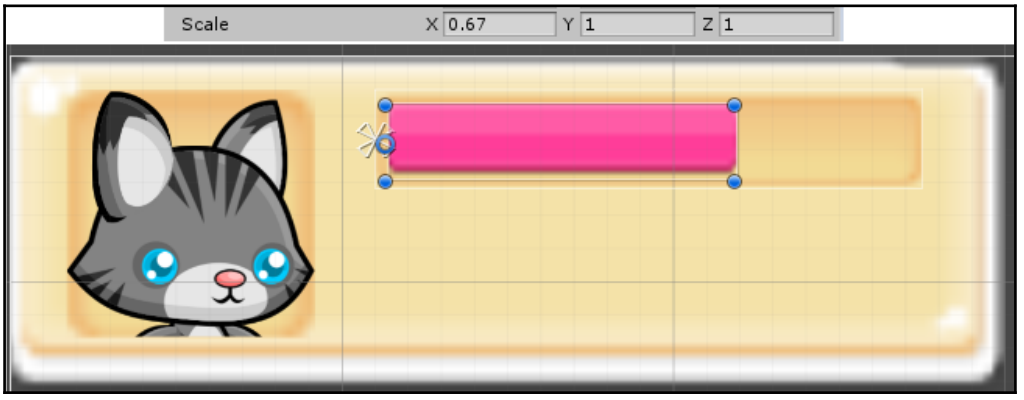

Inspector
Character
Static
Tag
Untagged
Layer
UI
Rect Transform
stretch
stretch
Left
Top
Pos Z
0
0
0
Right
Bottom
0
0
R

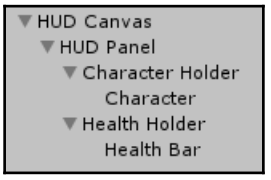


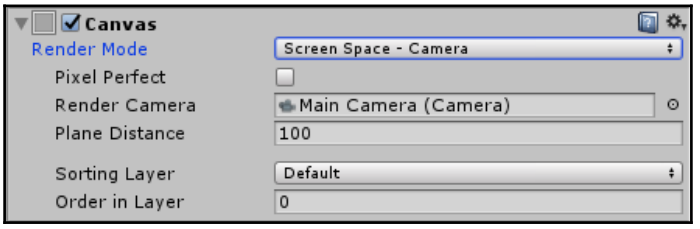

Gizmos
All
Inspector
Health Holder
Static
Tag
Untagged
Layer
UI
Rect Transform
right
stretch
Pos X
Top
Pos Z
-25
10
0
Width
Bottom
165
62
R
Anchors
Min
X 1
Y 0
Max
X 1
Y 1
Pivot
X 1
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_20
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

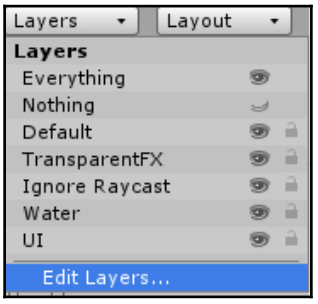

Gizmos
All
Inspector
Health Bar
Static
Tag
Untagged
Layer
UI
Rect Transform
stretch
Left
Top
Pos Z
4
4
0
Right
Bottom
4
3
R
Anchors
Min
X 0
Y 0
Max
X 1
Y 1
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_23
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

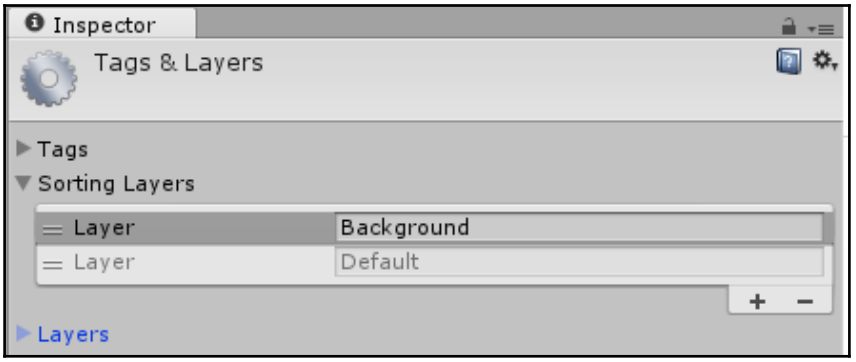

Gizmos
Health Bar
Static
Tag
Untagged
Layer
UI
Rect Transform
left
Pos X
Pos Y
Pos Z
4
-0.5
0
Width
Height
157
23
middle
Anchor Presets
Shift: Also set pivot
Alt: Also set position
left
center
right
stretch
top
middle
bottom
stretch
Native Size
Add Component

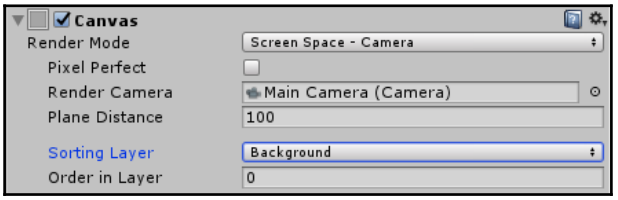

Scale
X 0.67
Y 1
Z 1

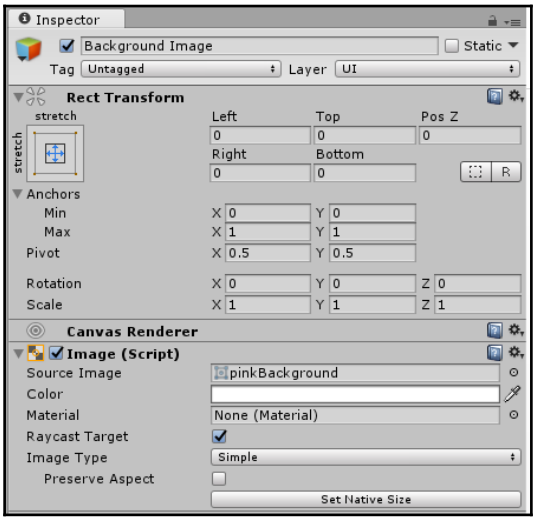

HUD Canvas
HUD Panel
Character Holder
Character
Health Holder
Health Bar

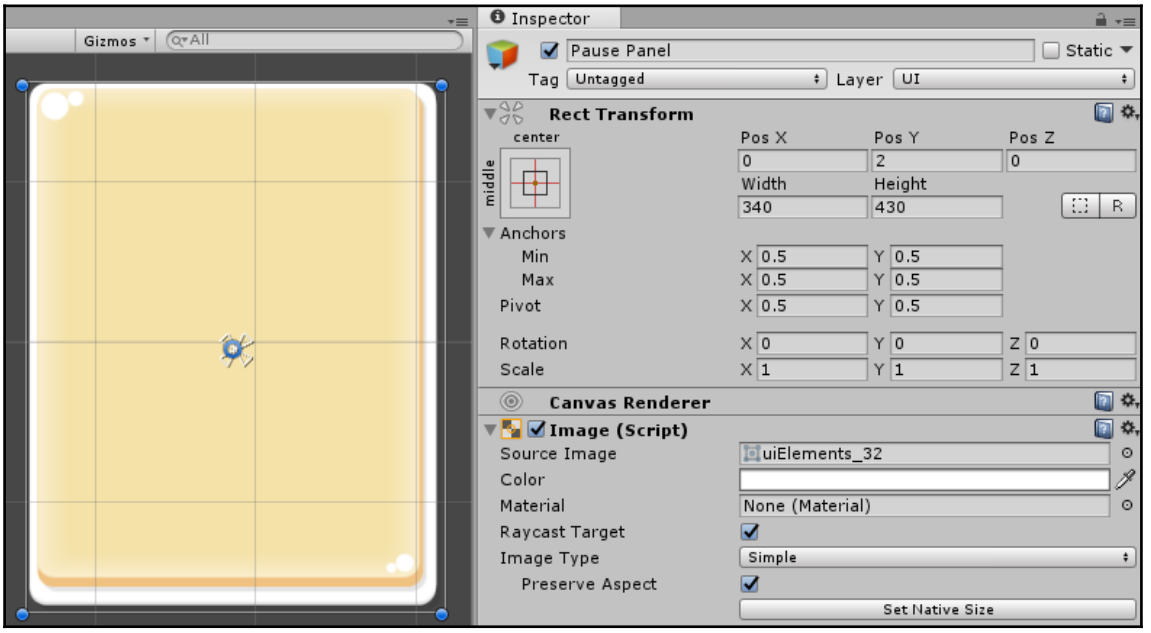

Canvas
Render Mode
Screen Space - Camera
Pixel Perfect
Render Camera
Main Camera (Camera)
Plane Distance
100
Sorting Layer
Default
Order in Layer
0

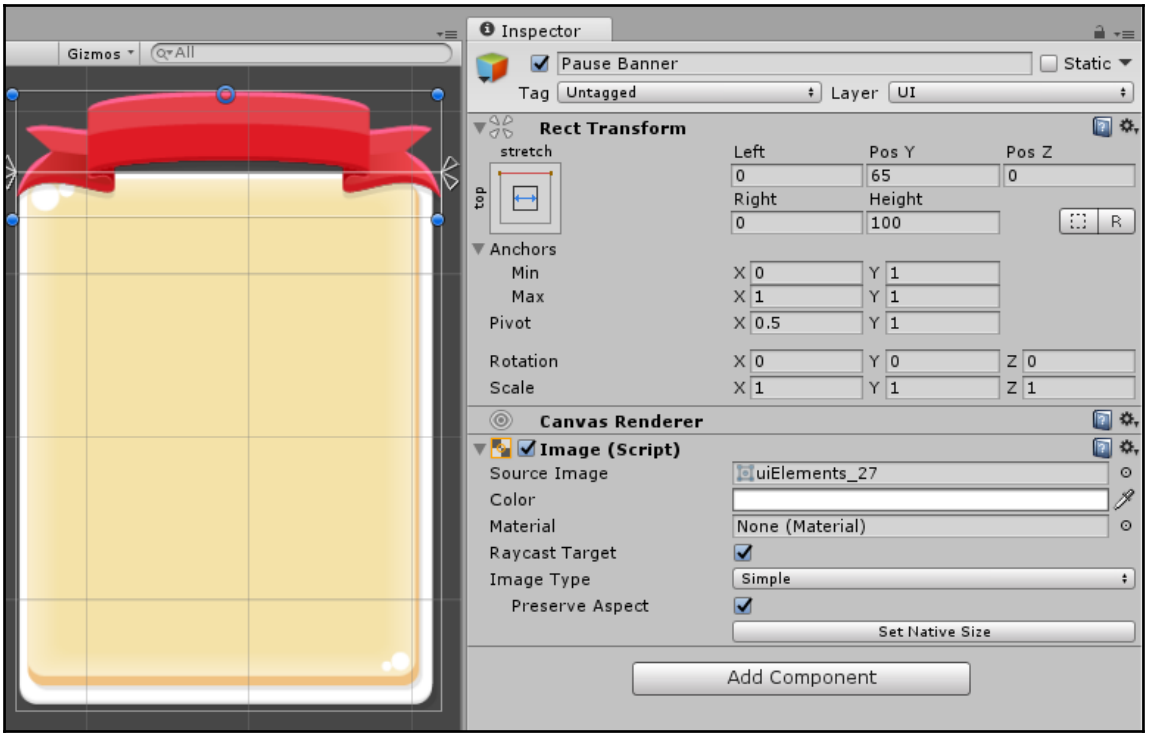

Layers
Layout
Layers
Everything
Nothing
Default
TransparentFX
Ignore Raycast
Water
UI
Edit Layers...


Inspector
Tags & Layers
Tags
Sorting Layers
Layer
Background
Layer
Default
Layers

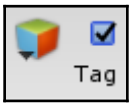

Canvas
Render Mode
Screen Space - Camera
Pixel Perfect
Render Camera
Main Camera (Camera)
Plane Distance
100
Sorting Layer
Background
Order in Layer
0

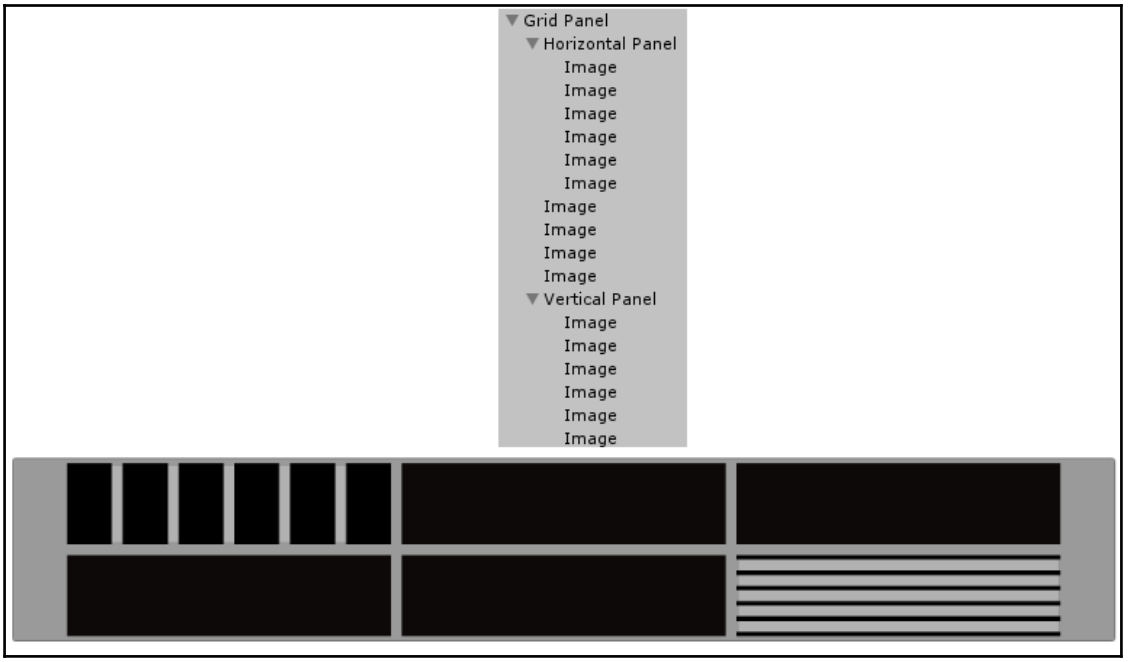

Inspector
Background Image
Static
Tag
Untagged
Layer
UI
Rect Transform
stretch
Left
Top
Pos Z
Right
Bottom
Anchors
Min
Max
Pivot
Rotation
Scale
Canvas Renderer
Image (Script)
Source Image
pinkBackground
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

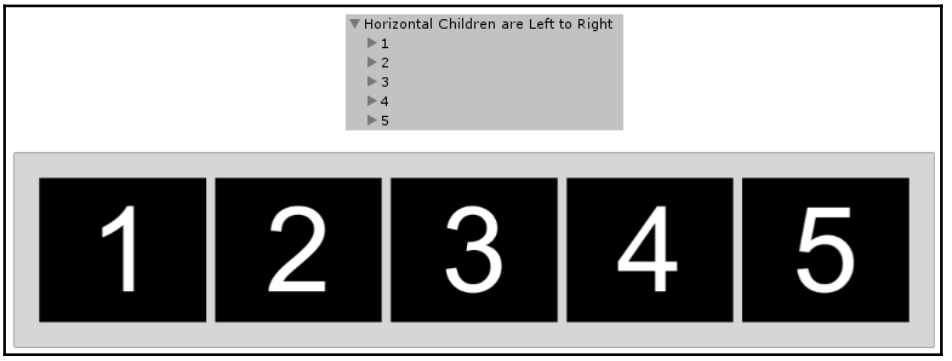

Gizmos
All
Inspector
Pause Panel
Static
Tag
Untagged
Layer
UI
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
0
2
0
Width
Height
340
430
R
Anchors
Min
X 0.5
Y 0.5
Max
X 0.5
Y 0.5
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_32
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

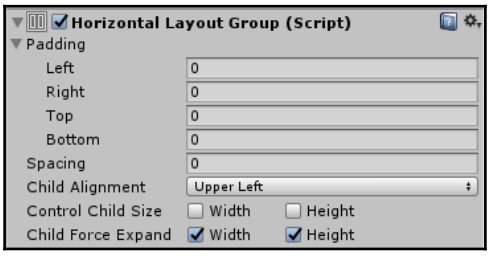

Gizmos
All
Inspector
Pause Banner
Static
Tag
Untagged
Layer
UI
Rect Transform
stretch
top
Left
Pos Y
Pos Z
0
65
0
Right
Height
0
100
R
Anchors
Min
X 0
Y 1
Max
X 1
Y 1
Pivot
X 0.5
Y 1
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_27
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size
Add Component

Chapter 3: Automatic Layouts

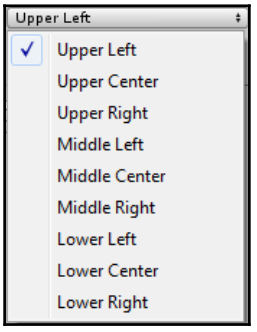


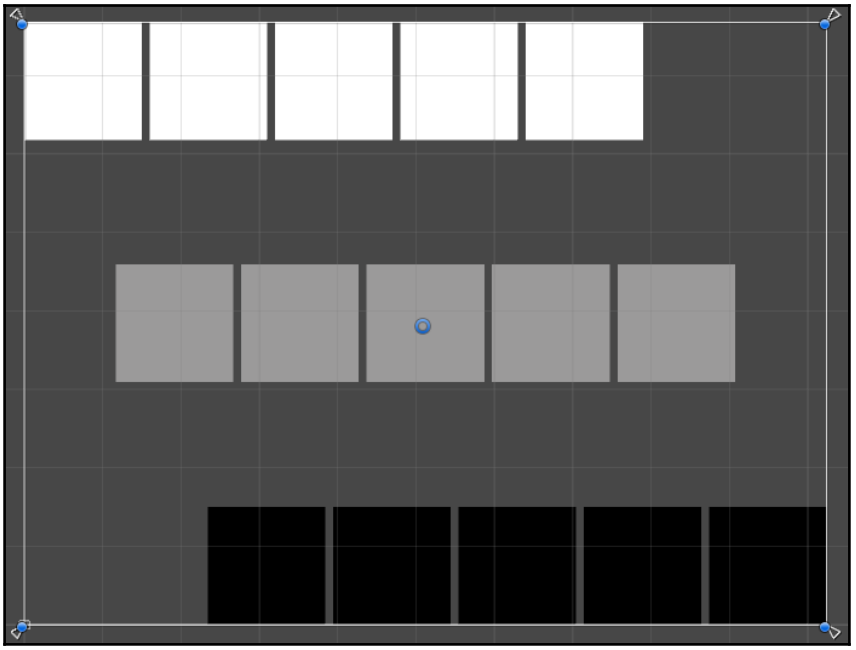

Grid Panel
Horizontal Panel
Image
Image
Image
Image
Image
Image
Image
Image
Image
Image
Vertical Panel
Image
Image
Image
Image
Image
Image


Horizontal Children are Left to Right
1
2
3
4
5
1
2
3
4
5

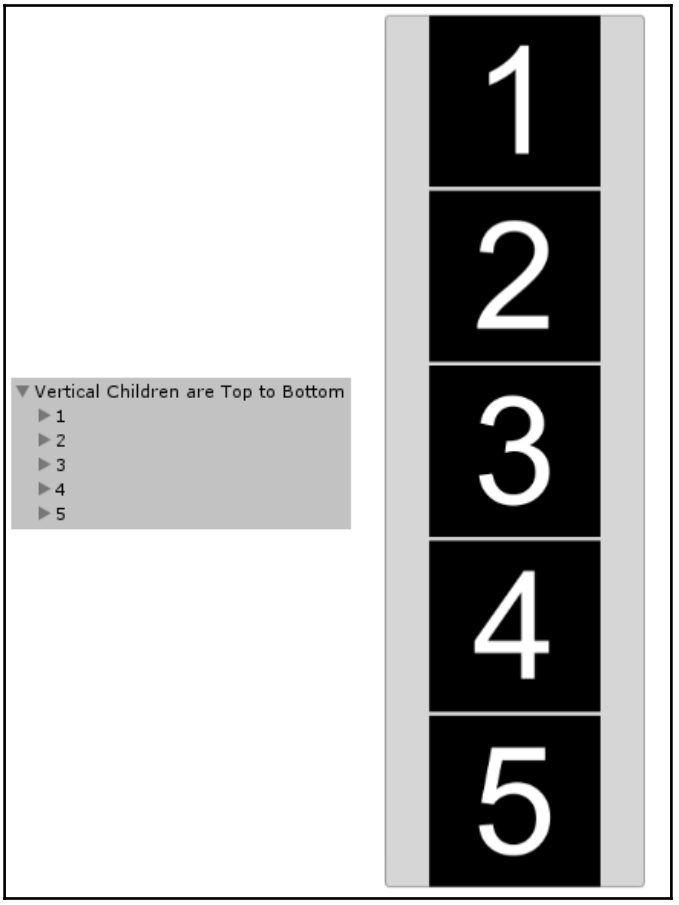

Horizontal Layout Group (Script)
Padding
Left
0
Right
0
Top
0
Bottom
0
Spacing
0
Child Alignment
Upper Left
Control Child Size
Width
Height
Child Force Expand
Width
Height

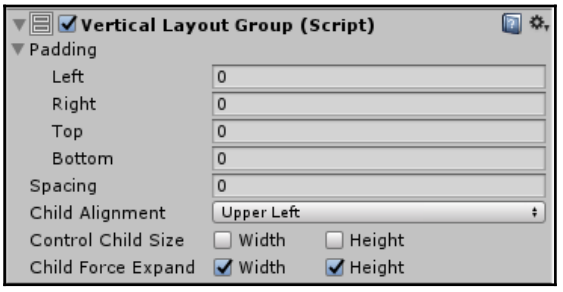
Horizontal Layout Group (Script)
Padding
Left 0
Right 0
Top 0
Bottom 0
Horizontal Layout Group (Script)
Padding
Left 30
Right 30
Top 30
Bottom 30
Horizontal Layout Group (Script)
Padding
Left 30
Right 30
Top -30
Bottom 30

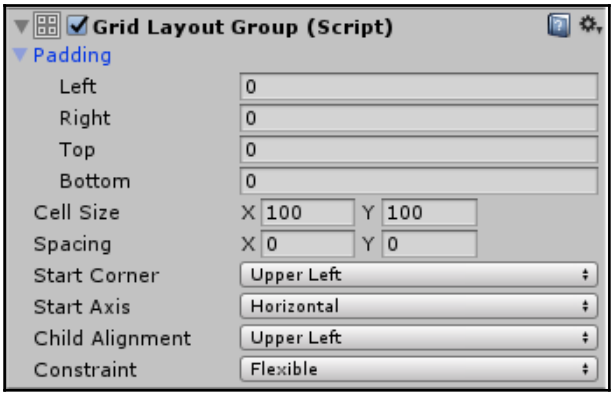

Upper Left
Upper Left
Upper Center
Upper Right
Middle Left
Middle Center
Middle Right
Lower Left
Lower Center
Lower Right

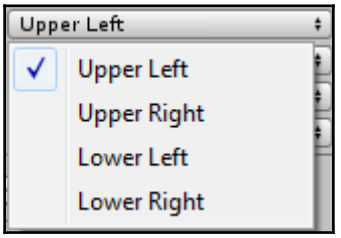


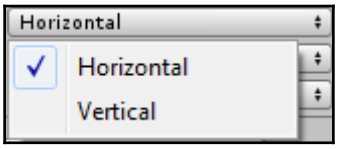
Control Child Size Width Height
Child Force Expand Width Height
Control Child Size Width Height
Child Force Expand Width Height
Control Child Size Width Height
Child Force Expand Width Height

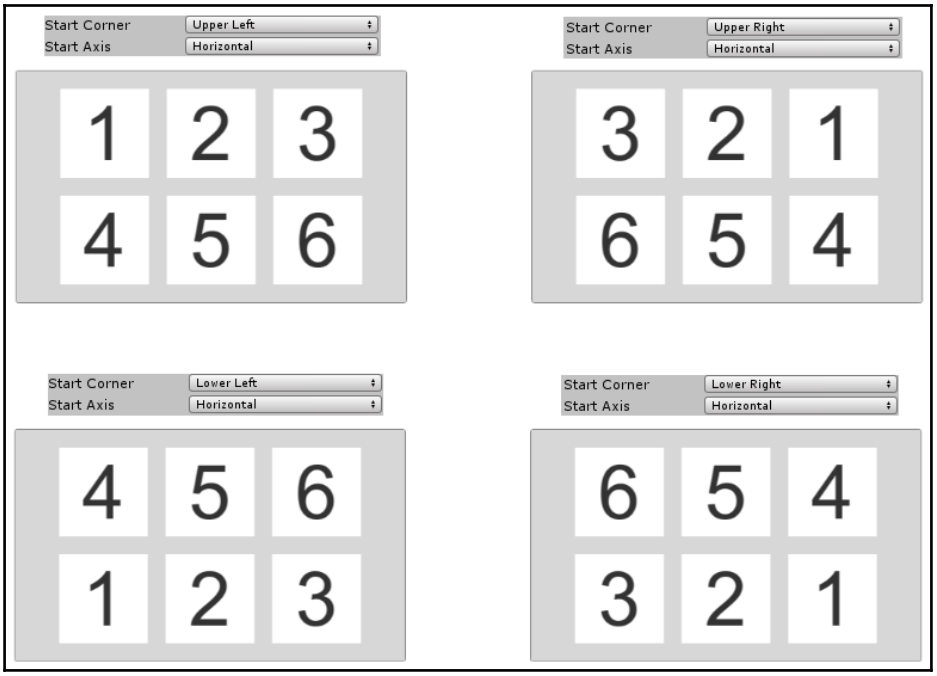

Vertical Children are Top to Bottom
1
2
3
4
5
1
2
3
4
5

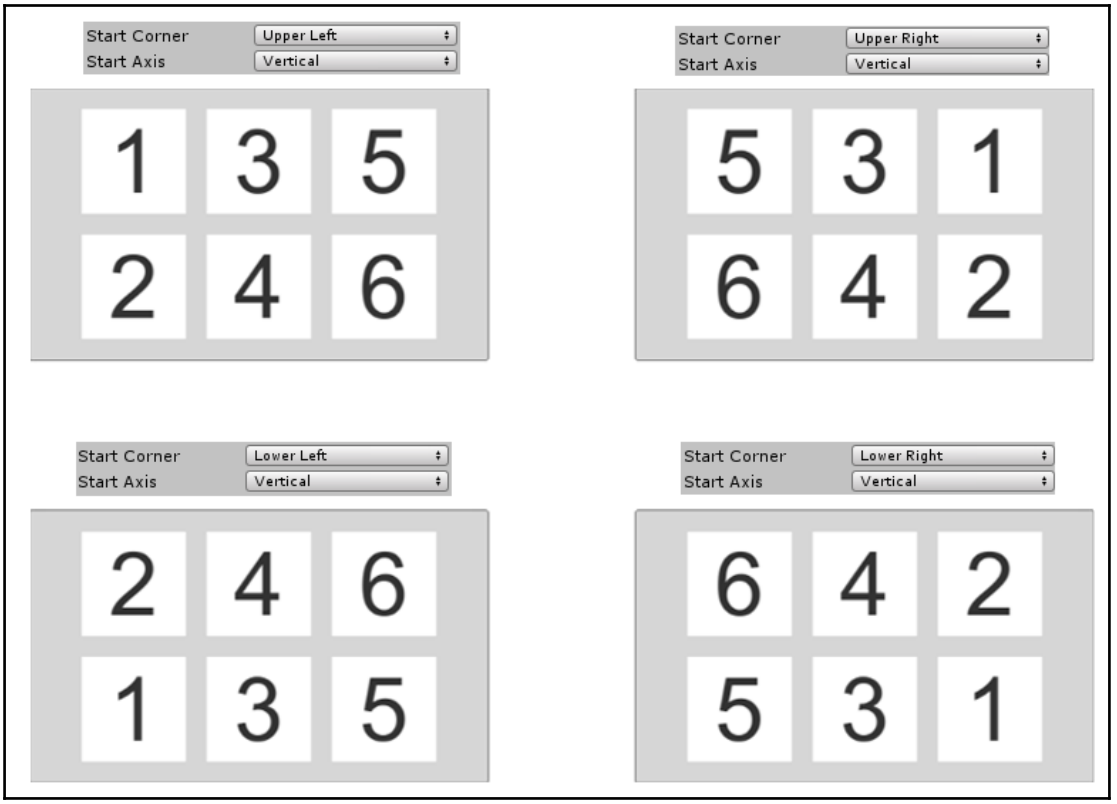

Vertical Layout Group (Script)
Padding
Left
0
Right
0
Top
0
Bottom
0
Spacing
0
Child Alignment
Upper Left
Control Child Size
Width
Height
Child Force Expand
Width
Height

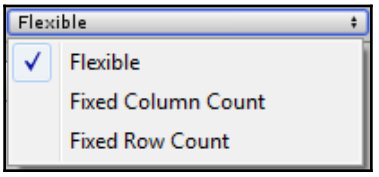

Grid Layout Group (Script)
Padding
Left
Right
Top
Bottom
Cell Size
Spacing
Start Corner
Start Axis
Child Alignment
Constraint
0
0
0
0
X 100
Y 100
X 0
Y 0
Upper Left
Horizontal
Upper Left
Flexible

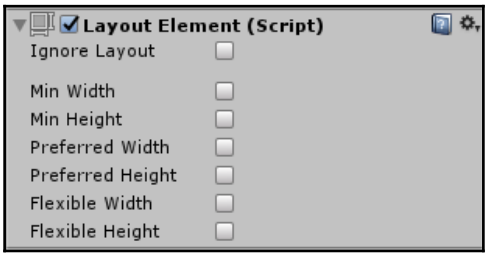

Upper Left
Upper Left
Upper Right
Lower Left
Lower Right

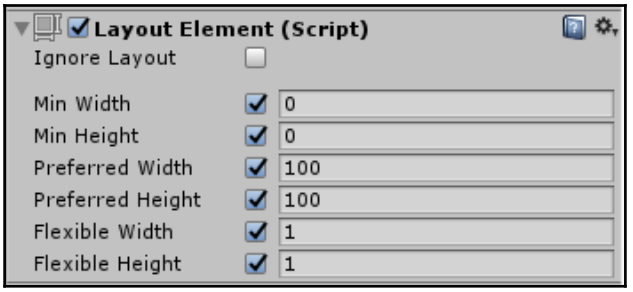

Horizontal
Horizontal
Vertical

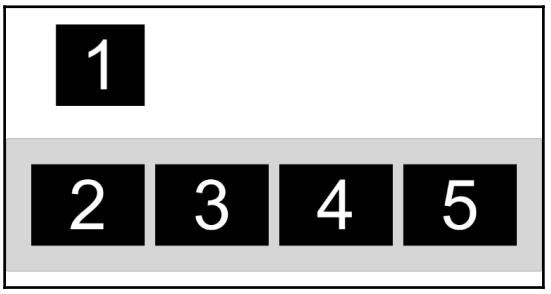

Start Corner
Upper Left
Start Axis
Horizontal
1 2 3
4 5 6
Start Corner
Upper Right
Start Axis
Horizontal
3 2 1
6 5 4
Start Corner
Lower Left
Start Axis
Horizontal
4 5 6
1 2 3
Start Corner
Lower Right
Start Axis
Horizontal
6 5 4
3 2 1

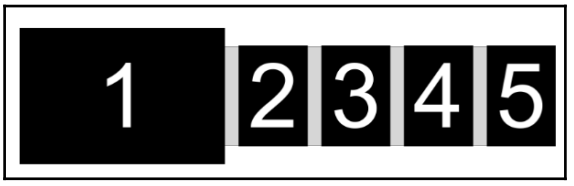

Start Corner
Upper Left
Start Axis
Vertical
1 3 5
2 4 6
Start Corner
Upper Right
Start Axis
Vertical
5 3 1
6 4 2
Start Corner
Lower Left
Start Axis
Vertical
2 4 6
1 3 5
Start Corner
Lower Right
Start Axis
Vertical
6 4 2
5 3 1

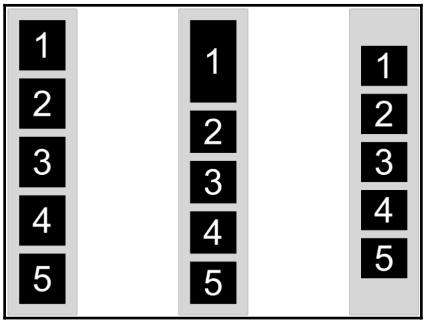

Flexible
Flexible
Fixed Column Count
Fixed Row Count

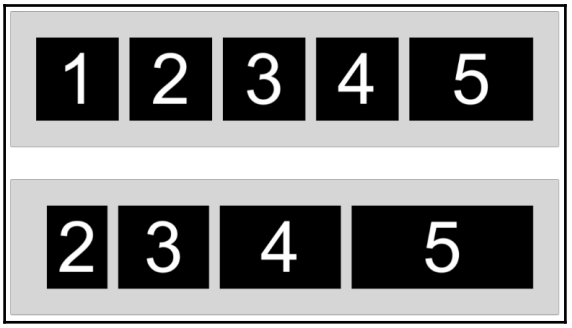

Layout Element (Script)
Ignore Layout
Min Width
Min Height
Preferred Width
Preferred Height
Flexible Width
Flexible Height


Layout Element (Script)
Ignore Layout
Min Width
0
Min Height
0
Preferred Width
100
Preferred Height
100
Flexible Width
1
Flexible Height
1

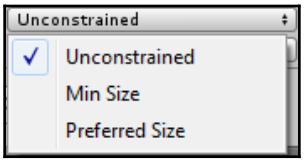

1
2
3
4
5

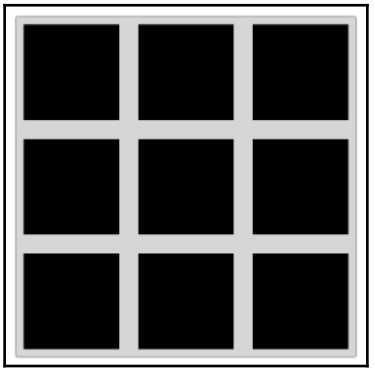

1
2
3
4
5


1
2
3
4
5
1
2
3
4
5
1
2
3
4
5

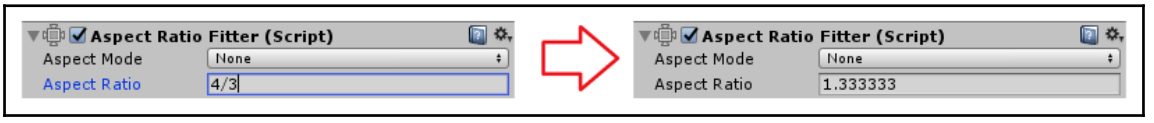

1 2 3 4 5
2 3 4 5

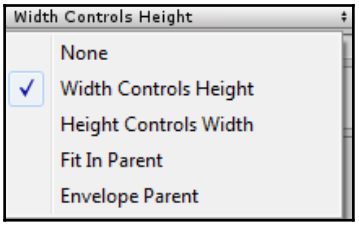
Content Size Fitter (Script)
Horizontal Fit
Unconstrained
Vertical Fit
Unconstrained

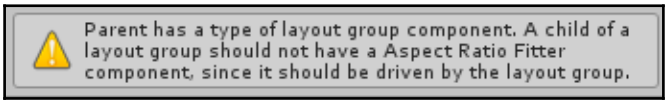

Unconstrained
Unconstrained
Min Size
Preferred Size

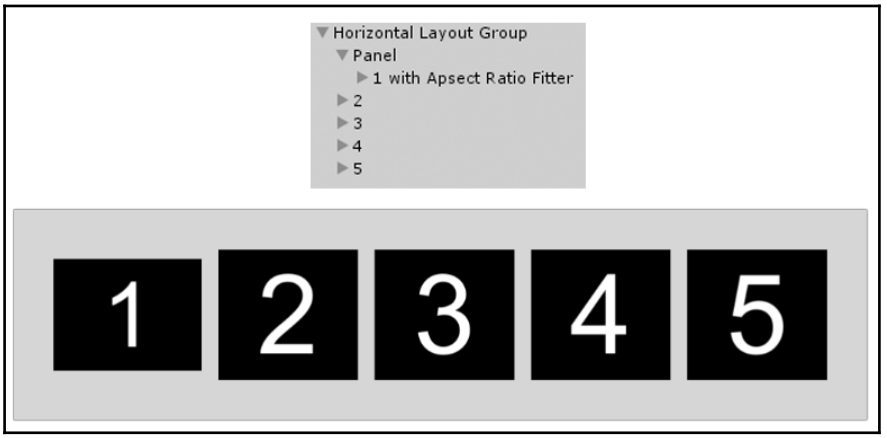


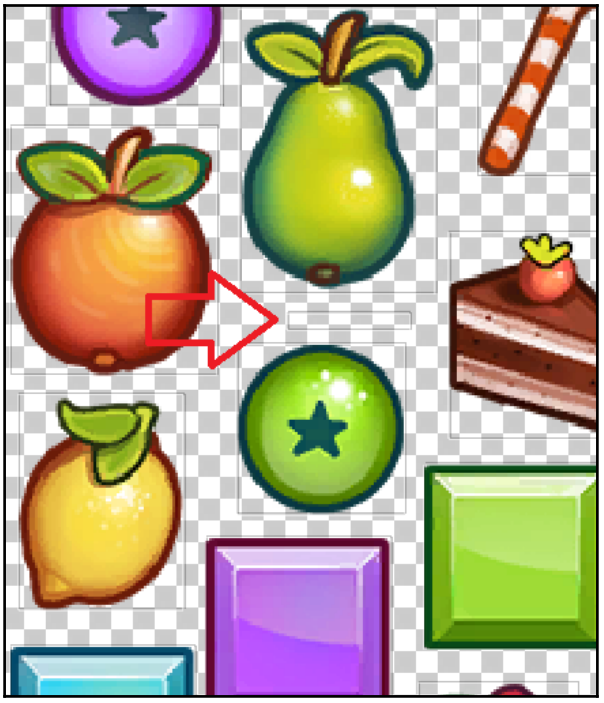
Aspect Ratio Fitter (Script)
Aspect Mode
None
Aspect Ratio
1


Aspect Ratio Fitter (Script)
Aspect Mode
None
Aspect Ratio
4/3
Aspect Ratio Fitter (Script)
Aspect Mode
None
Aspect Ratio
1.333333

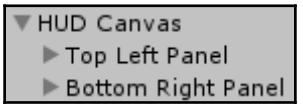

Width Controls Height
None
Width Controls Height
Height Controls Width
Fit In Parent
Envelope Parent

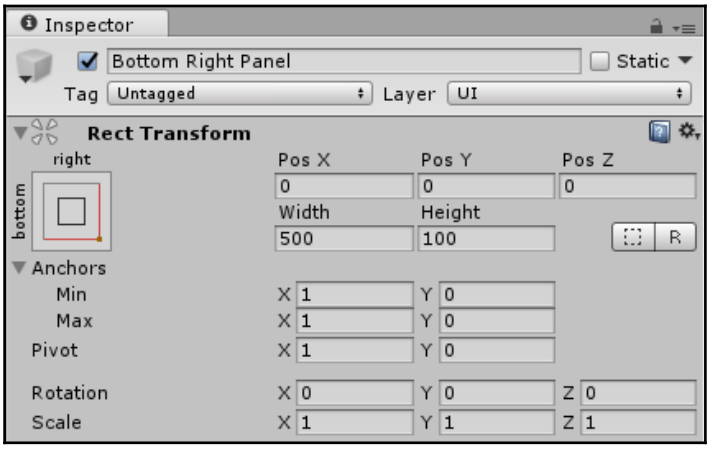

Parent has a type of layout group component. A child of a layout group should not have a Aspect Ratio Fitter component, since it should be driven by the layout group.

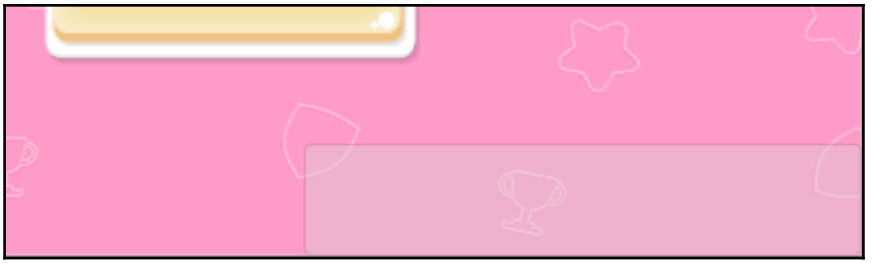

Horizontal Layout Group
Panel
1 with Apsect Ratio Fitter
2
3
4
5
1
2
3
4
5



Assets ▸ Sprites
catSprites
foodSpriteSheet
foodSpriteSheet..


HUD Canvas
Top Left Panel
Bottom Right Panel


Inspector
Bottom Right Panel
Static
Tag
Untagged
Layer
UI
Rect Transform
right
bottom
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
500
100
R
Anchors
Min
X 1
Y 0
Max
X 1
Y 0
Pivot
X 1
Y 0
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1



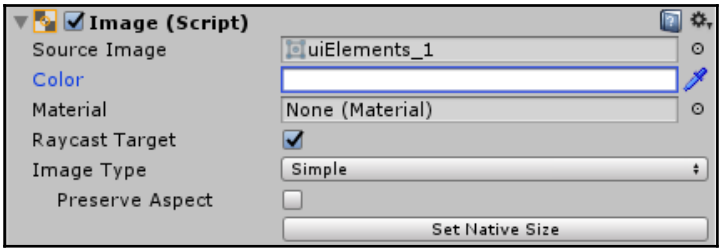
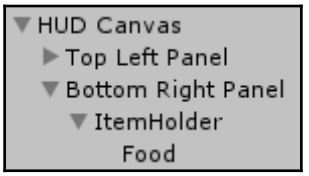


Image (Script)
Source Image
uiElements_1
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size


HUD Canvas
Top Left Panel
Bottom Right Panel
ItemHolder
Food

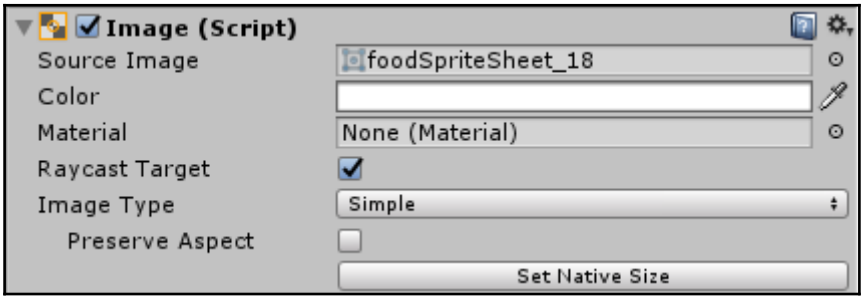


Image (Script)
Source Image
foodSpriteSheet_18
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

Inspector

Food — Static

Tag: Untagged — Layer: UI

Rect Transform

stretch / stretch

	Left	Top	Pos Z
	5	5	0
	Right	Bottom	
	5	5	

Anchors

Min	X 0	Y 0
Max	X 1	Y 1
Pivot	X 0.5	Y 0.5

Rotation	X 0	Y 0	Z 0
Scale	X 1	Y 1	Z 1

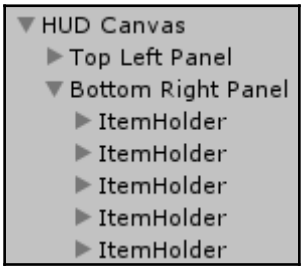
Canvas Renderer

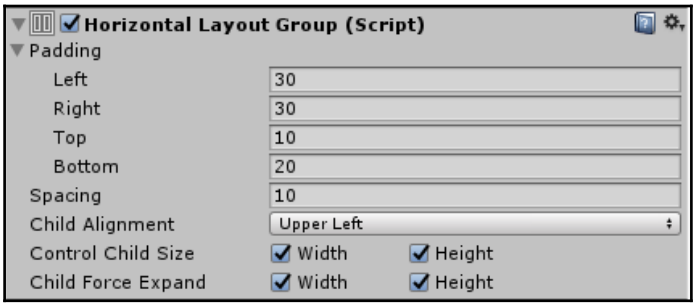
Image (Script)

Source Image	foodSpriteSheet_18
Color	
Material	None (Material)
Raycast Target	☑
Image Type	Simple
Preserve Aspect	☑

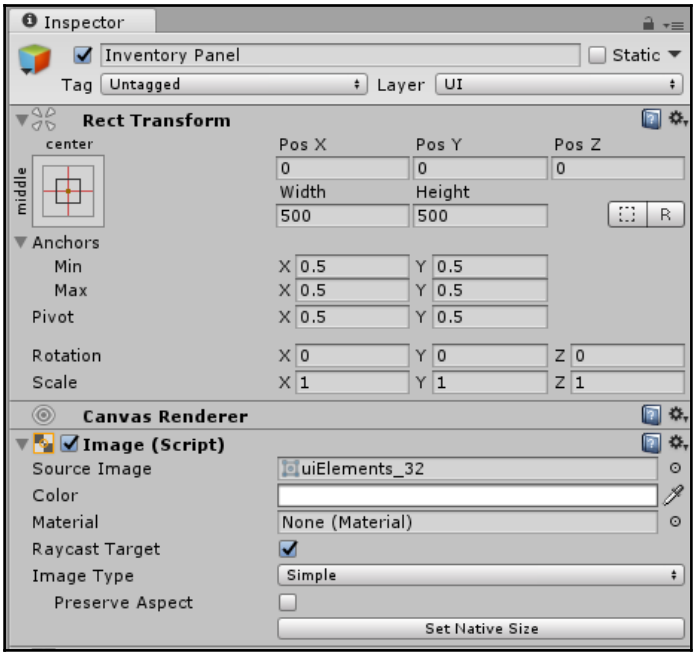
Set Native Size

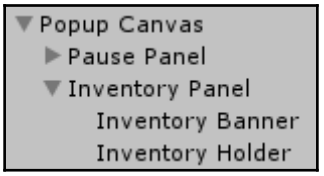
- HUD Canvas
  - Top Left Panel
  - Bottom Right Panel
    - ItemHolder
    - ItemHolder (1)
    - ItemHolder (2)
    - ItemHolder (3)
    - ItemHolder (4)

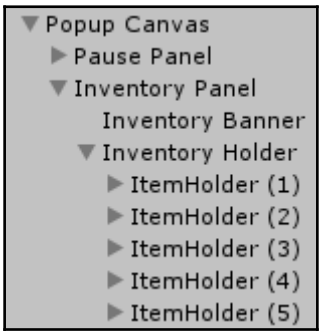

HUD Canvas
Top Left Panel
Bottom Right Panel
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder

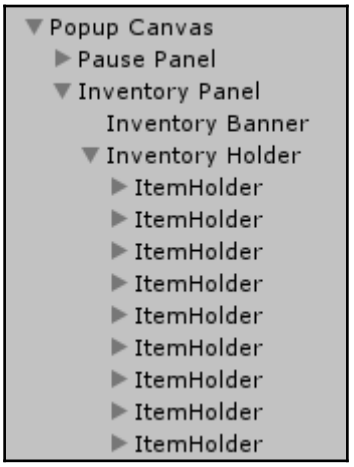

Horizontal Layout Group (Script)
Padding
Left 30
Right 30
Top 10
Bottom 20
Spacing 10
Child Alignment Upper Left
Control Child Size Width Height
Child Force Expand Width Height

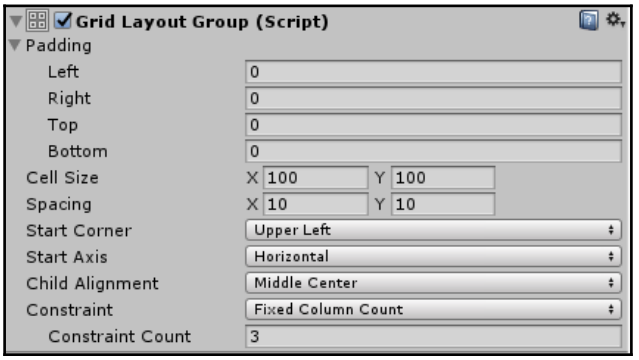
- Popup Canvas
  - Pause Panel
    - Pause Banner
  - Inventory Panel
    - Inventory Banner

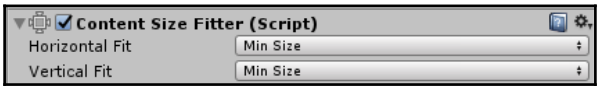

Inspector
Inventory Panel
Static
Tag
Untagged
Layer
UI
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
500
500
Anchors
Min
X 0.5
Y 0.5
Max
X 0.5
Y 0.5
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_32
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size


Popup Canvas
Pause Panel
Inventory Panel
Inventory Banner
Inventory Holder

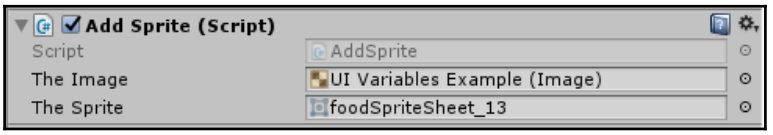

Popup Canvas
Pause Panel
Inventory Panel
Inventory Banner
Inventory Holder
ItemHolder (1)
ItemHolder (2)
ItemHolder (3)
ItemHolder (4)
ItemHolder (5)

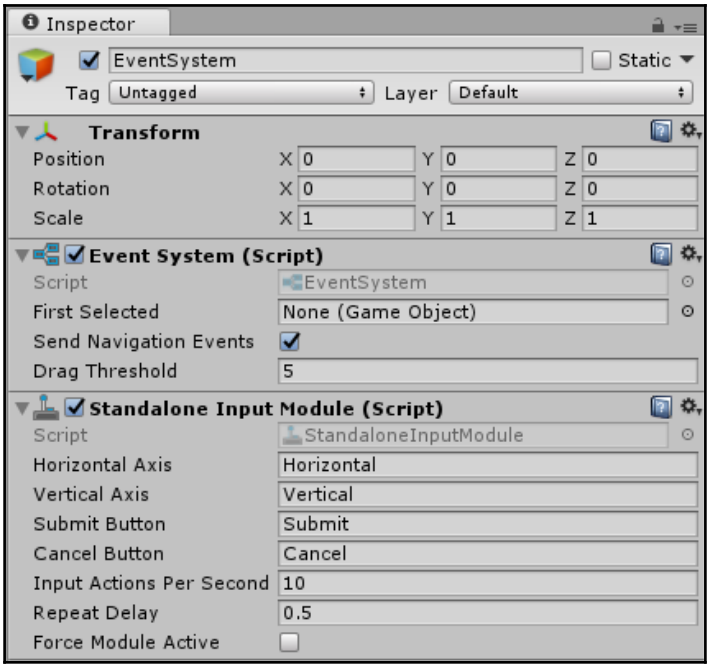

Popup Canvas
Pause Panel
Inventory Panel
Inventory Banner
Inventory Holder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder

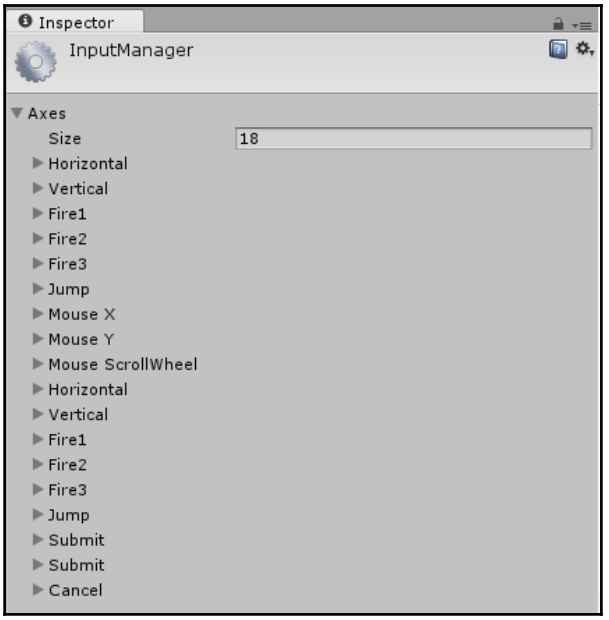

Grid Layout Group (Script)
Padding
Left
0
Right
0
Top
0
Bottom
0
Cell Size
X 100
Y 100
Spacing
X 10
Y 10
Start Corner
Upper Left
Start Axis
Horizontal
Child Alignment
Middle Center
Constraint
Fixed Column Count
Constraint Count
3

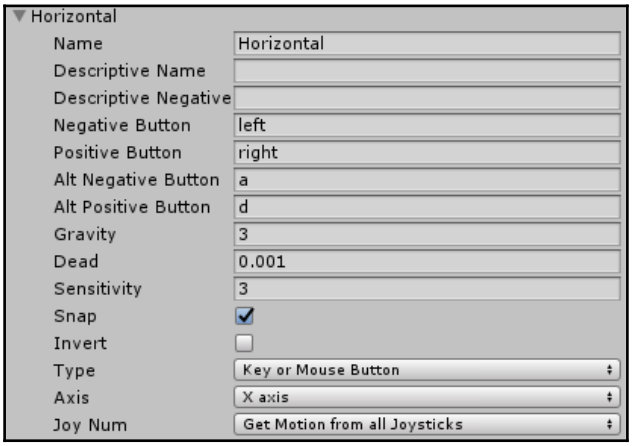

Content Size Fitter (Script)
Horizontal Fit
Min Size
Vertical Fit
Min Size

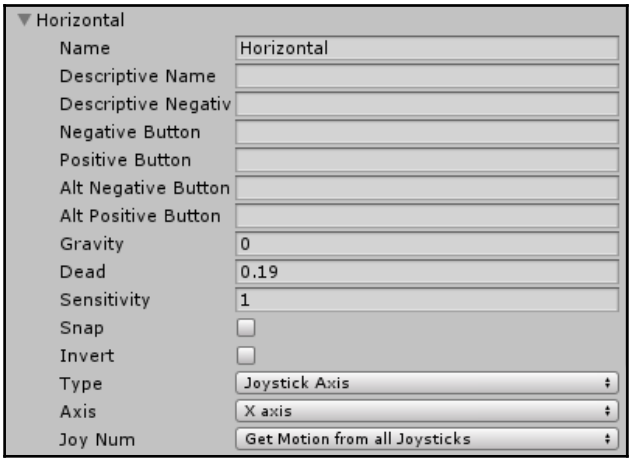
Chapter 4:
The Event System and Programming for UI

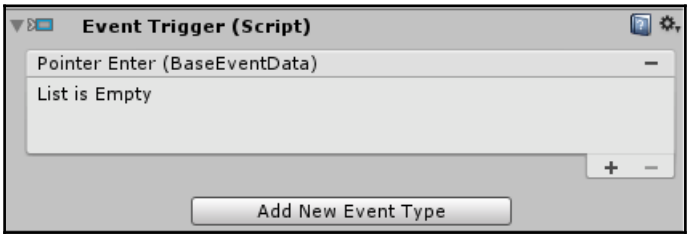


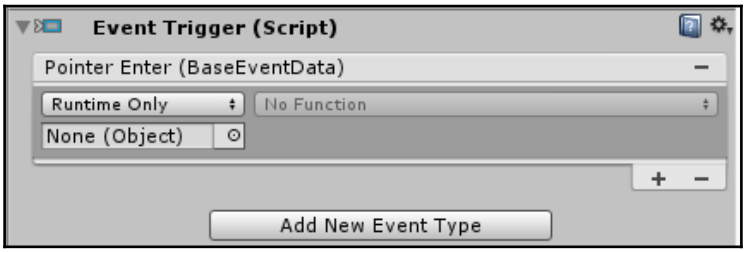


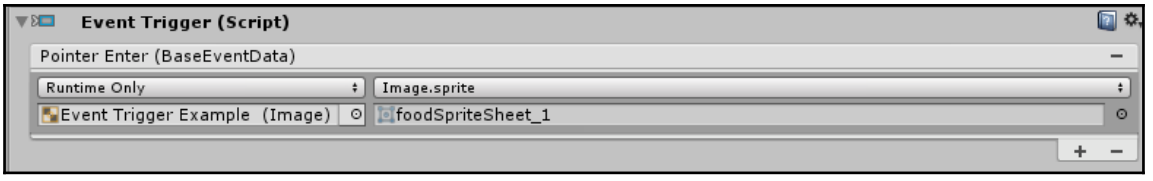

Inspector
InputManager
Axes
Size
18
Horizontal
Vertical
Fire1
Fire2
Fire3
Jump
Mouse X
Mouse Y
Mouse ScrollWheel
Horizontal
Vertical
Fire1
Fire2
Fire3
Jump
Submit
Submit
Cancel

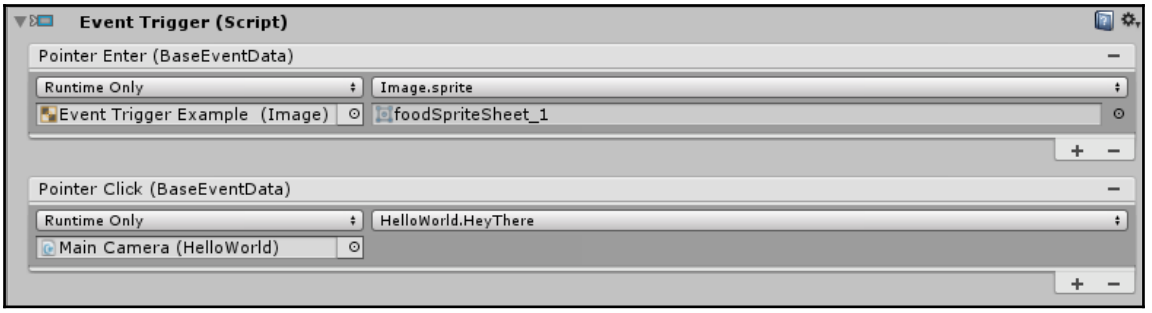

Horizontal
Name
Horizontal
Descriptive Name
Descriptive Negative
Negative Button
left
Positive Button
right
Alt Negative Button
a
Alt Positive Button
d
Gravity
3
Dead
0.001
Sensitivity
3
Snap
Invert
Type
Key or Mouse Button
Axis
X axis
Joy Num
Get Motion from all Joysticks

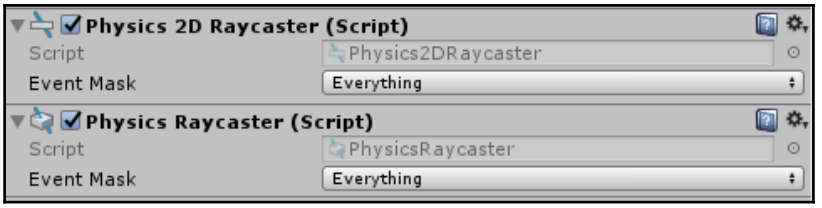

Horizontal
Name
Horizontal
Descriptive Name
Descriptive Negativ
Negative Button
Positive Button
Alt Negative Button
Alt Positive Button
Gravity
0
Dead
0.19
Sensitivity
1
Snap
Invert
Type
Joystick Axis
Axis
X axis
Joy Num
Get Motion from all Joysticks

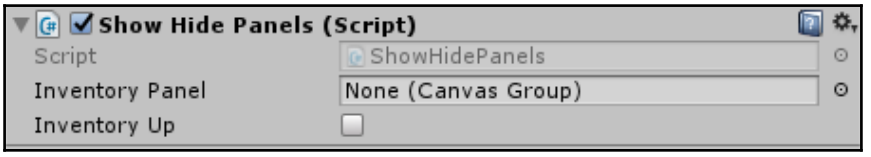

Event Trigger (Script)
Pointer Enter (BaseEventData)
List is Empty
Add New Event Type

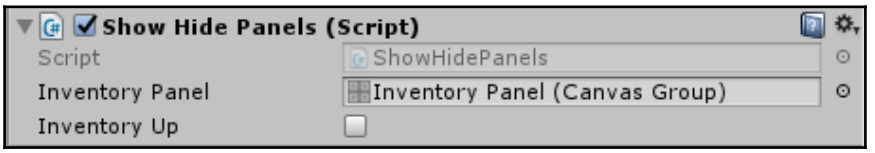

Event Trigger (Script)
Pointer Enter (BaseEventData)
Runtime Only
No Function
None (Object)
Add New Event Type

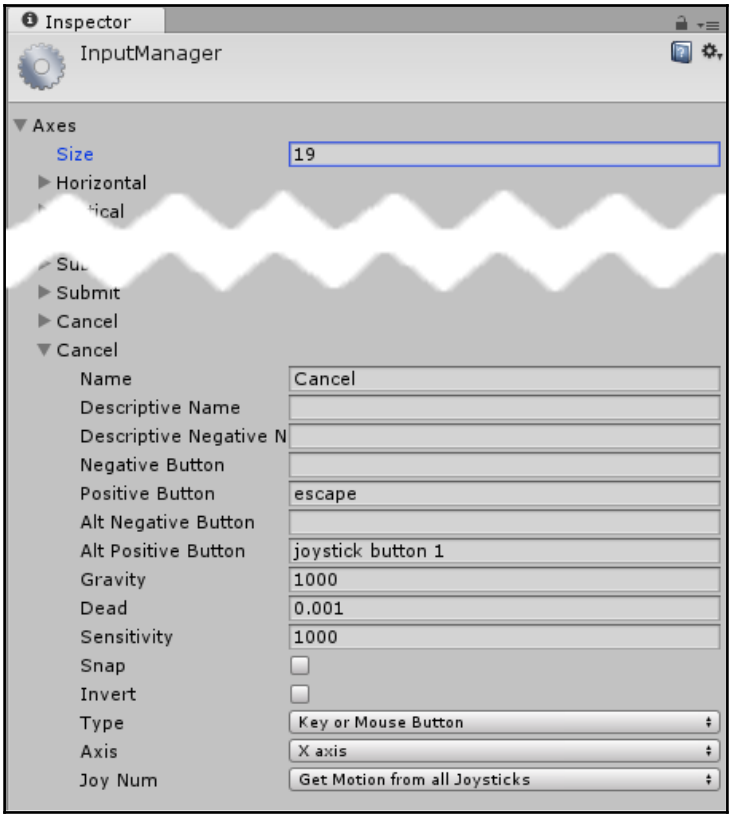

Event Trigger (Script)
Pointer Enter (BaseEventData)
Runtime Only
Image.sprite
Event Trigger Example (Image)
foodSpriteSheet_1

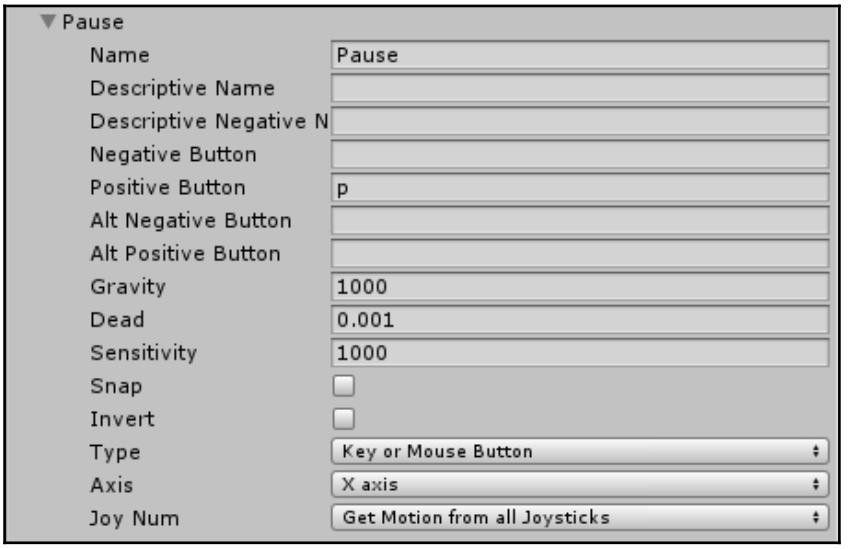

Event Trigger (Script)
Pointer Enter (BaseEventData)
Runtime Only
Image.sprite
Event Trigger Example (Image)
foodSpriteSheet_1
Pointer Click (BaseEventData)
Runtime Only
HelloWorld.HeyThere
Main Camera (HelloWorld)

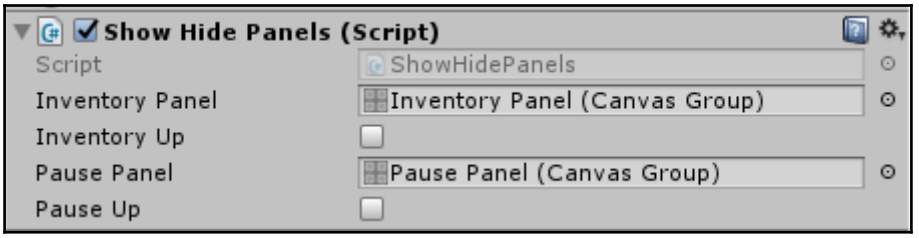

Physics 2D Raycaster (Script)
Script
Physics2DRaycaster
Event Mask
Everything
Physics Raycaster (Script)
Script
PhysicsRaycaster
Event Mask
Everything

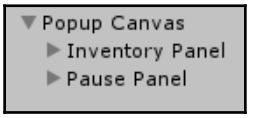

Show Hide Panels (Script)
Script
ShowHidePanels
Inventory Panel
None (Canvas Group)
Inventory Up

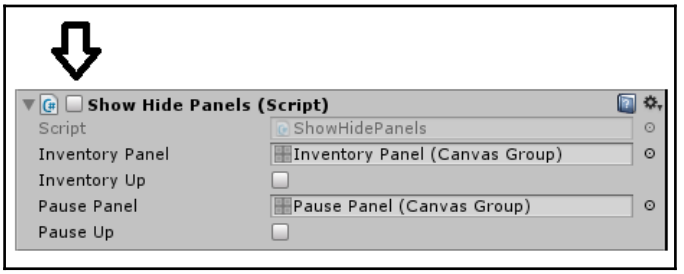

Show Hide Panels (Script)
Script
ShowHidePanels
Inventory Panel
Inventory Panel (Canvas Group)
Inventory Up

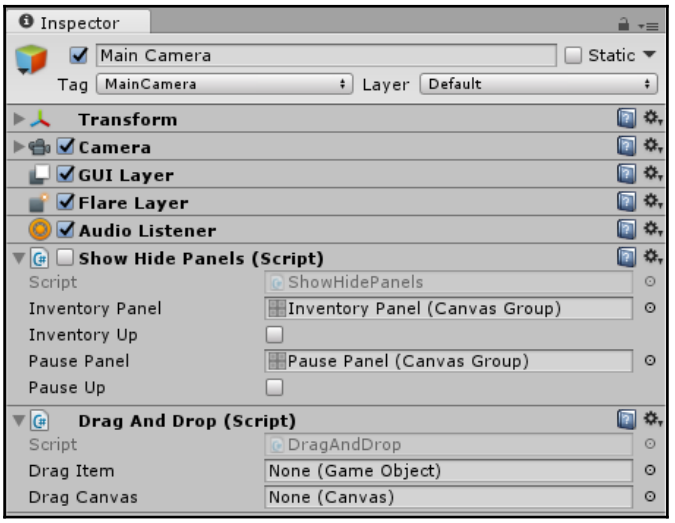

Inspector
InputManager
Axes
Size
19
Horizontal
Submit
Cancel
Cancel
Name
Cancel
Descriptive Name
Descriptive Negative N
Negative Button
Positive Button
escape
Alt Negative Button
Alt Positive Button
joystick button 1
Gravity
1000
Dead
0.001
Sensitivity
1000
Snap
Invert
Type
Key or Mouse Button
Axis
X axis
Joy Num
Get Motion from all Joysticks

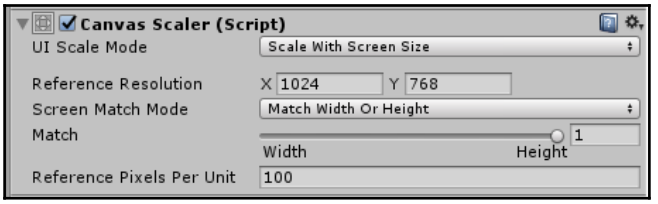

Pause
Name
Pause
Descriptive Name
Descriptive Negative N
Negative Button
Positive Button
p
Alt Negative Button
Alt Positive Button
Gravity
1000
Dead
0.001
Sensitivity
1000
Snap
Invert
Type
Key or Mouse Button
Axis
X axis
Joy Num
Get Motion from all Joysticks

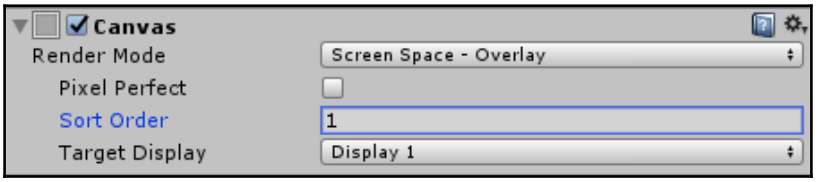

Show Hide Panels (Script)
Script
ShowHidePanels
Inventory Panel
Inventory Panel (Canvas Group)
Inventory Up
Pause Panel
Pause Panel (Canvas Group)
Pause Up

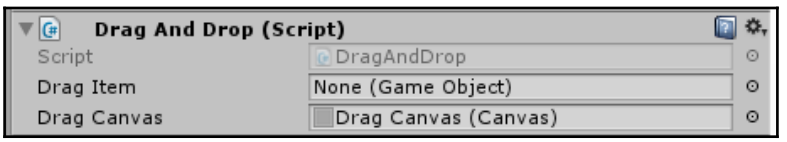

Popup Canvas
Inventory Panel
Pause Panel

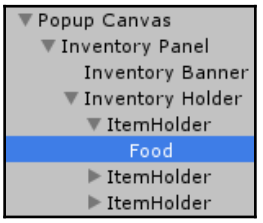

Show Hide Panels (Script)
Script
ShowHidePanels
Inventory Panel
Inventory Panel (Canvas Group)
Inventory Up
Pause Panel
Pause Panel (Canvas Group)
Pause Up

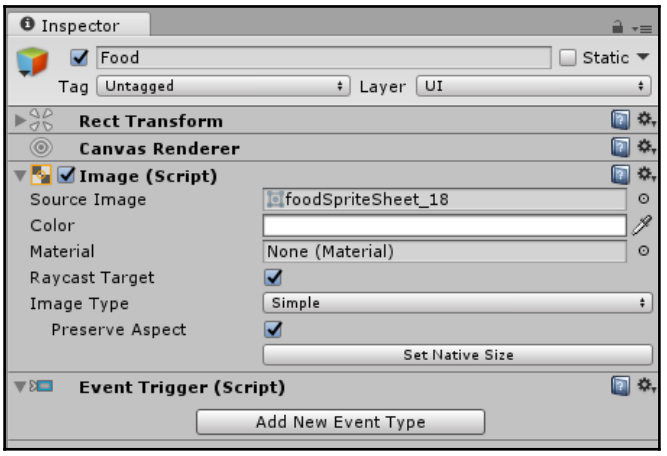

Inspector
Main Camera
Static
Tag
MainCamera
Layer
Default
Transform
Camera
GUI Layer
Flare Layer
Audio Listener
Show Hide Panels (Script)
Script
ShowHidePanels
Inventory Panel
Inventory Panel (Canvas Group)
Inventory Up
Pause Panel
Pause Panel (Canvas Group)
Pause Up
Drag And Drop (Script)
Script
DragAndDrop
Drag Item
None (Game Object)
Drag Canvas
None (Canvas)

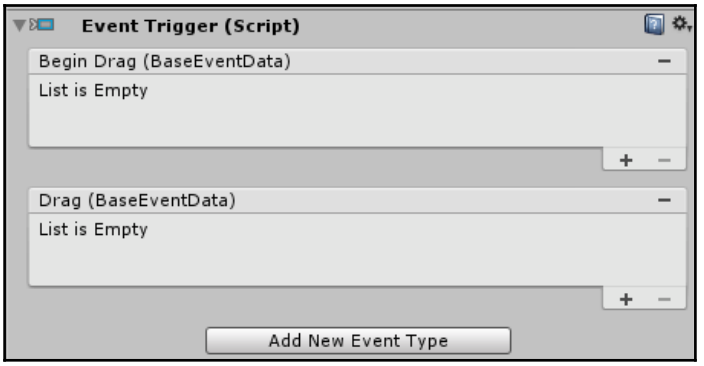

Canvas Scaler (Script)
UI Scale Mode
Scale With Screen Size
Reference Resolution
X 1024
Y 768
Screen Match Mode
Match Width Or Height
Match
1
Width
Height
Reference Pixels Per Unit
100

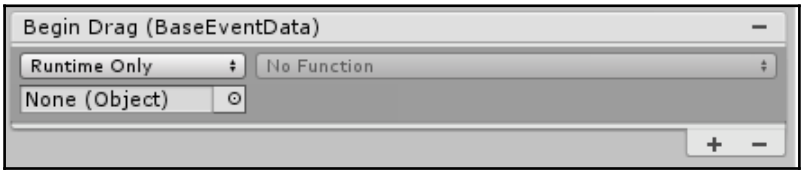

Canvas
Render Mode
Screen Space - Overlay
Pixel Perfect
Sort Order
1
Target Display
Display 1

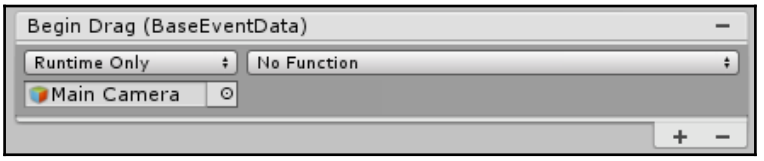

Drag And Drop (Script)
Script
DragAndDrop
Drag Item
None (Game Object)
Drag Canvas
Drag Canvas (Canvas)

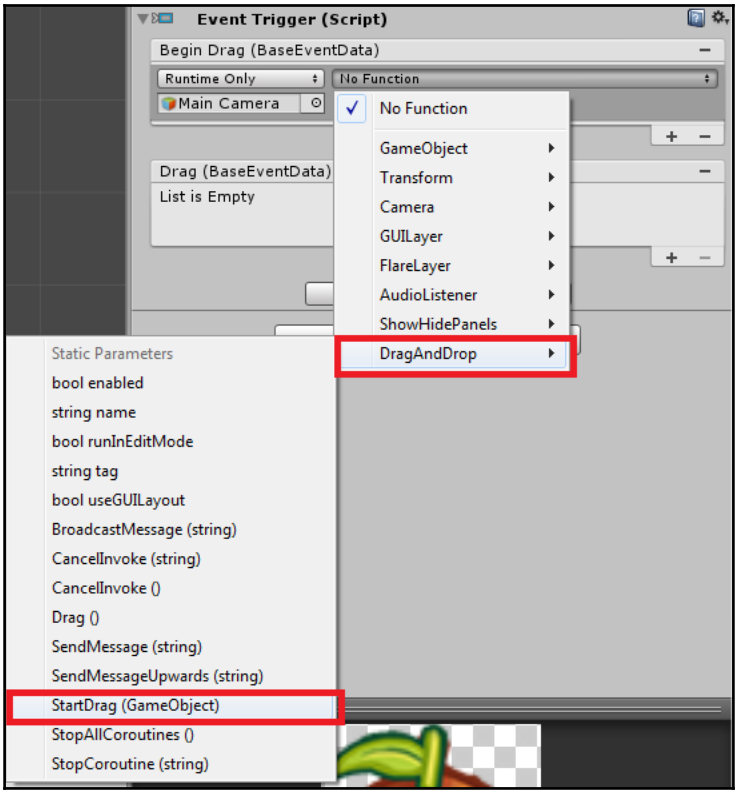

Popup Canvas
Inventory Panel
Inventory Banner
Inventory Holder
ItemHolder
Food
ItemHolder
ItemHolder

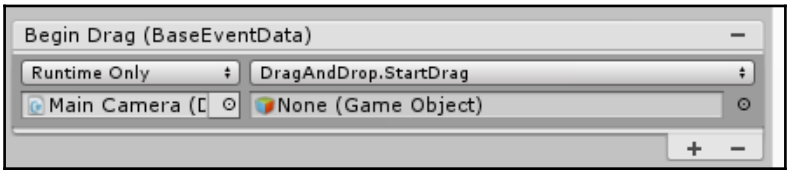

Inspector
Food
Static
Tag
Untagged
Layer
UI
Rect Transform
Canvas Renderer
Image (Script)
Source Image
foodSpriteSheet_18
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size
Event Trigger (Script)
Add New Event Type

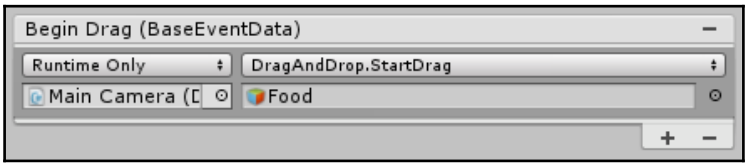

Event Trigger (Script)
Begin Drag (BaseEventData)
List is Empty
Drag (BaseEventData)
List is Empty
Add New Event Type

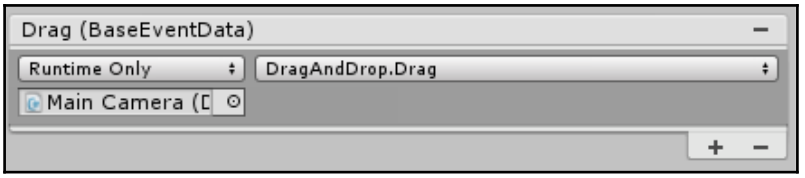

Begin Drag (BaseEventData)
Runtime Only
No Function
None (Object)

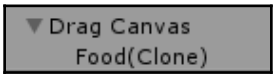

Begin Drag (BaseEventData)
Runtime Only
No Function
Main Camera

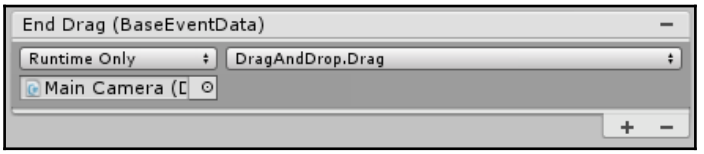

Event Trigger (Script)
Begin Drag (BaseEventData)
Runtime Only
No Function
Main Camera
No Function
GameObject
Transform
Camera
GUILayer
FlareLayer
AudioListener
ShowHidePanels
DragAndDrop
Drag (BaseEventData)
List is Empty
Static Parameters
bool enabled
string name
bool runInEditMode
string tag
bool useGUILayout
BroadcastMessage (string)
CancelInvoke (string)
CancelInvoke ()
Drag ()
SendMessage (string)
SendMessageUpwards (string)
StartDrag (GameObject)
StopAllCoroutines ()
StopCoroutine (string)

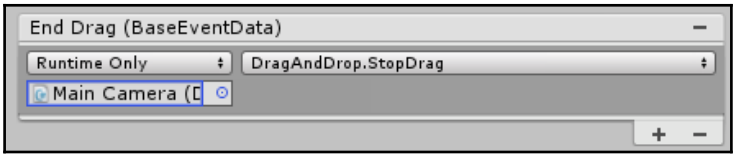

Begin Drag (BaseEventData)
Runtime Only
DragAndDrop.StartDrag
Main Camera (D
None (Game Object)

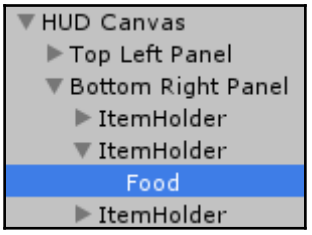

Begin Drag (BaseEventData)
Runtime Only
DragAndDrop.StartDrag
Main Camera (D
Food

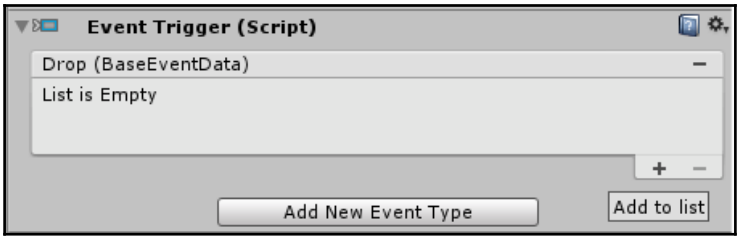

Drag (BaseEventData)
Runtime Only
DragAndDrop.Drag
Main Camera (D

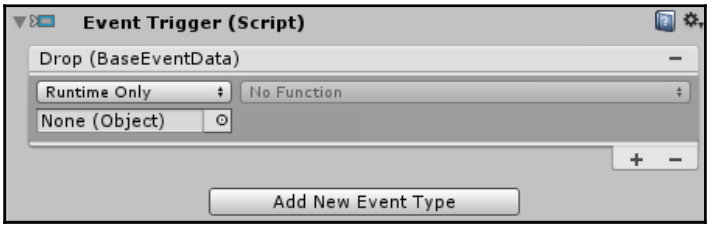

Drag Canvas
Food(Clone)

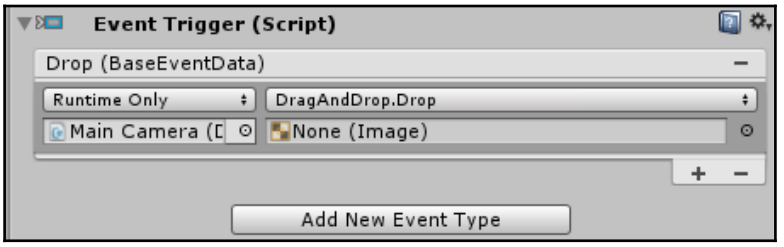

End Drag (BaseEventData)
Runtime Only
DragAndDrop.Drag
Main Camera (D

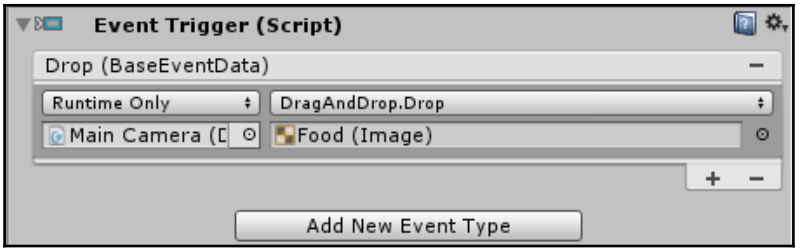

End Drag (BaseEventData)
Runtime Only
DragAndDrop.StopDrag
Main Camera (D

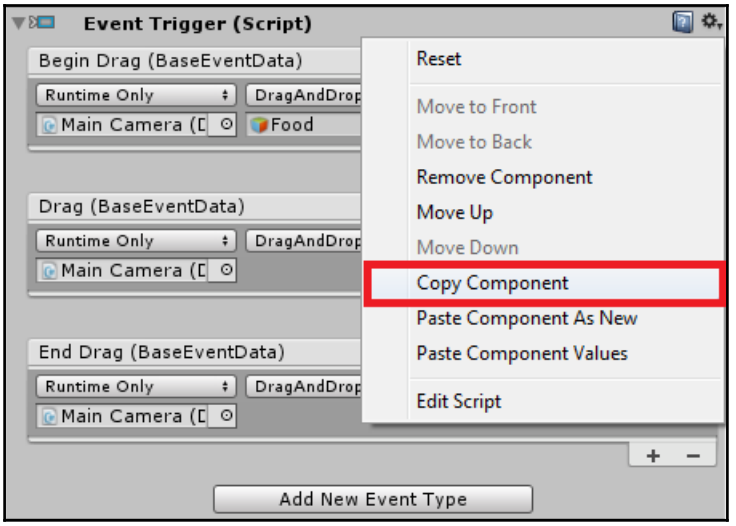

HUD Canvas
Top Left Panel
Bottom Right Panel
ItemHolder
ItemHolder
Food
ItemHolder


Event Trigger (Script)
Drop (BaseEventData)
List is Empty
Add New Event Type
Add to list

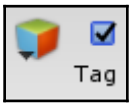

Event Trigger (Script)
Drop (BaseEventData)
Runtime Only
No Function
None (Object)
Add New Event Type

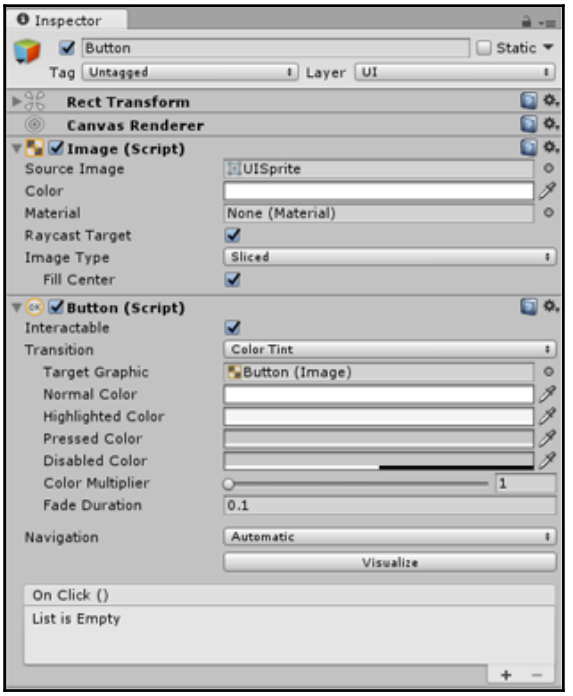

Event Trigger (Script)
Drop (BaseEventData)
Runtime Only
DragAndDrop.Drop
Main Camera (D
None (Image)
Add New Event Type

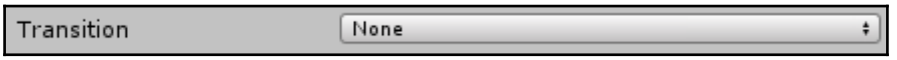

Event Trigger (Script)
Drop (BaseEventData)
Runtime Only
DragAndDrop.Drop
Main Camera (D
Food (Image)
Add New Event Type

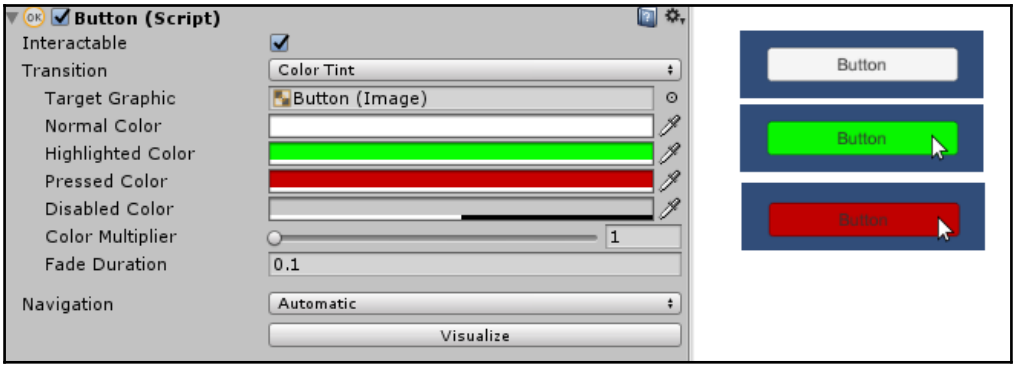

Event Trigger (Script)
Begin Drag (BaseEventData)
Runtime Only
DragAndDrop
Main Camera (D
Food
Drag (BaseEventData)
Runtime Only
DragAndDrop
Main Camera (D
End Drag (BaseEventData)
Runtime Only
DragAndDrop
Main Camera (D
Add New Event Type
Reset
Move to Front
Move to Back
Remove Component
Move Up
Move Down
Copy Component
Paste Component As New
Paste Component Values
Edit Script

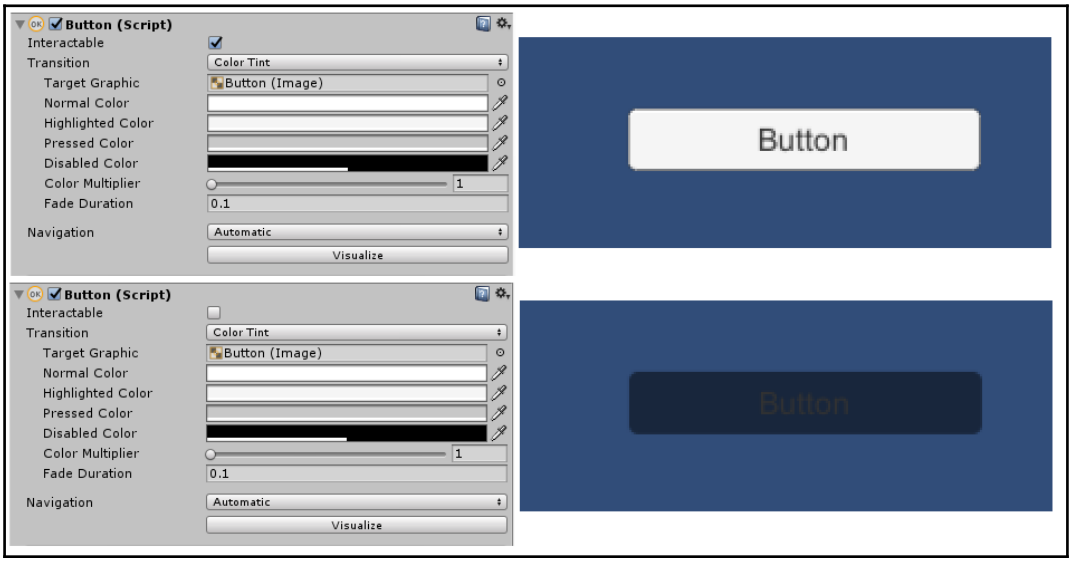
Chapter 5: Buttons

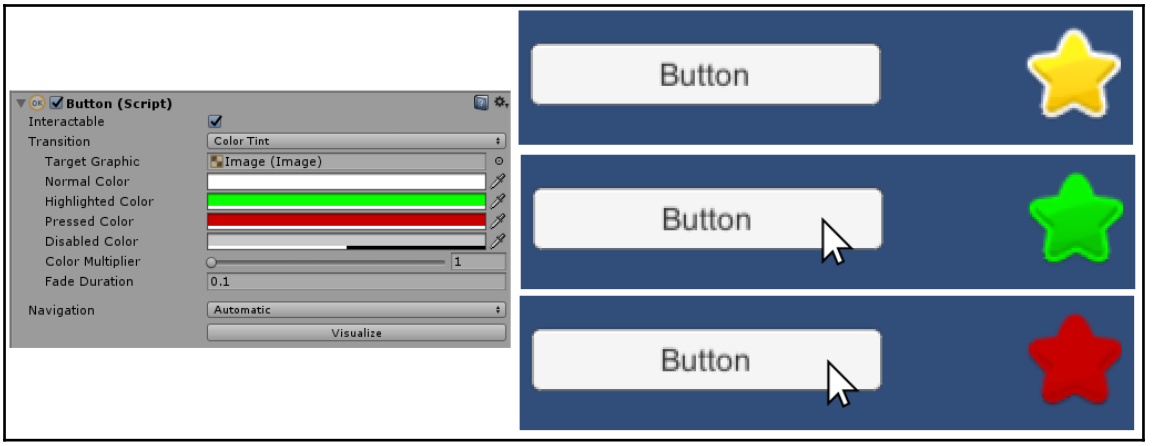







Button (Script)
Interactable
Transition
Color Tint
Target Graphic
Button (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Button
Button
Button


Button (Script)
Interactable
Transition
Color Tint
Target Graphic
Button (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Button (Script)
Interactable
Transition
Color Tint
Target Graphic
Button (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Button
Button


Button (Script)
Interactable
Transition
Color Tint
Target Graphic
Image (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Button
Button
Button

normal
hover
click
locked
uiElements_39
uiElements_40
uiElements_41
uiElements_42

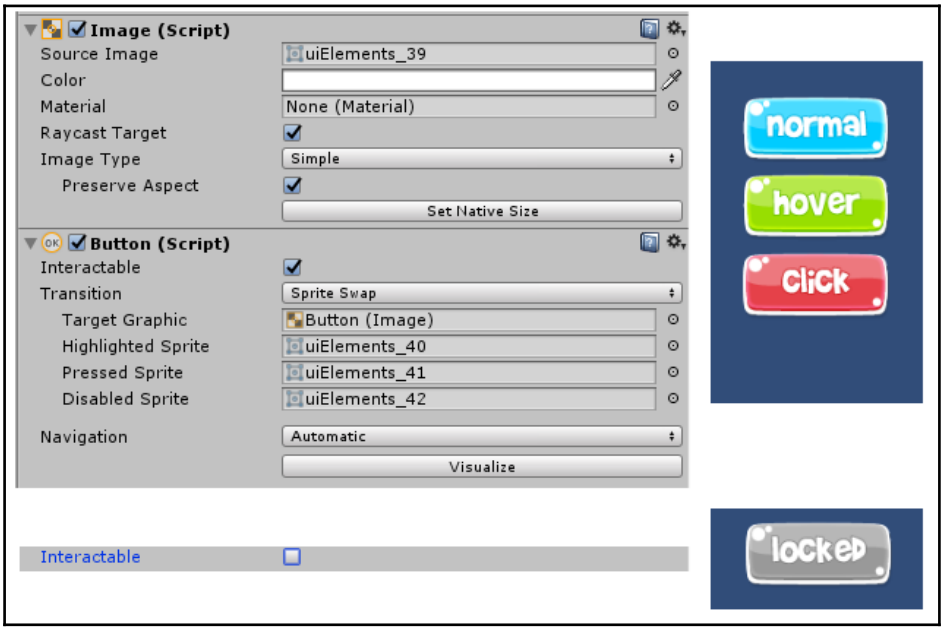
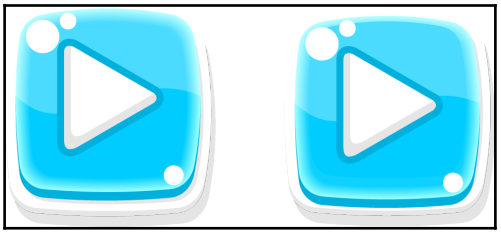
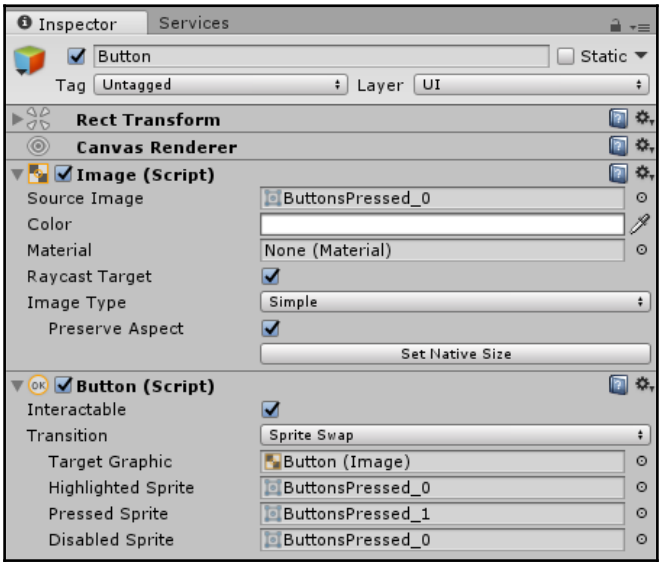
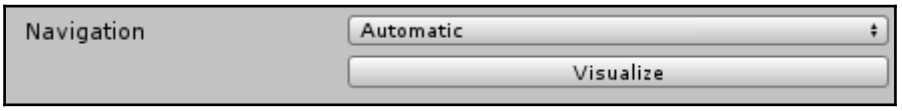
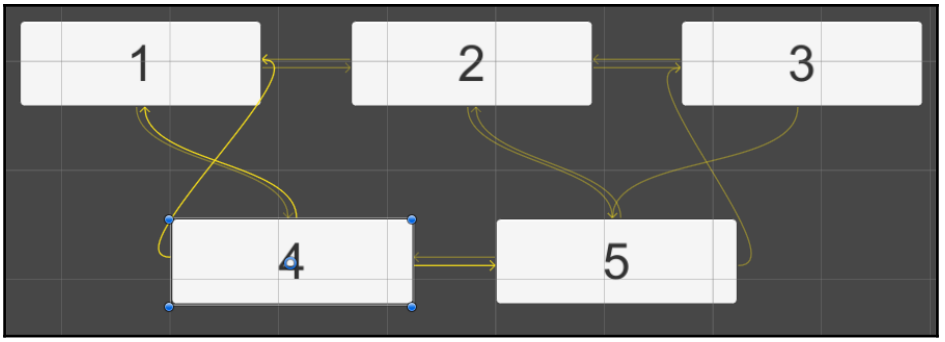


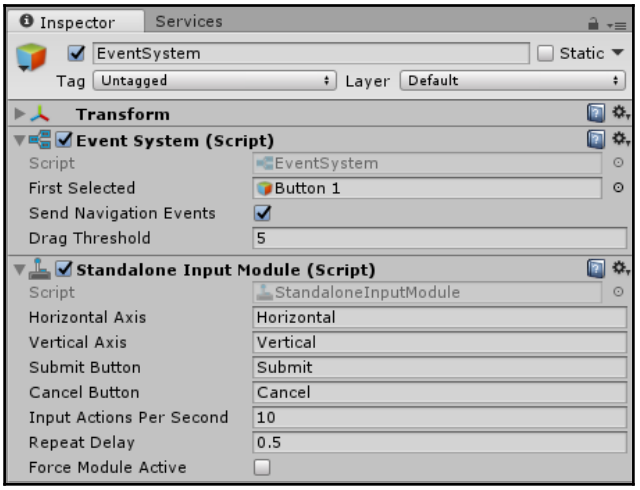
Image (Script)
Source Image
uiElements_39
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size
Button (Script)
Interactable
Transition
Sprite Swap
Target Graphic
Button (Image)
Highlighted Sprite
uiElements_40
Pressed Sprite
uiElements_41
Disabled Sprite
uiElements_42
Navigation
Automatic
Visualize
Interactable
normal
hover
click
locked

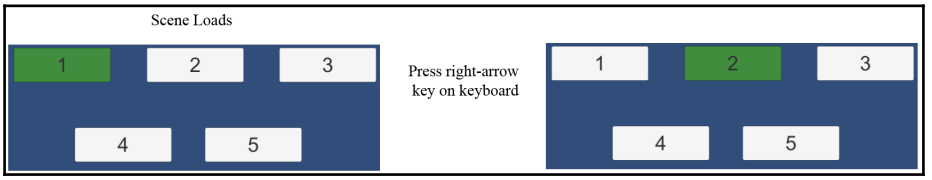



Inspector
Services
Button
Static
Tag
Untagged
Layer
UI
Rect Transform
Canvas Renderer
Image (Script)
Source Image
ButtonsPressed_0
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size
Button (Script)
Interactable
Transition
Sprite Swap
Target Graphic
Button (Image)
Highlighted Sprite
ButtonsPressed_0
Pressed Sprite
ButtonsPressed_1
Disabled Sprite
ButtonsPressed_0


Navigation
Automatic
Visualize

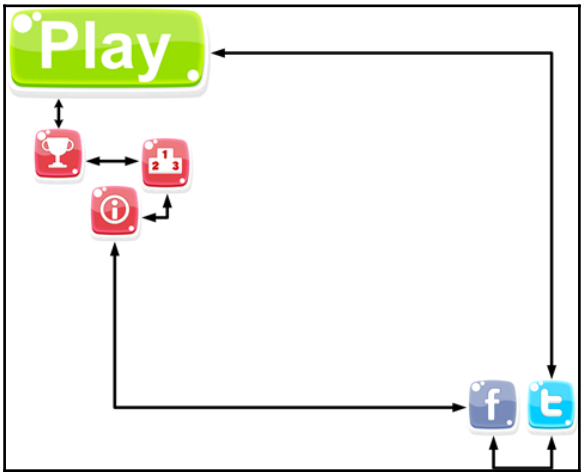

1
2
3
4
5

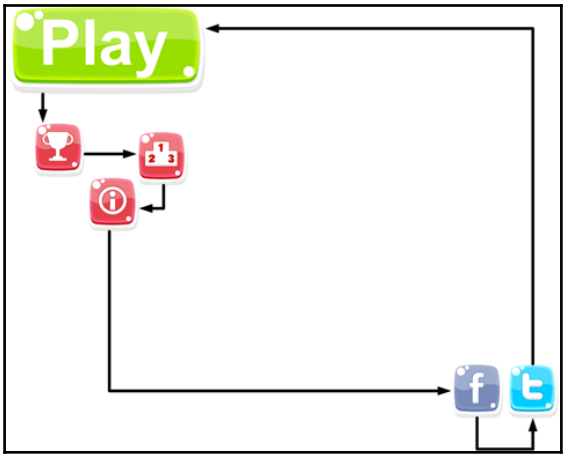

Inspector
Services
EventSystem
Static
Tag
Untagged
Layer
Default
Transform
Event System (Script)
Script
EventSystem
First Selected
Button 1
Send Navigation Events
Drag Threshold
5
Standalone Input Module (Script)
Script
StandaloneInputModule
Horizontal Axis
Horizontal
Vertical Axis
Vertical
Submit Button
Submit
Cancel Button
Cancel
Input Actions Per Second
10
Repeat Delay
0.5
Force Module Active

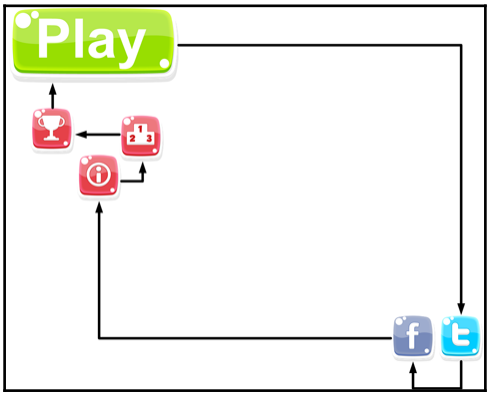

Scene Loads
1
2
3
4
5
Press right-arrow key on keyboard
1
2
3
4
5

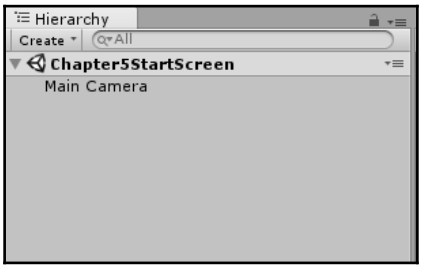
Navigation
Explicit
Select On Up
None (Selectable)
Select On Down
None (Selectable)
Select On Left
None (Selectable)
Select On Right
None (Selectable)
Visualize

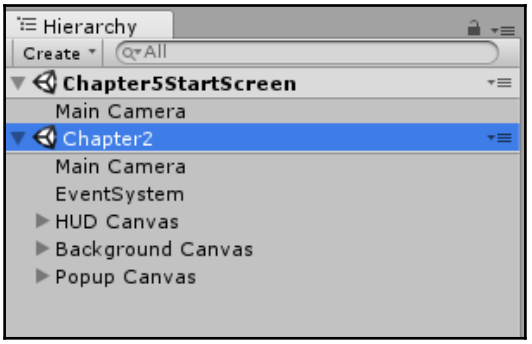
Play

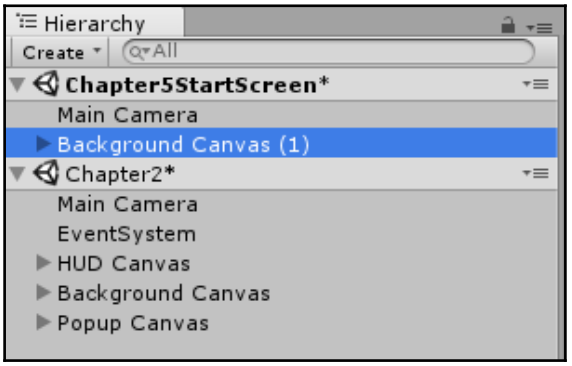

Play

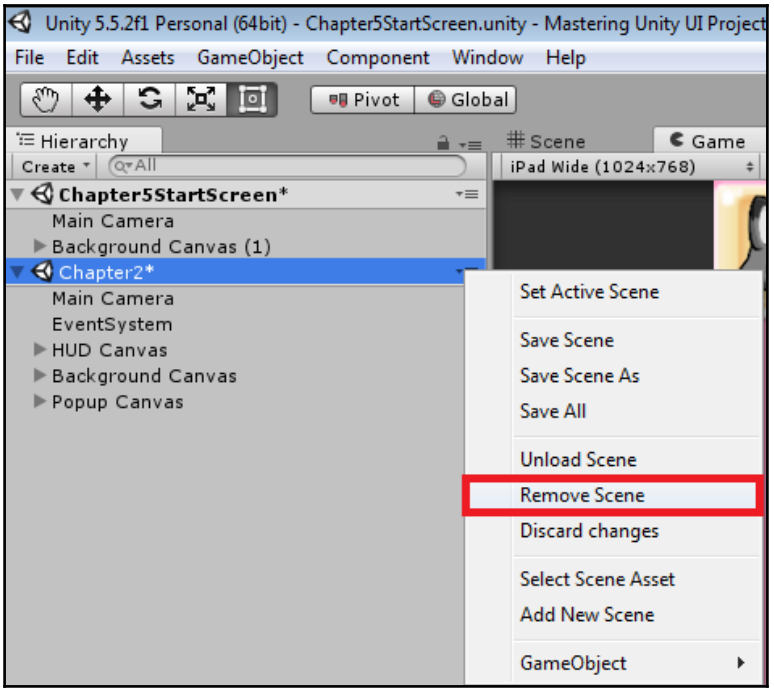

Play

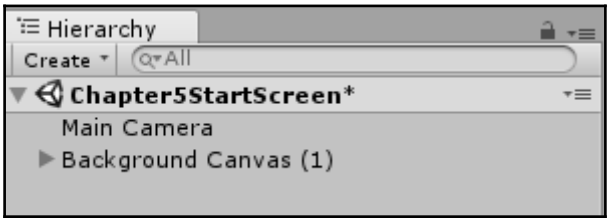

Play

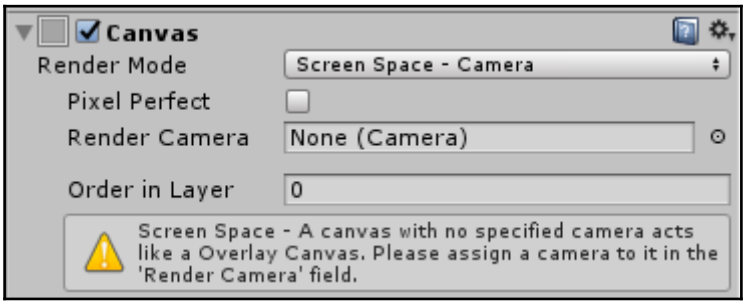

Hierarchy
Create
All
Chapter5StartScreen
Main Camera

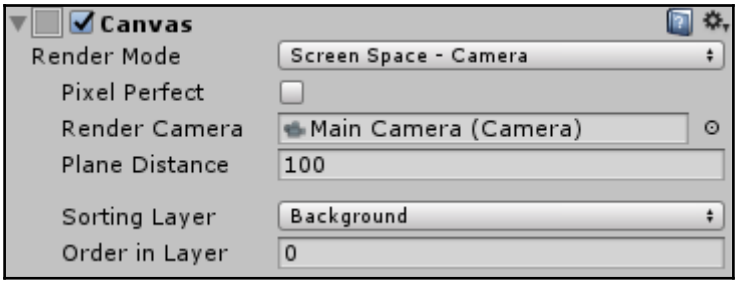

Hierarchy
Create
All
Chapter5StartScreen
Main Camera
Chapter2
Main Camera
EventSystem
HUD Canvas
Background Canvas
Popup Canvas

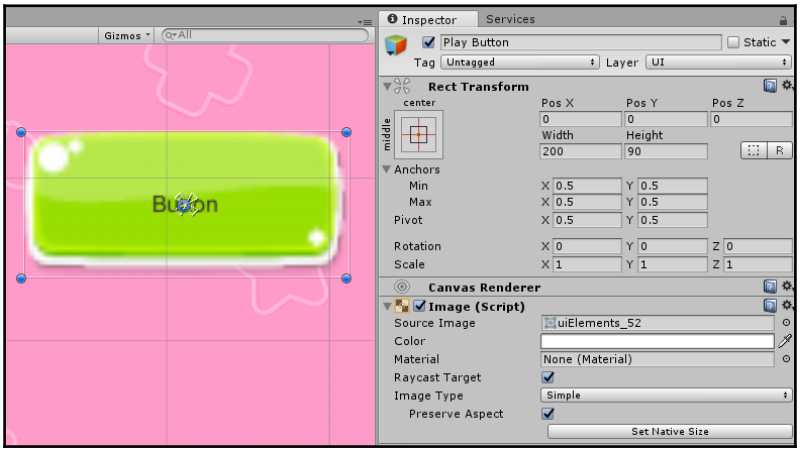

Hierarchy
Create
All
Chapter5StartScreen*
Main Camera
Background Canvas (1)
Chapter2*
Main Camera
EventSystem
HUD Canvas
Background Canvas
Popup Canvas

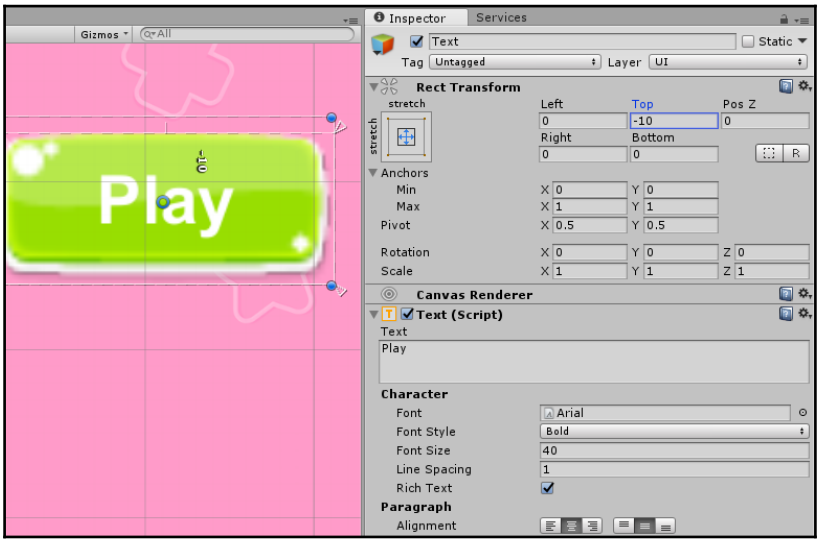

Unity 5.5.2f1 Personal (64bit) - Chapter5StartScreen.unity - Mastering Unity UI Project
File Edit Assets GameObject Component Window Help
Pivot Global
Hierarchy
Create All
Chapter5StartScreen*
Main Camera
Background Canvas (1)
Chapter2*
Main Camera
EventSystem
HUD Canvas
Background Canvas
Popup Canvas
Scene Game
iPad Wide (1024x768)
Set Active Scene
Save Scene
Save Scene As
Save All
Unload Scene
Remove Scene
Discard changes
Select Scene Asset
Add New Scene
GameObject


Hierarchy
Create All
Chapter5StartScreen*
Main Camera
Background Canvas (1)

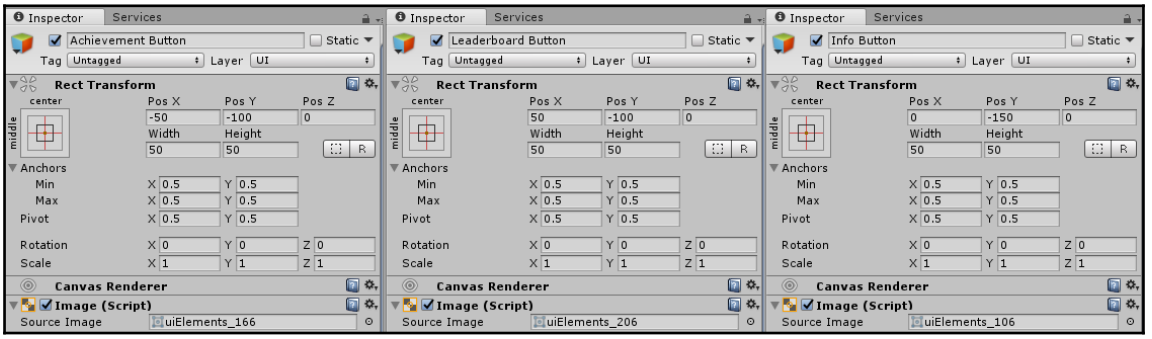

Canvas
Render Mode
Screen Space - Camera
Pixel Perfect
Render Camera
None (Camera)
Order in Layer
0
Screen Space - A canvas with no specified camera acts like a Overlay Canvas. Please assign a camera to it in the 'Render Camera' field.

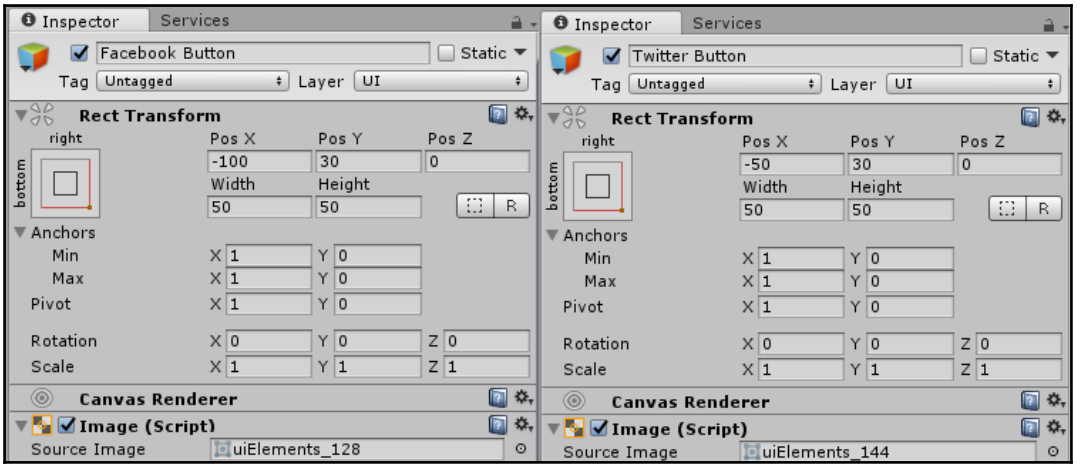

Canvas
Render Mode
Screen Space - Camera
Pixel Perfect
Render Camera
Main Camera (Camera)
Plane Distance
100
Sorting Layer
Background
Order in Layer
0


Gizmos
All
Button
Inspector
Services
Play Button
Static
Tag
Untagged
Layer
UI
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
Width
Height
Anchors
Min
Max
Pivot
Rotation
Scale
Canvas Renderer
Image (Script)
Source Image
uiElements_52
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

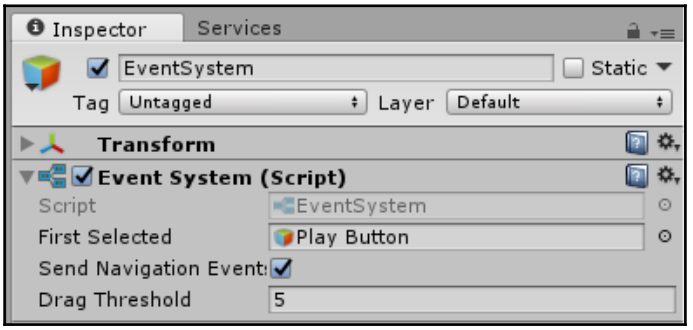

Gizmos
All
Play
Inspector
Services
Text
Static
Tag
Untagged
Layer
UI
Rect Transform
stretch
stretch
Left
Top
Pos Z
Right
Bottom
Anchors
Min
Max
Pivot
Rotation
Scale
Canvas Renderer
Text (Script)
Text
Play
Character
Font
Arial
Font Style
Bold
Font Size
40
Line Spacing
1
Rich Text
Paragraph
Alignment

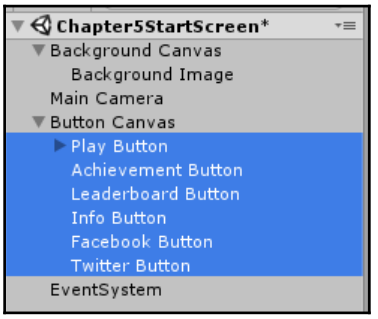
Play

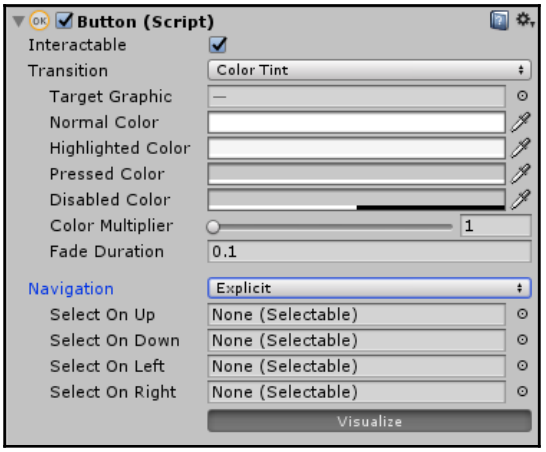

Inspector
Services
Achievement Button
Static
Tag
Untagged
Layer
UI
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
-50
-100
0
Width
Height
50
50
R
Anchors
Min
Max
Pivot
X 0.5
Y 0.5
Rotation
Scale
X 0
Y 0
Z 0
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_166
Inspector
Services
Leaderboard Button
Static
Tag
Untagged
Layer
UI
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
50
-100
0
Width
Height
50
50
R
Anchors
Min
Max
Pivot
X 0.5
Y 0.5
Rotation
Scale
X 0
Y 0
Z 0
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_206
Inspector
Services
Info Button
Static
Tag
Untagged
Layer
UI
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
0
-150
0
Width
Height
50
50
R
Anchors
Min
Max
Pivot
X 0.5
Y 0.5
Rotation
Scale
X 0
Y 0
Z 0
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_106

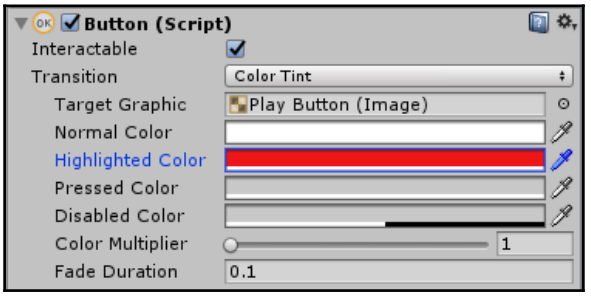

Inspector
Services
Facebook Button
Static
Tag
Untagged
Layer
UI
Rect Transform
right
bottom
Pos X
Pos Y
Pos Z
-100
30
0
Width
Height
50
50
R
Anchors
Min
Max
Pivot
X 1
Y 0
Rotation
Scale
X 0
Y 0
Z 0
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_128
Inspector
Services
Twitter Button
Static
Tag
Untagged
Layer
UI
Rect Transform
right
bottom
Pos X
Pos Y
Pos Z
-50
30
0
Width
Height
50
50
R
Anchors
Min
Max
Pivot
X 1
Y 0
Rotation
Scale
X 0
Y 0
Z 0
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_144

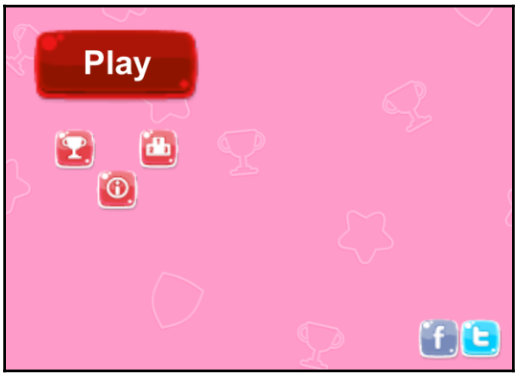
Play

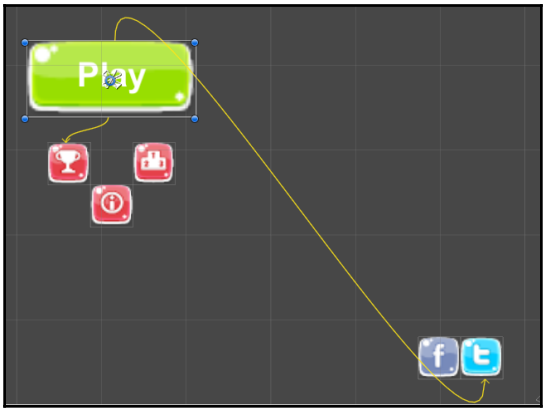

Inspector
Services
EventSystem
Static
Tag
Untagged
Layer
Default
Transform
Event System (Script)
Script
EventSystem
First Selected
Play Button
Send Navigation Event
Drag Threshold
5

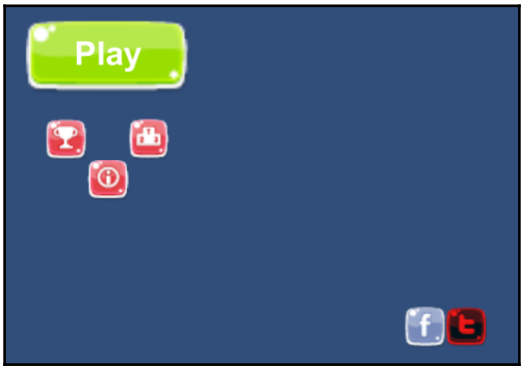

Chapter5StartScreen*
Background Canvas
Background Image
Main Camera
Button Canvas
Play Button
Achievement Button
Leaderboard Button
Info Button
Facebook Button
Twitter Button
EventSystem

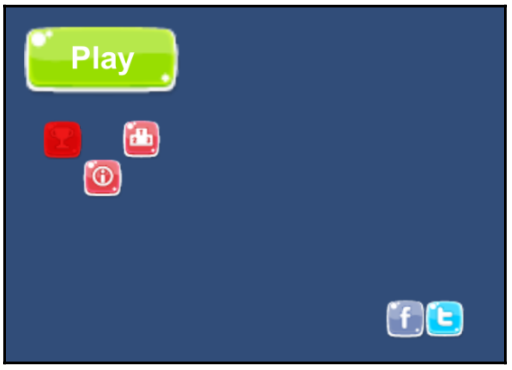

Button (Script)
Interactable
Transition
Color Tint
Target Graphic
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Explicit
Select On Up
None (Selectable)
Select On Down
None (Selectable)
Select On Left
None (Selectable)
Select On Right
None (Selectable)
Visualize


Button (Script)
Interactable
Transition
Color Tint
Target Graphic
Play Button (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1

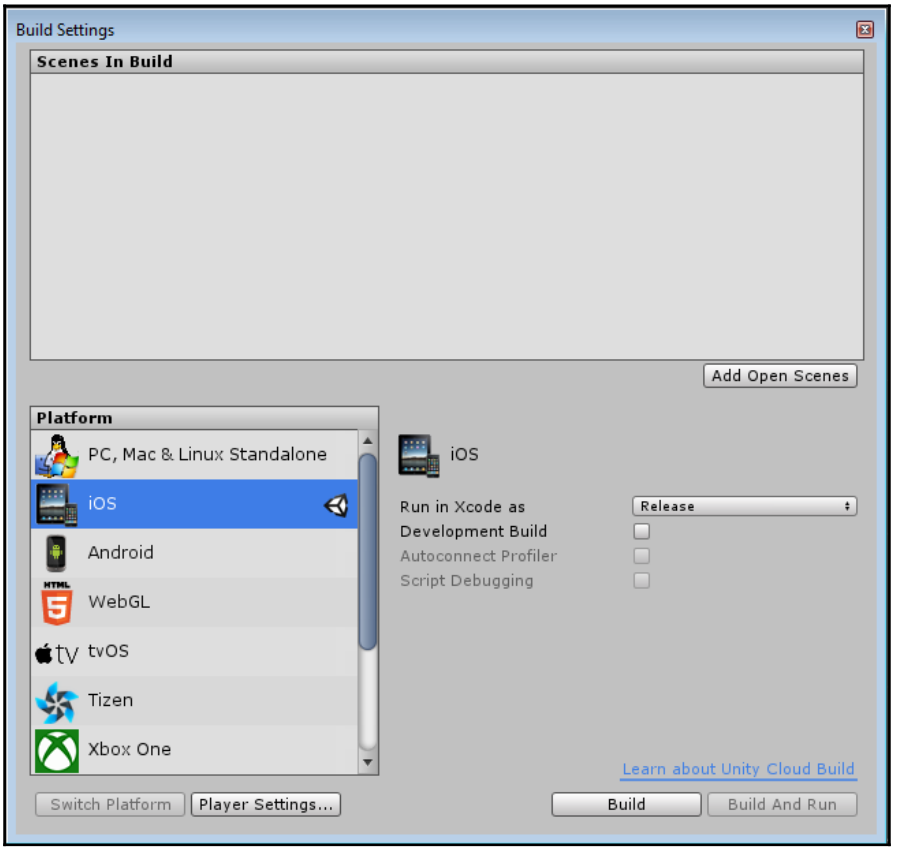

Play

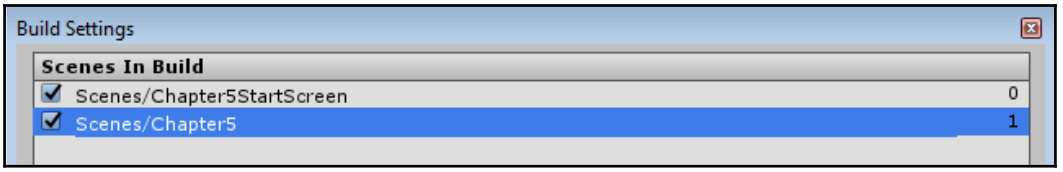

Play


Play

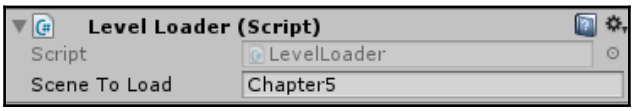

Play

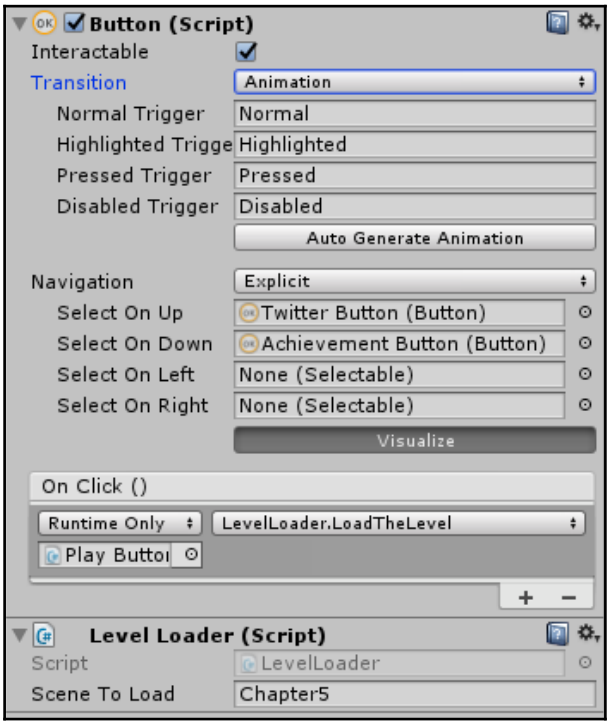
Play

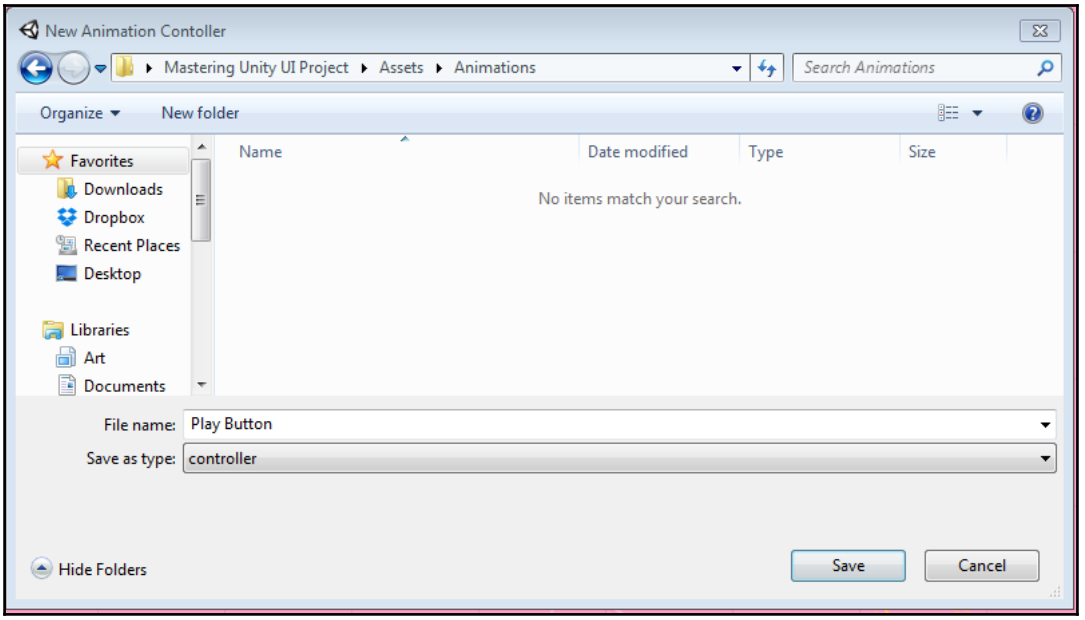

Build Settings
Scenes In Build
Add Open Scenes
Platform
PC, Mac & Linux Standalone
iOS
Android
WebGL
tvOS
Tizen
Xbox One
iOS
Run in Xcode as
Release
Development Build
Autoconnect Profiler
Script Debugging
Learn about Unity Cloud Build
Switch Platform
Player Settings...
Build
Build And Run

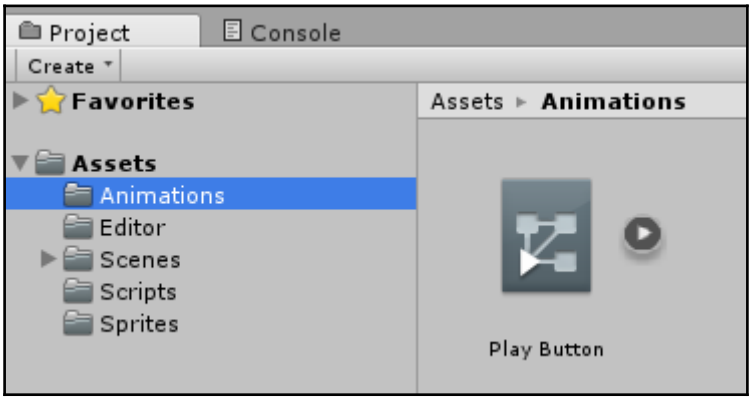

Build Settings
Scenes In Build
Scenes/Chapter5StartScreen
0
Scenes/Chapter5
1

Level Loader (Script)
Script
LevelLoader
Scene To Load

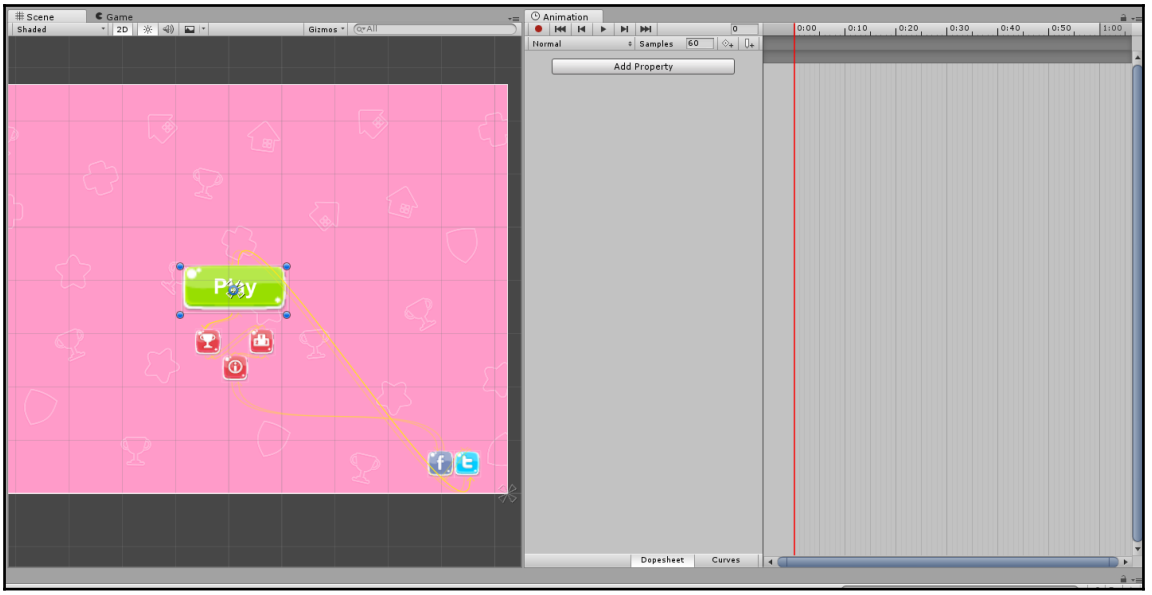

Level Loader (Script)
Script
LevelLoader
Scene To Load
Chapter5

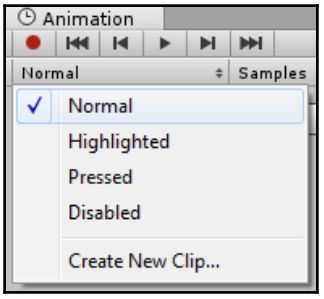

Button (Script)
Interactable
Transition
Animation
Normal Trigger
Normal
Highlighted Trigge
Highlighted
Pressed Trigger
Pressed
Disabled Trigger
Disabled
Auto Generate Animation
Navigation
Explicit
Select On Up
Twitter Button (Button)
Select On Down
Achievement Button (Button)
Select On Left
None (Selectable)
Select On Right
None (Selectable)
Visualize
On Click ()
Runtime Only
LevelLoader.LoadTheLevel
Play Buttor
Level Loader (Script)
Script
LevelLoader
Scene To Load
Chapter5

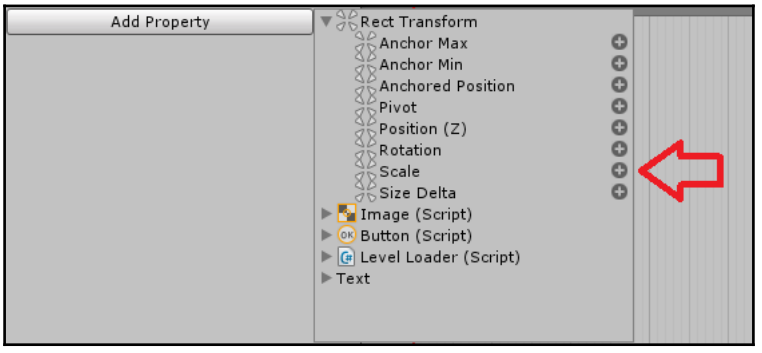

New Animation Contoller
Mastering Unity UI Project ▸ Assets ▸ Animations
Search Animations
Organize
New folder
Favorites
Downloads
Dropbox
Recent Places
Desktop
Libraries
Art
Documents
Name
Date modified
Type
Size
No items match your search.
File name: Play Button
Save as type: controller
Hide Folders
Save
Cancel

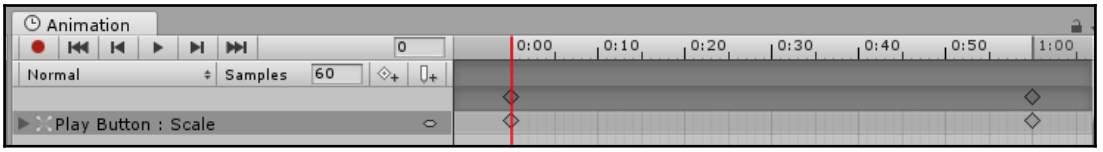

Project
Console
Create
Favorites
Assets
Animations
Editor
Scenes
Scripts
Sprites
Assets ▸ Animations
Play Button

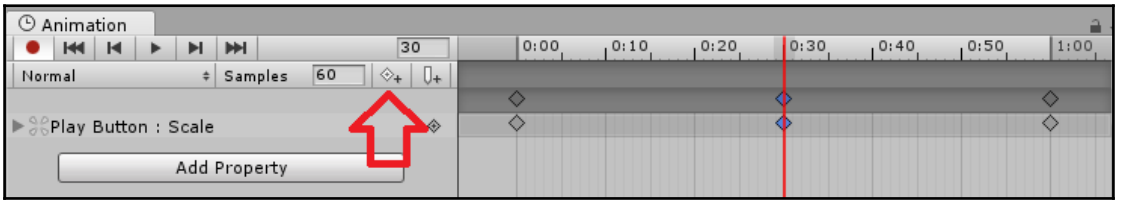
Animator
Controller
Play Button
Avatar
None (Avatar)
Apply Root Motion
Update Mode
Normal
Culling Mode
Always Animate

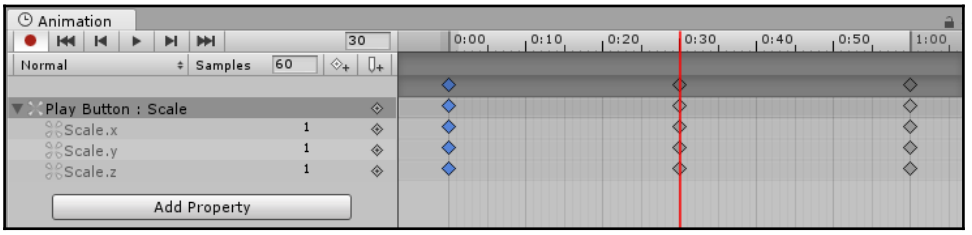

Scene
Game
Shaded
2D
Gizmos
Play
Animation
Normal
Samples
60
Add Property
0:00
0:10
0:20
0:30
0:40
0:50
1:00
Dopesheet
Curves

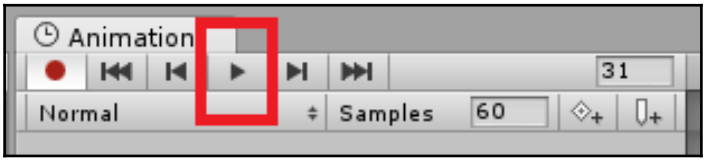

Animation
Normal
Samples
Normal
Highlighted
Pressed
Disabled
Create New Clip...

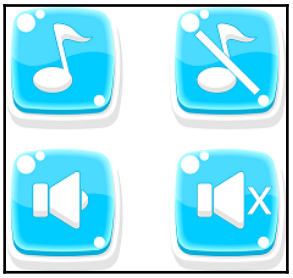

Add Property
Rect Transform
Anchor Max
Anchor Min
Anchored Position
Pivot
Position (Z)
Rotation
Scale
Size Delta
Image (Script)
Button (Script)
Level Loader (Script)
Text

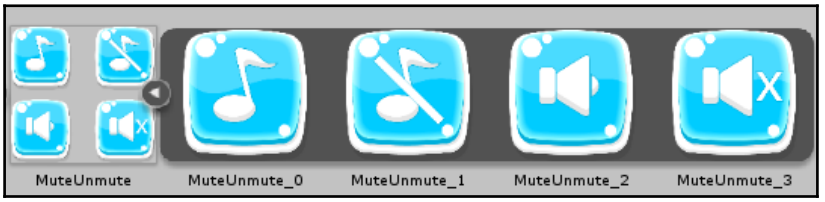

Animation
0
Normal
Samples
60
0:00
0:10
0:20
0:30
0:40
0:50
1:00
Play Button : Scale

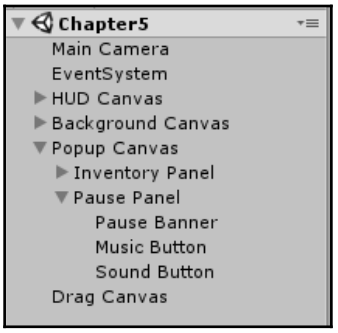

Animation
30
Normal
Samples
60
0:00
0:10
0:20
0:30
0:40
0:50
1:00
Play Button : Scale
Add Property

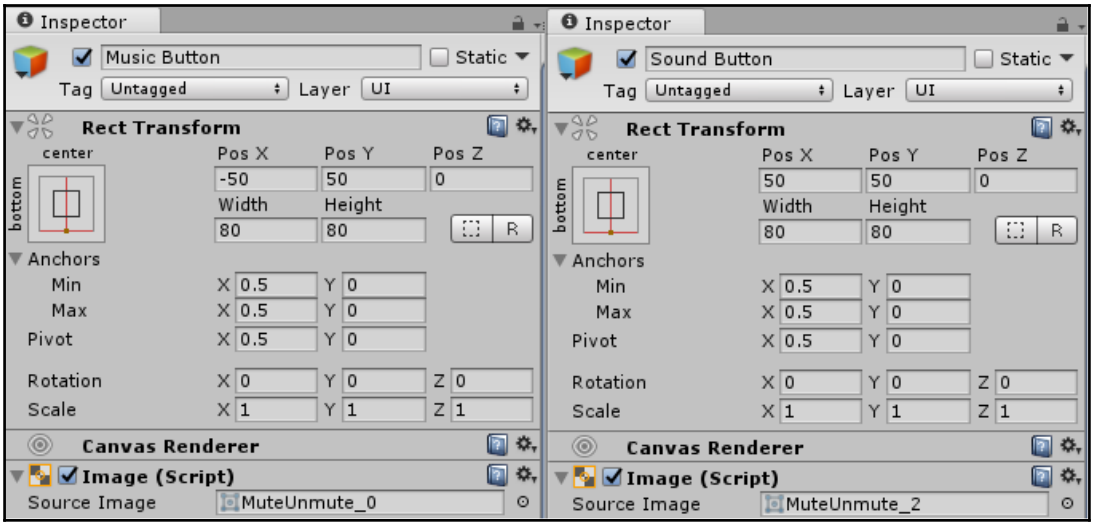

Animation
30
Normal
Samples
60
0:00
0:10
0:20
0:30
0:40
0:50
1:00
Play Button : Scale
Scale.x
1
Scale.y
1
Scale.z
1
Add Property

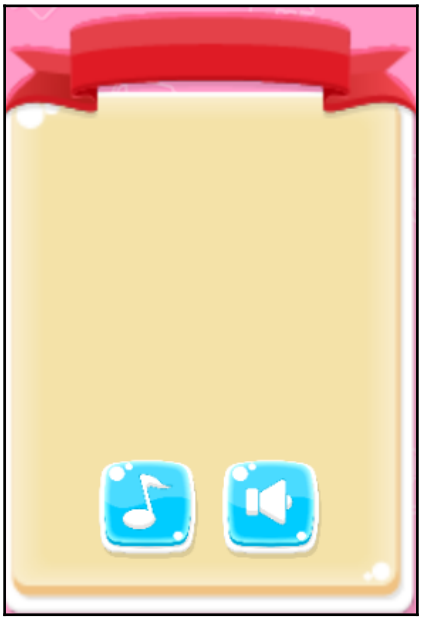

Animation
31
Normal
Samples
60

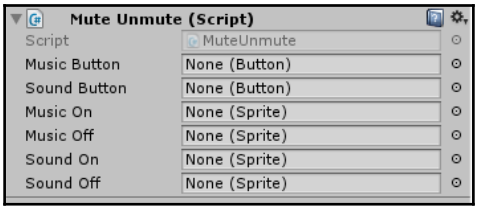


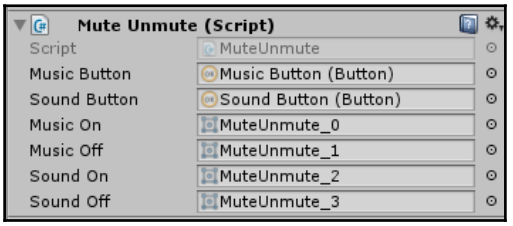

MuteUnmute
MuteUnmute_0
MuteUnmute_1
MuteUnmute_2
MuteUnmute_3


Chapter5
Main Camera
EventSystem
HUD Canvas
Background Canvas
Popup Canvas
Inventory Panel
Pause Panel
Pause Banner
Music Button
Sound Button
Drag Canvas

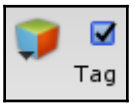

Inspector
Music Button
Static
Tag Untagged
Layer UI
Rect Transform
center
bottom
Pos X -50
Pos Y 50
Pos Z 0
Width 80
Height 80
R
Anchors
Min X 0.5 Y 0
Max X 0.5 Y 0
Pivot X 0.5 Y 0
Rotation X 0 Y 0 Z 0
Scale X 1 Y 1 Z 1
Canvas Renderer
Image (Script)
Source Image MuteUnmute_0
Inspector
Sound Button
Static
Tag Untagged
Layer UI
Rect Transform
center
bottom
Pos X 50
Pos Y 50
Pos Z 0
Width 80
Height 80
R
Anchors
Min X 0.5 Y 0
Max X 0.5 Y 0
Pivot X 0.5 Y 0
Rotation X 0 Y 0 Z 0
Scale X 1 Y 1 Z 1
Canvas Renderer
Image (Script)
Source Image MuteUnmute_2

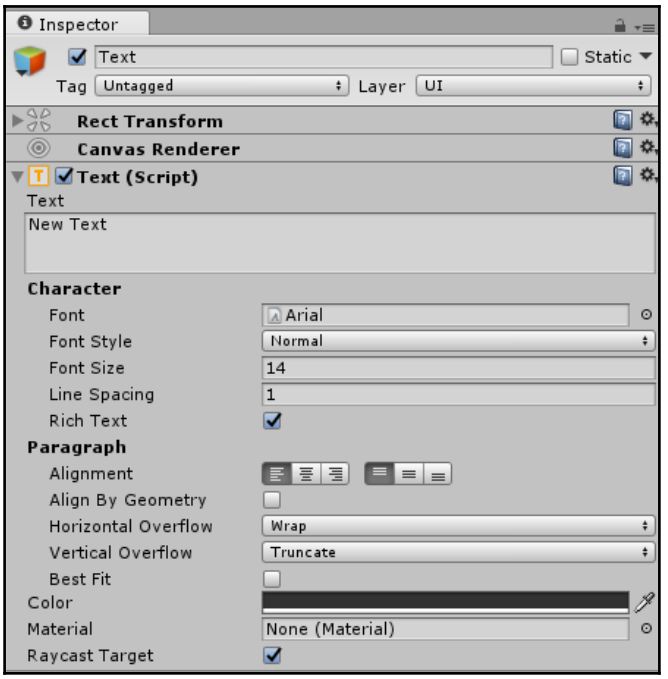


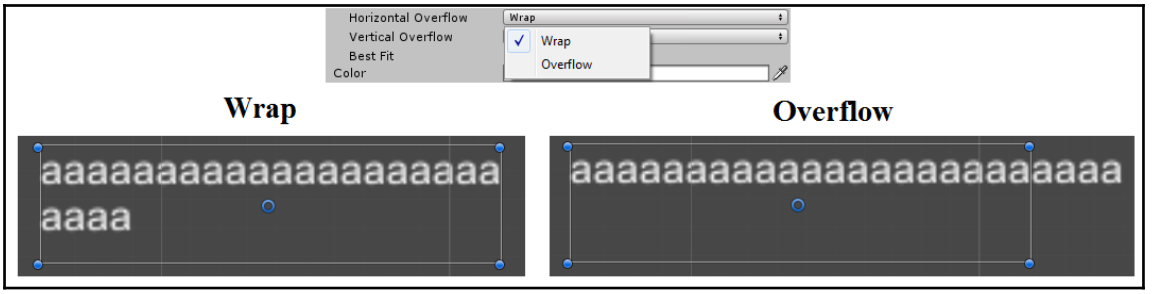

Mute Unmute (Script)
Script
MuteUnmute
Music Button
None (Button)
Sound Button
None (Button)
Music On
None (Sprite)
Music Off
None (Sprite)
Sound On
None (Sprite)
Sound Off
None (Sprite)

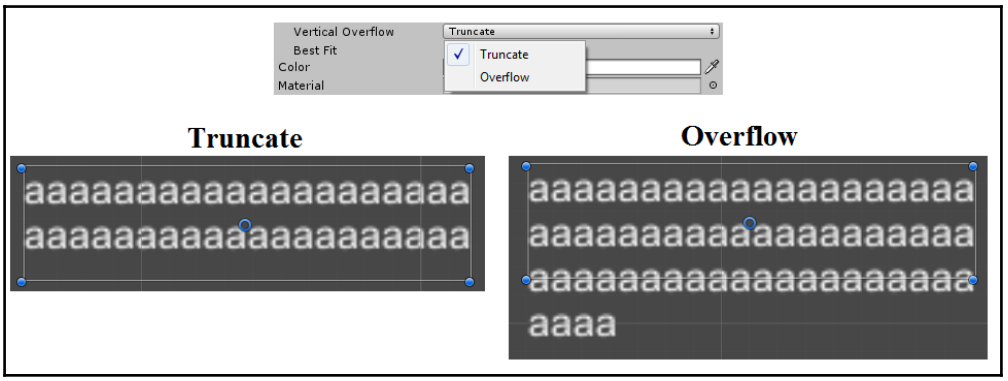

Mute Unmute (Script)
Script
MuteUnmute
Music Button
Music Button (Button)
Sound Button
Sound Button (Button)
Music On
MuteUnmute_0
Music Off
MuteUnmute_1
Sound On
MuteUnmute_2
Sound Off
MuteUnmute_3

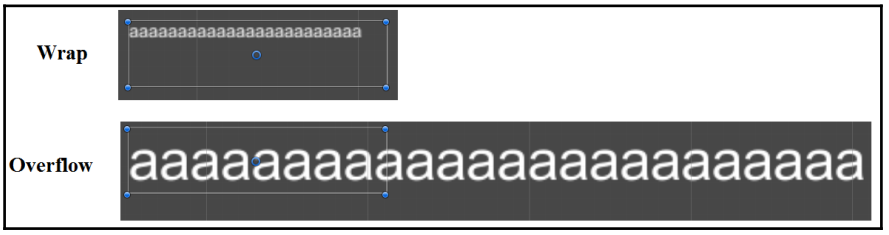
Chapter 6: Text, Images, and TextMesh Pro-Text











Bold Text

Italic Text

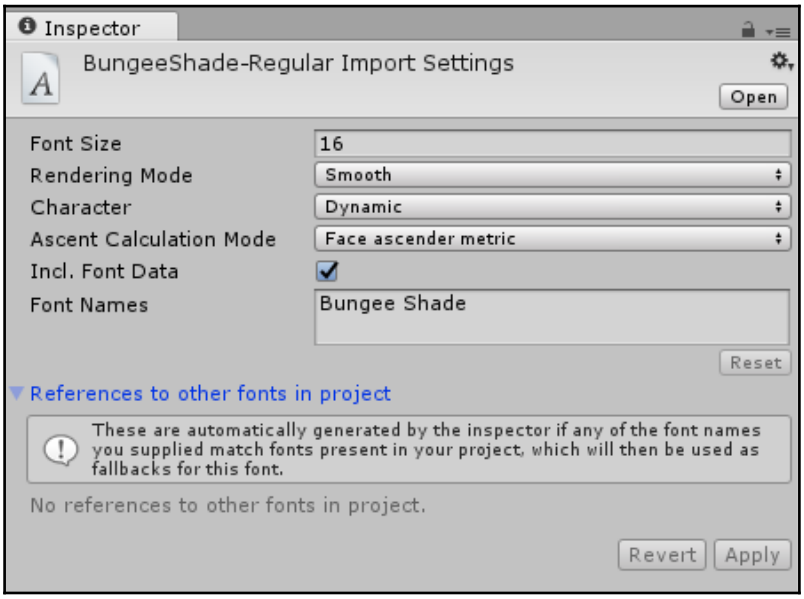
Nested Text

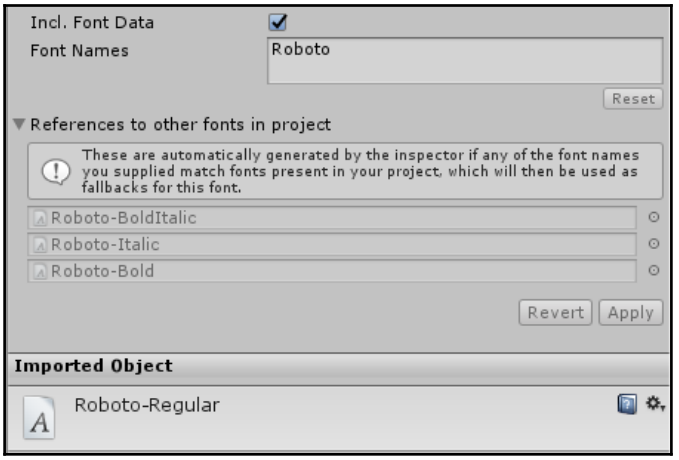
Red Text

Red Text

Red Text

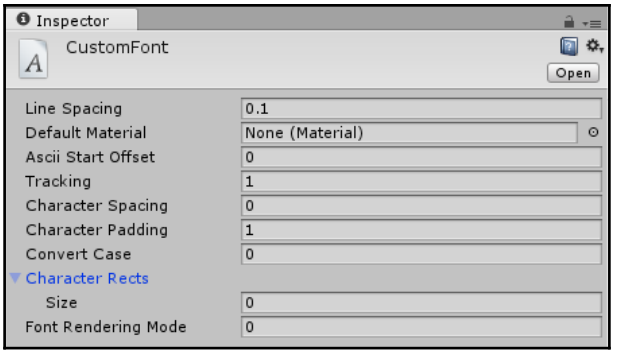
Small Normal Big

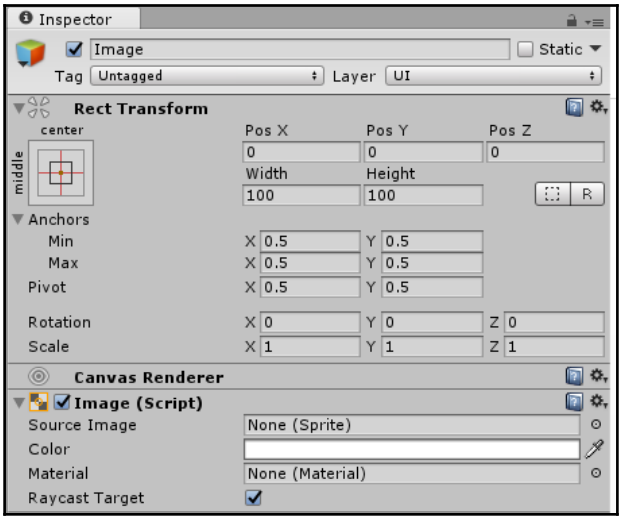



Incl. Font Data
Font Names
Roboto
Reset
References to other fonts in project
These are automatically generated by the inspector if any of the font names you supplied match fonts present in your project, which will then be used as fallbacks for this font.
Roboto-BoldItalic
Roboto-Italic
Roboto-Bold
Revert
Apply
Imported Object
Roboto-Regular

New
New

New
New


Inspector
CustomFont
Open
Line Spacing
0.1
Default Material
None (Material)
Ascii Start Offset
0
Tracking
1
Character Spacing
0
Character Padding
1
Convert Case
0
Character Rects
Size
0
Font Rendering Mode
0


Inspector
Image
Static
Tag
Untagged
Layer
UI
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
100
100
R
Anchors
Min
X 0.5
Y 0.5
Max
X 0.5
Y 0.5
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
None (Sprite)
Color
Material
None (Material)
Raycast Target

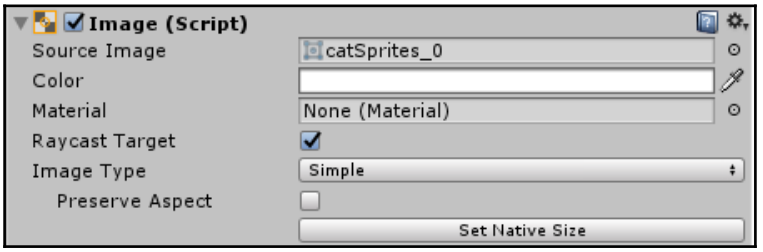
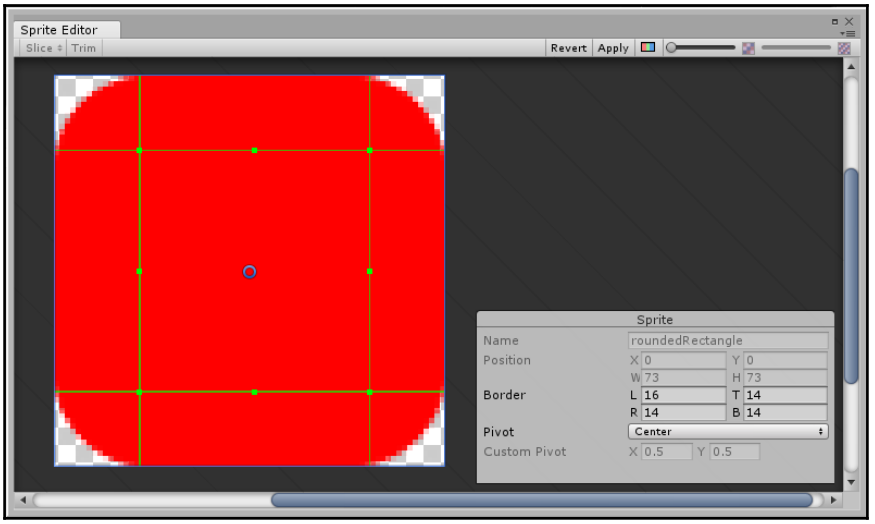
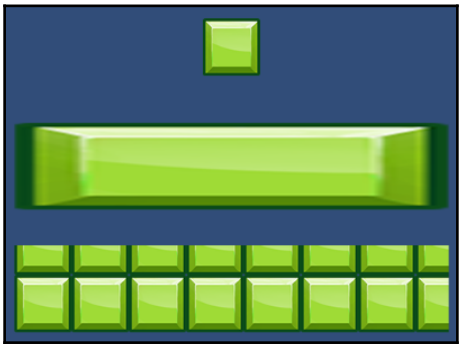


Image (Script)
Source Image
catSprites_0
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size


Sprite Editor
Slice
Trim
Revert
Apply
Sprite
Name
roundedRectangle
Position
X 0
Y 0
W 73
H 73
Border
L 16
T 14
R 14
B 14
Pivot
Center
Custom Pivot
X 0.5
Y 0.5



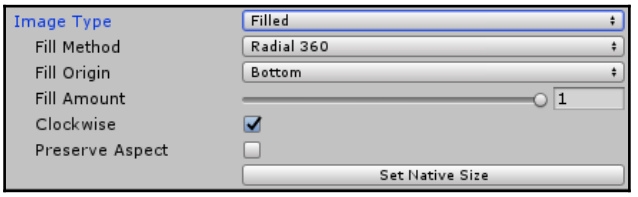
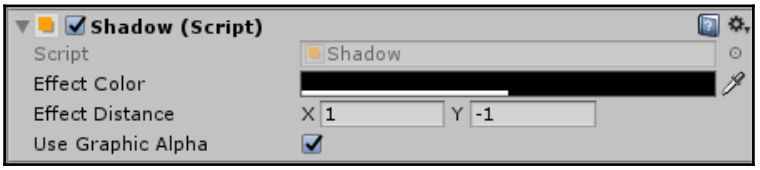
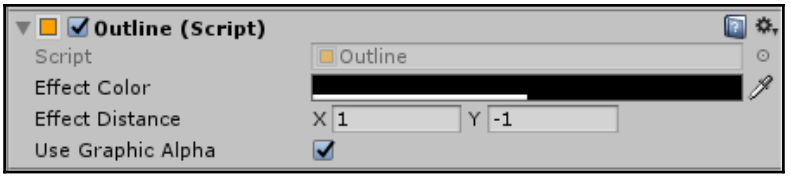
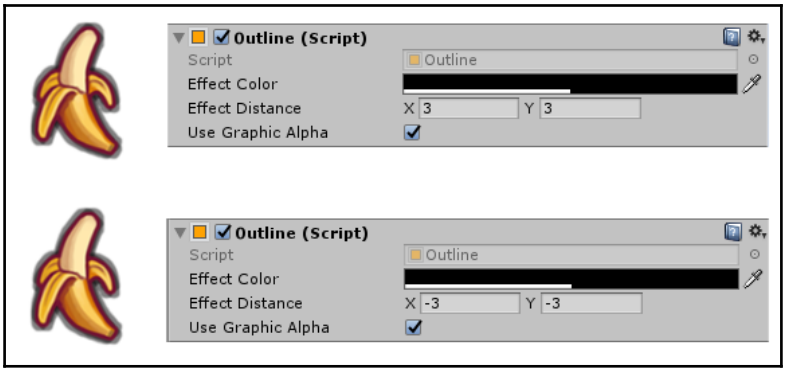


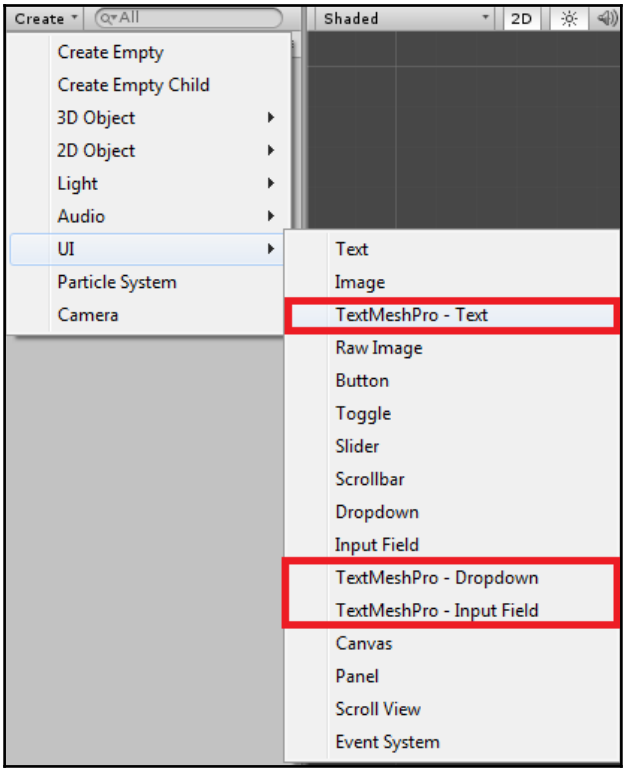
Image Type
Filled
Fill Method
Radial 360
Fill Origin
Bottom
Fill Amount
1
Clockwise
Preserve Aspect
Set Native Size

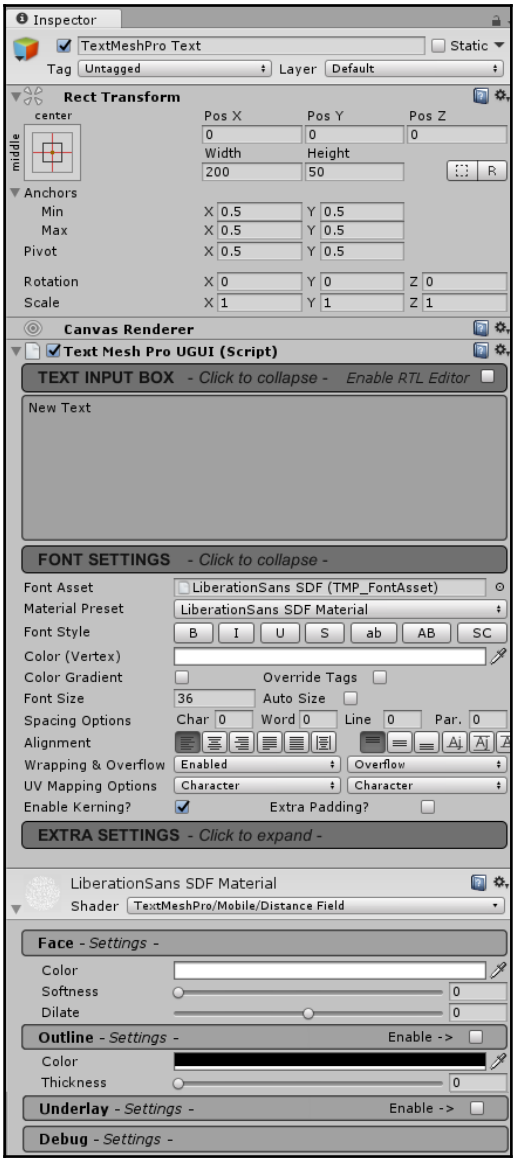

Shadow (Script)
Script
Shadow
Effect Color
Effect Distance
X 1
Y -1
Use Graphic Alpha

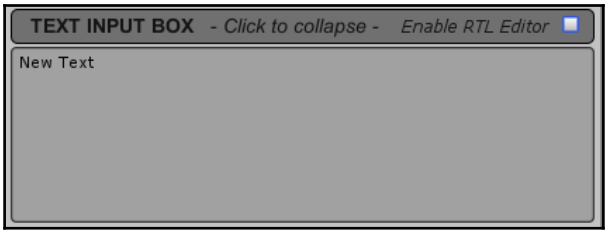

Outline (Script)
Script
Outline
Effect Color
Effect Distance
X 1
Y -1
Use Graphic Alpha

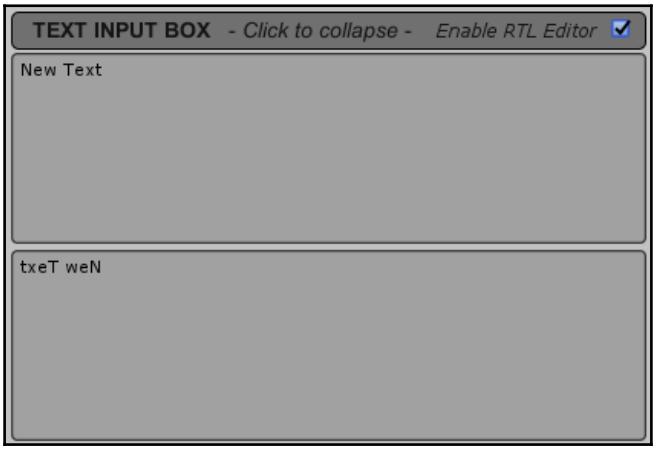

Outline (Script)
Script
Outline
Effect Color
Effect Distance
X 3
Y 3
Use Graphic Alpha
Outline (Script)
Script
Outline
Effect Color
Effect Distance
X -3
Y -3
Use Graphic Alpha

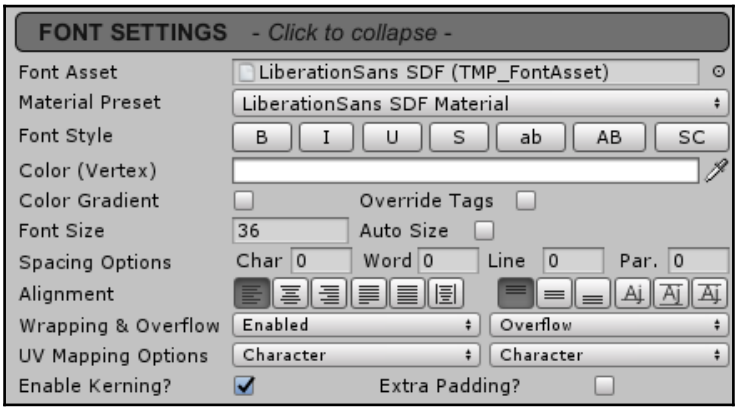
Position As UV1 (Script)
Script
PositionAsUV1

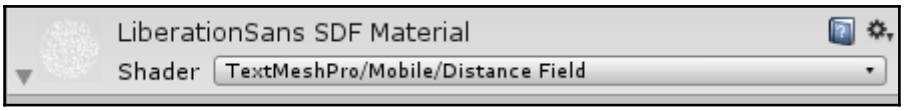

Create
All
Shaded
2D
Create Empty
Create Empty Child
3D Object
2D Object
Light
Audio
UI
Particle System
Camera
Text
Image
TextMeshPro - Text
Raw Image
Button
Toggle
Slider
Scrollbar
Dropdown
Input Field
TextMeshPro - Dropdown
TextMeshPro - Input Field
Canvas
Panel
Scroll View
Event System

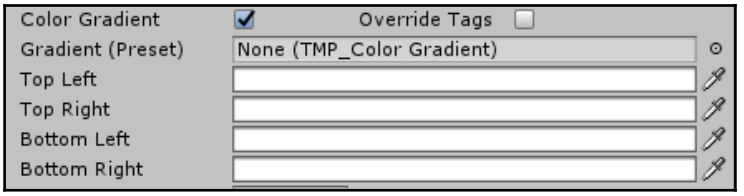

Inspector
TextMeshPro Text
Static
Tag
Untagged
Layer
Default
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
200
50
R
Anchors
Min
X 0.5
Y 0.5
Max
X 0.5
Y 0.5
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Text Mesh Pro UGUI (Script)
TEXT INPUT BOX - Click to collapse - Enable RTL Editor
New Text
FONT SETTINGS - Click to collapse -
Font Asset
LiberationSans SDF (TMP_FontAsset)
Material Preset
LiberationSans SDF Material
Font Style
B
I
U
S
ab
AB
SC
Color (Vertex)
Color Gradient
Override Tags
Font Size
36
Auto Size
Spacing Options
Char 0
Word 0
Line 0
Par. 0
Alignment
Wrapping & Overflow
Enabled
Overflow
UV Mapping Options
Character
Character
Enable Kerning?
Extra Padding?
EXTRA SETTINGS - Click to expand -
LiberationSans SDF Material
Shader
TextMeshPro/Mobile/Distance Field
Face - Settings -
Color
Softness
0
Dilate
0
Outline - Settings -
Enable ->
Color
Thickness
0
Underlay - Settings -
Enable ->
Debug - Settings -


TEXT INPUT BOX - Click to collapse - Enable RTL Editor
New Text

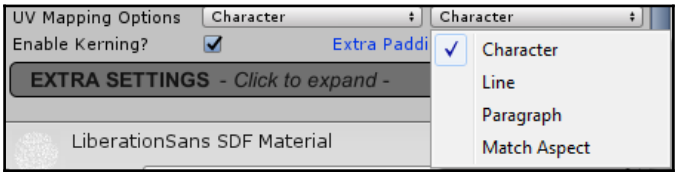

TEXT INPUT BOX - Click to collapse - Enable RTL Editor
New Text
txeT weN

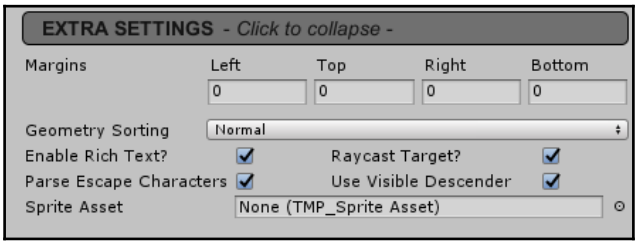

FONT SETTINGS - Click to collapse -
Font Asset
LiberationSans SDF (TMP_FontAsset)
Material Preset
LiberationSans SDF Material
Font Style
B
I
U
S
ab
AB
SC
Color (Vertex)
Color Gradient
Override Tags
Font Size
36
Auto Size
Spacing Options
Char 0
Word 0
Line 0
Par. 0
Alignment
Wrapping & Overflow
Enabled
Overflow
UV Mapping Options
Character
Character
Enable Kerning?
Extra Padding?


LiberationSans SDF Material
Shader
TextMeshPro/Mobile/Distance Field

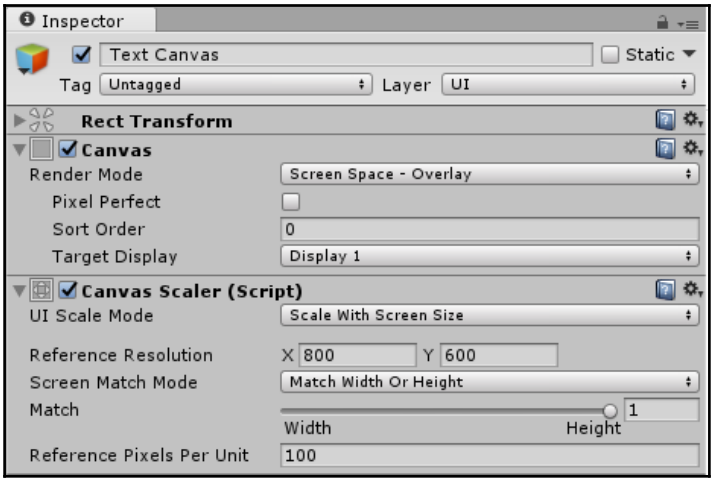

Color Gradient
Override Tags
Gradient (Preset)
None (TMP_Color Gradient)
Top Left
Top Right
Bottom Left
Bottom Right

Font Size
68.8
Auto Size
Auto Size Options
Min 18
Max 72
WD% 0
Line 0

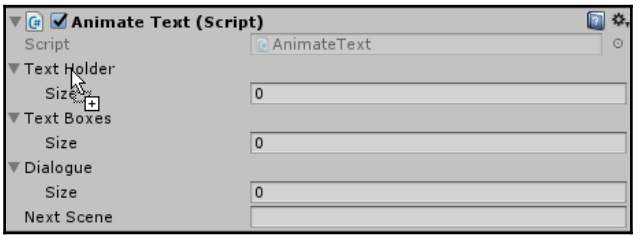

UV Mapping Options
Character
Character
Enable Kerning?
Extra Paddi
Character
Line
Paragraph
Match Aspect
EXTRA SETTINGS - Click to expand -
LiberationSans SDF Material

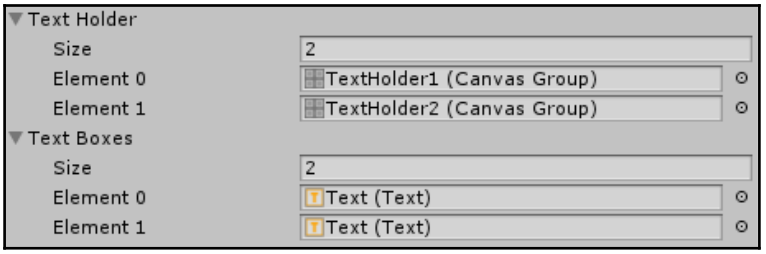

EXTRA SETTINGS - Click to collapse -
Margins
Left
Top
Right
Bottom
0
0
0
0
Geometry Sorting
Normal
Enable Rich Text?
Raycast Target?
Parse Escape Characters
Use Visible Descender
Sprite Asset
None (TMP_Sprite Asset)

I'm a cat and, for some reason, I'm collecting food!

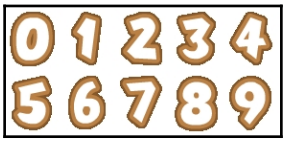

Inspector
Text Canvas
Static
Tag
Untagged
Layer
UI
Rect Transform
Canvas
Render Mode
Screen Space - Overlay
Pixel Perfect
Sort Order
0
Target Display
Display 1
Canvas Scaler (Script)
UI Scale Mode
Scale With Screen Size
Reference Resolution
X 800
Y 600
Screen Match Mode
Match Width Or Height
Match
1
Width
Height
Reference Pixels Per Unit
100

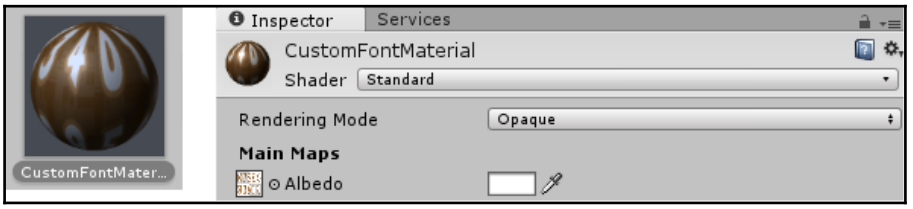
Main Camera
Background Canvas
Background Image
Text Canvas
TextHolder1
Image
Text
Button
EventSystem
New Text

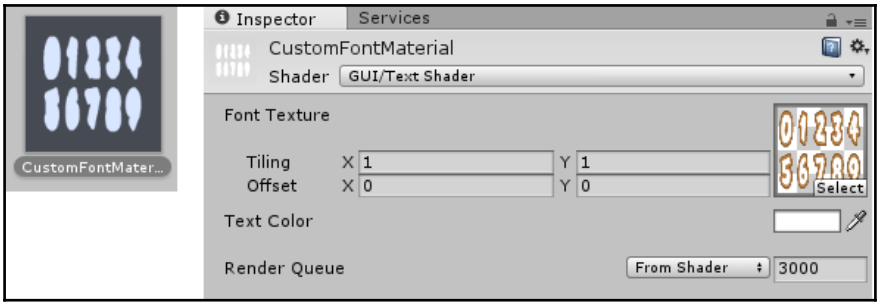

Animate Text (Script)
Script
AnimateText
Text Holder
Size
0
Text Boxes
Size
0
Dialogue
Size
0
Next Scene

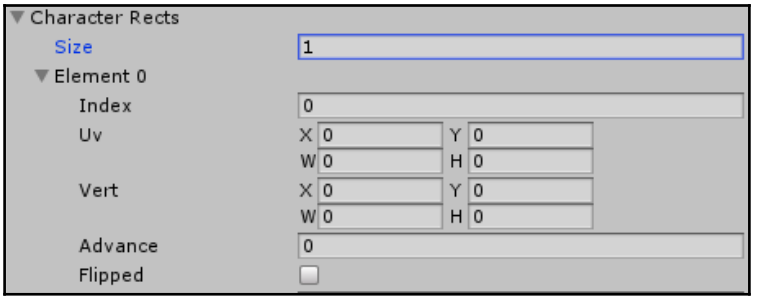

Text Holder
Size
2
Element 0
TextHolder1 (Canvas Group)
Element 1
TextHolder2 (Canvas Group)
Text Boxes
Size
2
Element 0
Text (Text)
Element 1
Text (Text)

0 1 2 3 4 5 6 7 8 9


0 1 2 3 4
5 6 7 8 9

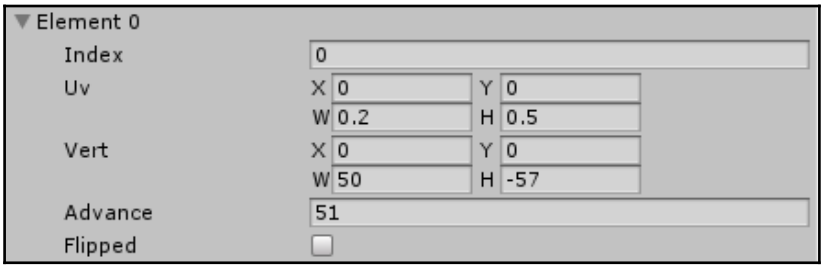

CustomFontMater...
Inspector
Services
CustomFontMaterial
Shader
Standard
Rendering Mode
Opaque
Main Maps
Albedo

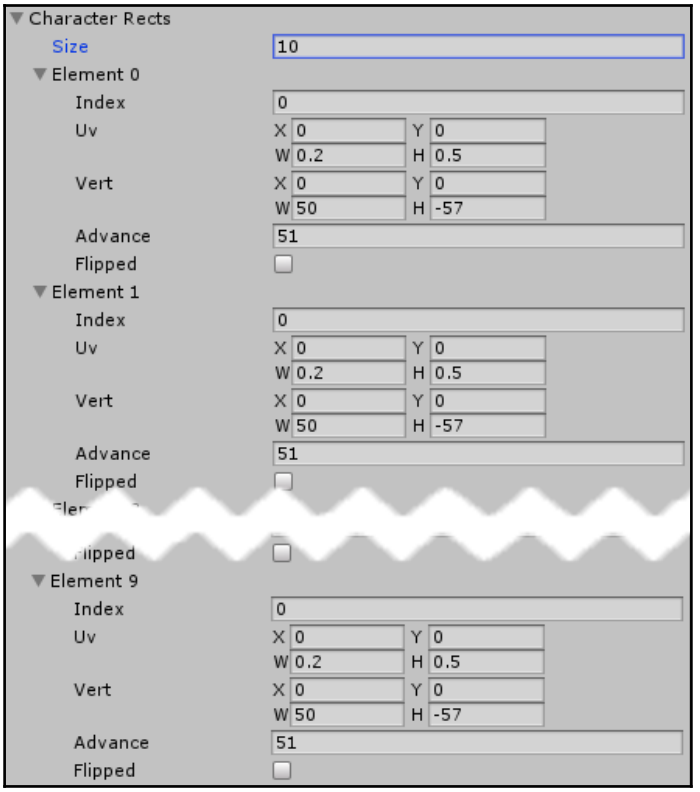

CustomFontMater...
Inspector
Services
CustomFontMaterial
Shader
GUI/Text Shader
Font Texture
Tiling
X 1
Y 1
Offset
X 0
Y 0
Select
Text Color
Render Queue
From Shader
3000

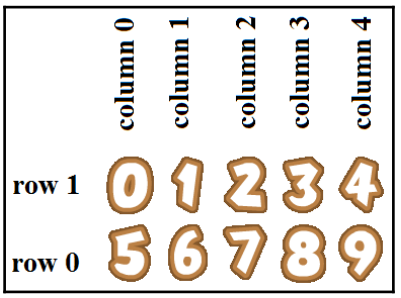


$$UV\ W = \frac{1}{columnCount}$$

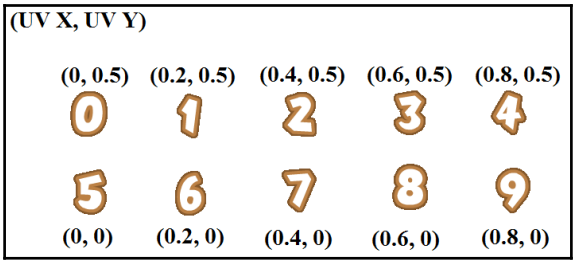
$$UV\ H = \frac{1}{rowCount}$$



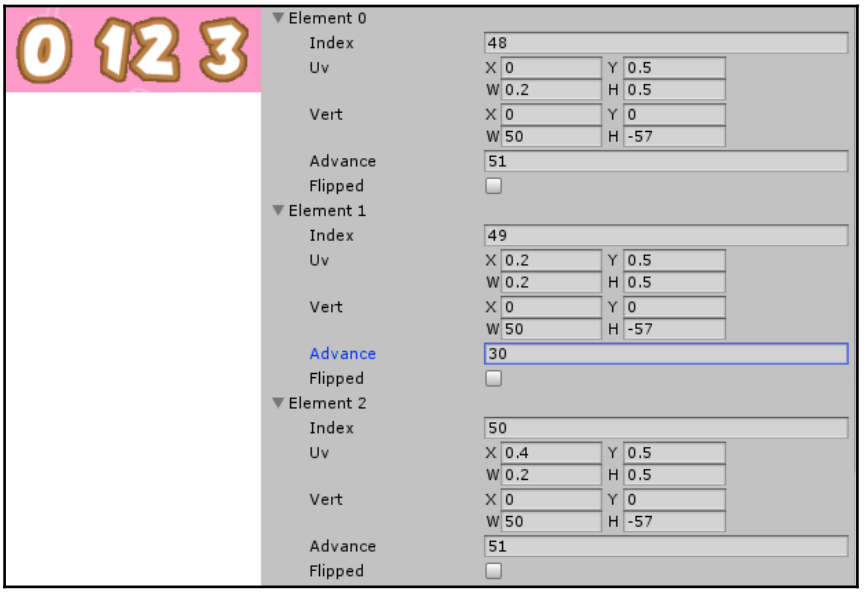




UV X = columnNumber × UV W
UV Y = rowNumber × UV H

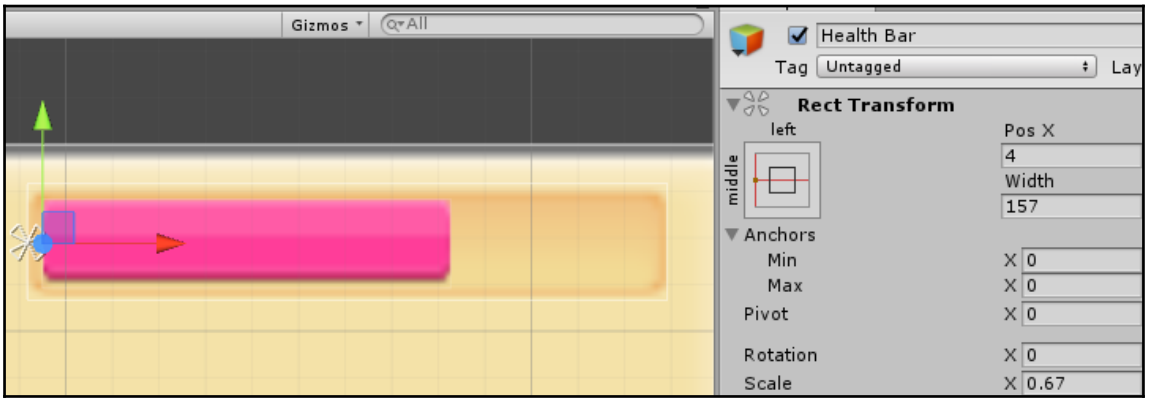

(UV X, UV Y)
(0, 0.5)
(0.2, 0.5)
(0.4, 0.5)
(0.6, 0.5)
(0.8, 0.5)
0
1
2
3
4
5
6
7
8
9
(0, 0)
(0.2, 0)
(0.4, 0)
(0.6, 0)
(0.8, 0)

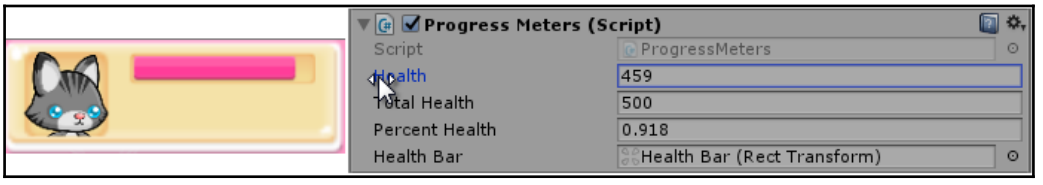
0123456789
0 1 2 3 4 5 6 7 8 9

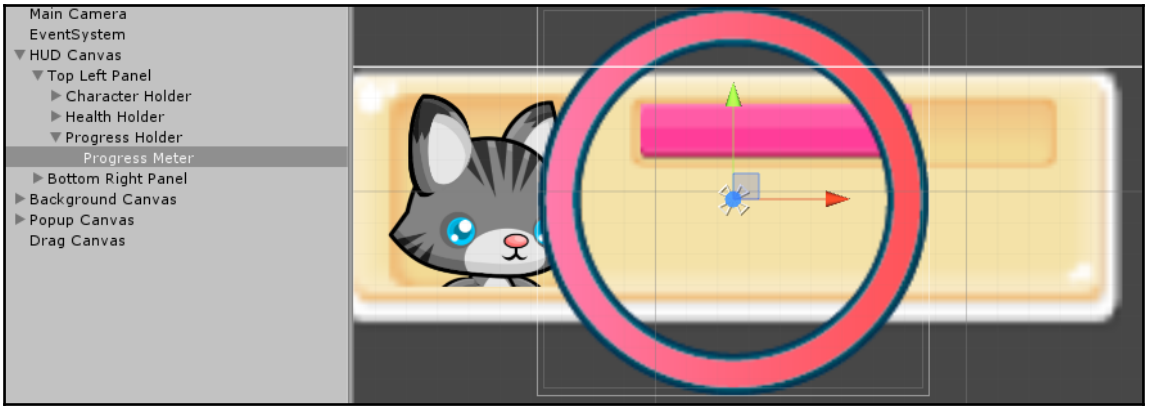

0 12 3
Element 0
Index 48
Uv X 0 Y 0.5 W 0.2 H 0.5
Vert X 0 Y 0 W 50 H -57
Advance 51
Flipped
Element 1
Index 49
Uv X 0.2 Y 0.5 W 0.2 H 0.5
Vert X 0 Y 0 W 50 H -57
Advance 30
Flipped
Element 2
Index 50
Uv X 0.4 Y 0.5 W 0.2 H 0.5
Vert X 0 Y 0 W 50 H -57
Advance 51
Flipped

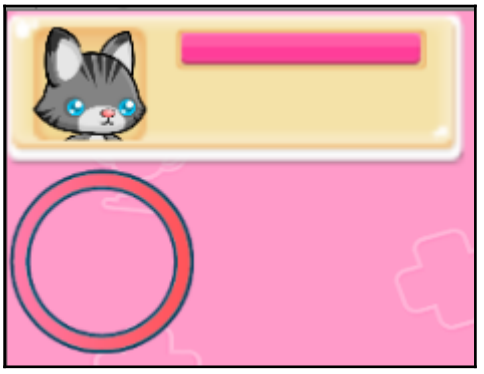
0123456789

01
09


Gizmos
All
Health Bar
Tag
Untagged
Rect Transform
left
middle
Pos X
4
Width
157
Anchors
Min
Max
Pivot
Rotation
Scale
0
0
0
0
0.67


Progress Meters (Script)
Script
ProgressMeters
Health
459
Total Health
500
Percent Health
0.918
Health Bar
Health Bar (Rect Transform)


Main Camera
EventSystem
HUD Canvas
Top Left Panel
Character Holder
Health Holder
Progress Holder
Progress Meter
Bottom Right Panel
Background Canvas
Popup Canvas
Drag Canvas



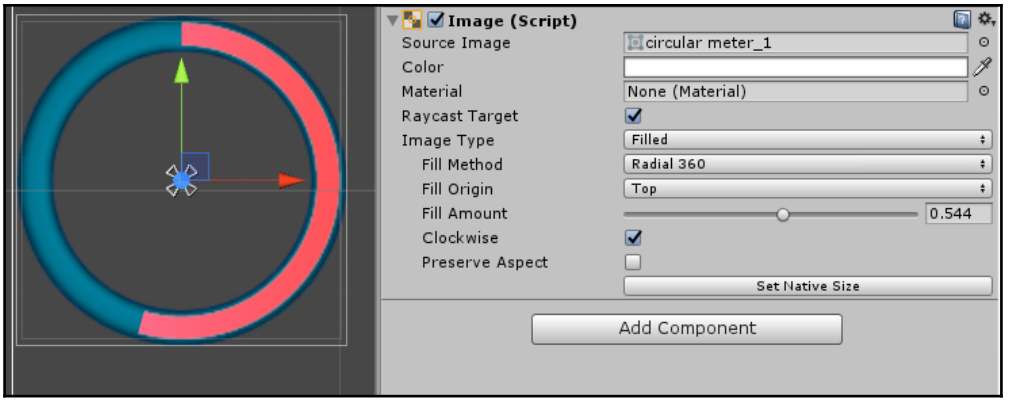
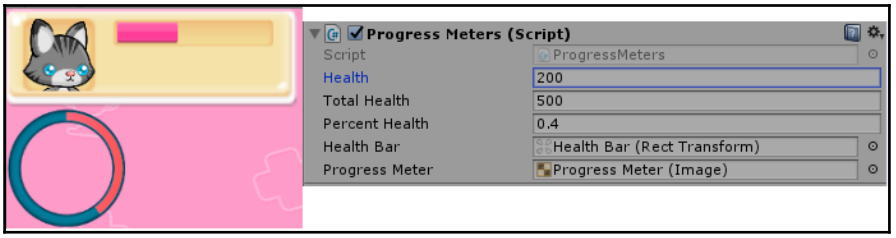
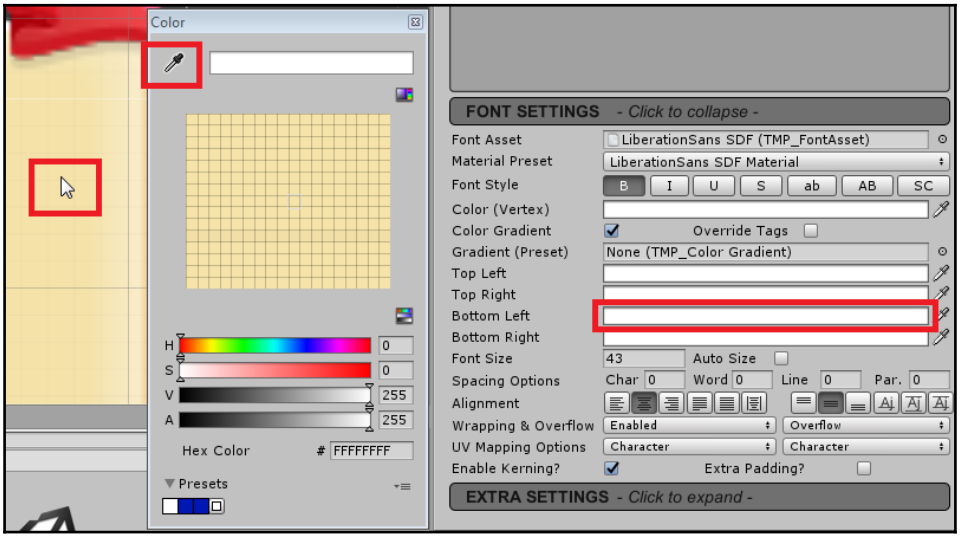


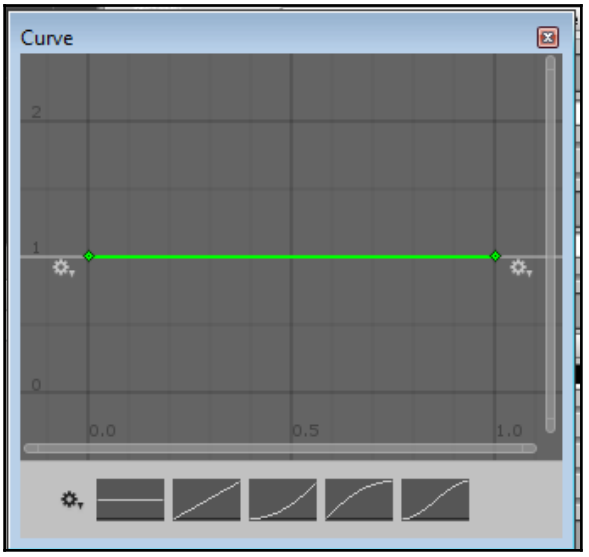
Image (Script)
Source Image
circular meter_1
Color
Material
None (Material)
Raycast Target
Image Type
Filled
Fill Method
Radial 360
Fill Origin
Top
Fill Amount
0.544
Clockwise
Preserve Aspect
Set Native Size
Add Component

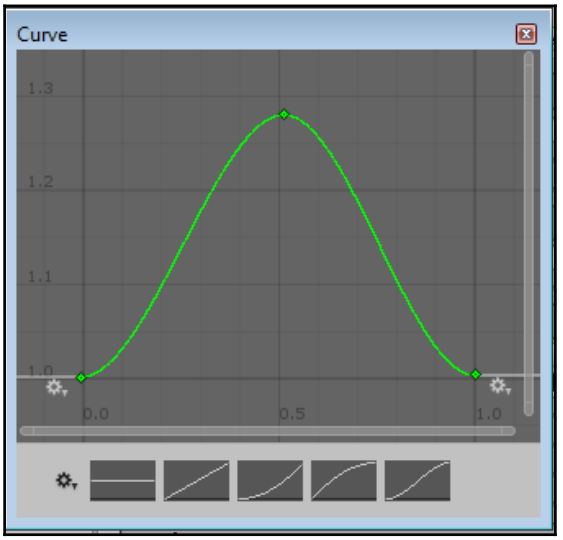

Progress Meters (Script)
Script
ProgressMeters
Health
200
Total Health
500
Percent Health
0.4
Health Bar
Health Bar (Rect Transform)
Progress Meter
Progress Meter (Image)

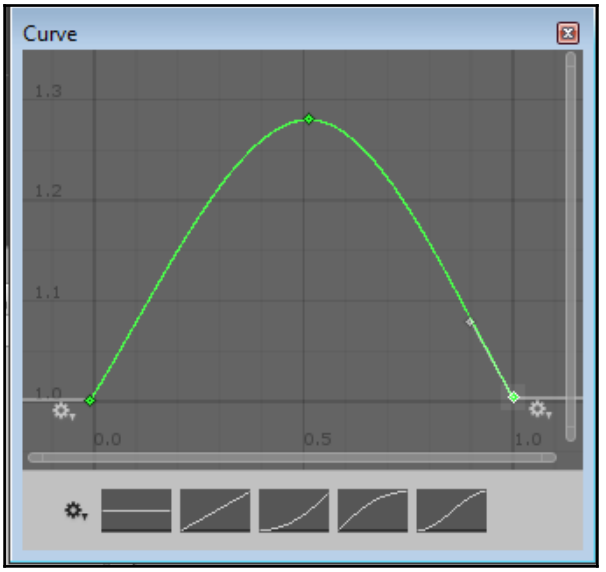
Paused

Paused

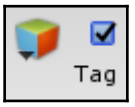

Color
H
S
V
A
Hex Color
FFFFFFFF
Presets
FONT SETTINGS - Click to collapse -
Font Asset
LiberationSans SDF (TMP_FontAsset)
Material Preset
LiberationSans SDF Material
Font Style
B
I
U
S
ab
AB
SC
Color (Vertex)
Color Gradient
Override Tags
Gradient (Preset)
None (TMP_Color Gradient)
Top Left
Top Right
Bottom Left
Bottom Right
Font Size
43
Auto Size
Spacing Options
Char
Word
Line
Par.
Alignment
Wrapping & Overflow
Enabled
Overflow
UV Mapping Options
Character
Character
Enable Kerning?
Extra Padding?
EXTRA SETTINGS - Click to expand -

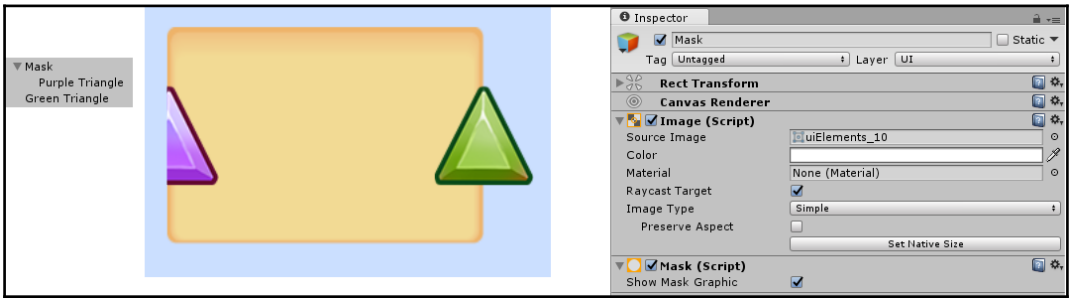

Curve
2
1
0
0.0
0.5
1.0

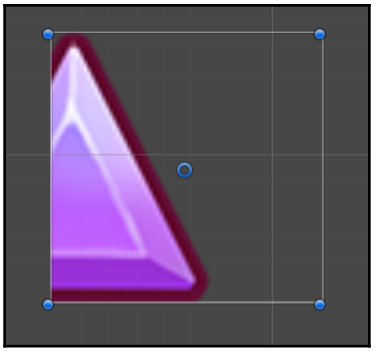

Curve
1.3
1.2
1.1
1.0
0.0
0.5
1.0

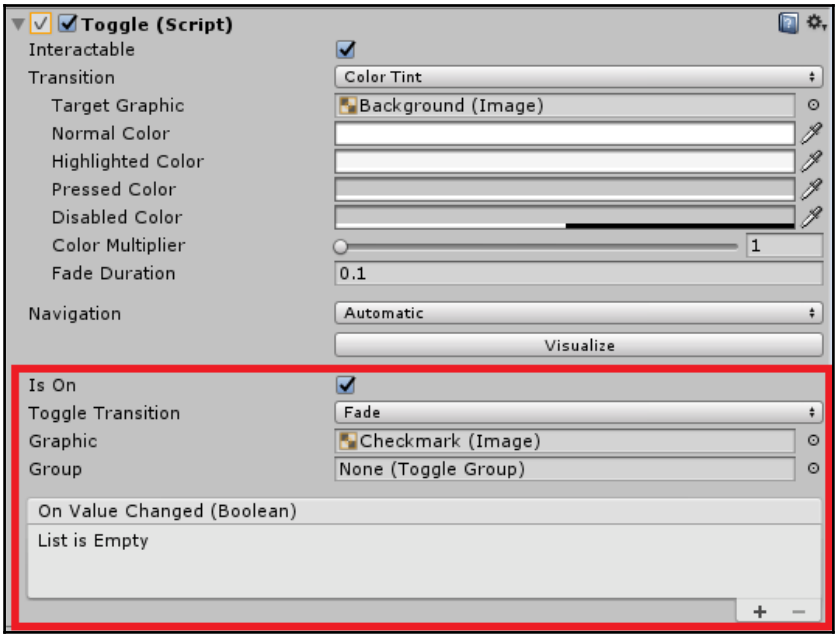

Curve
1.3
1.2
1.1
1.0
0.0
0.5
1.0

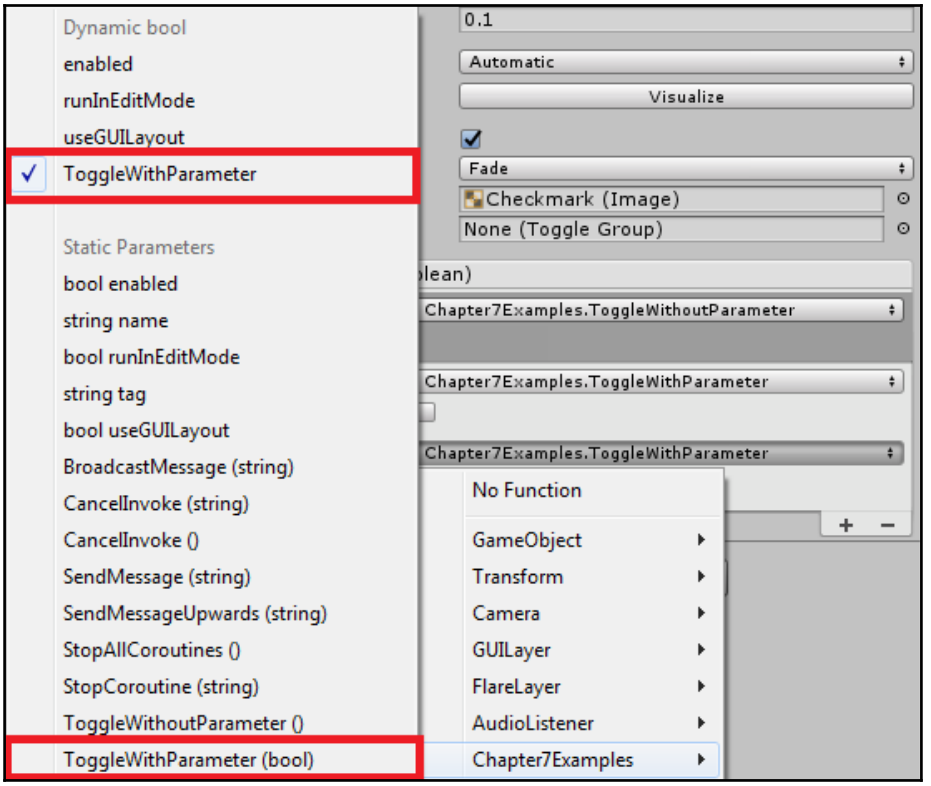
Chapter 7: Masks and Other Inputs

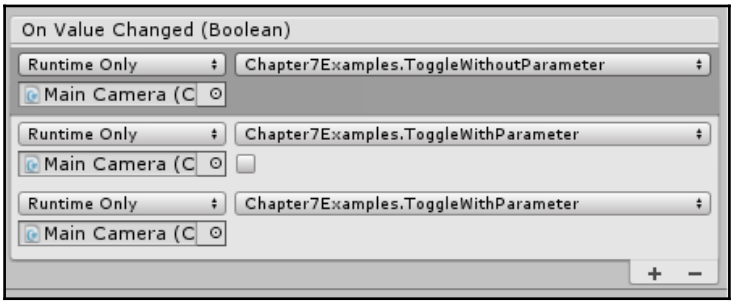




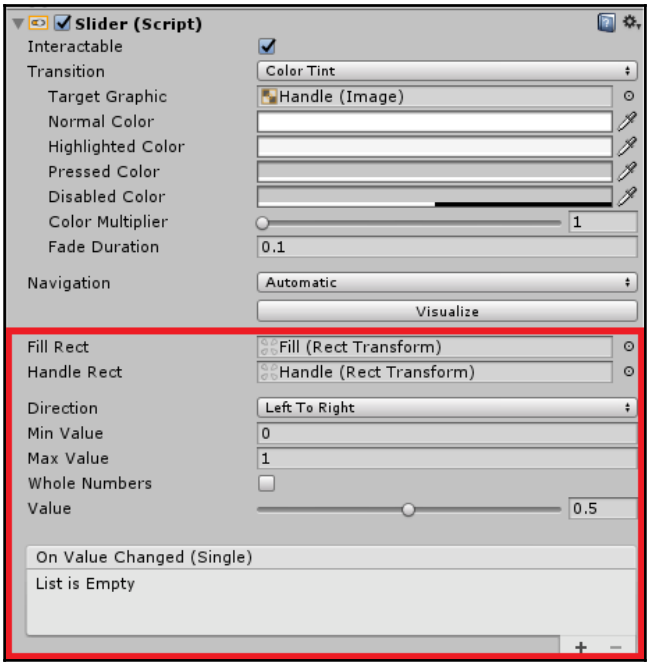


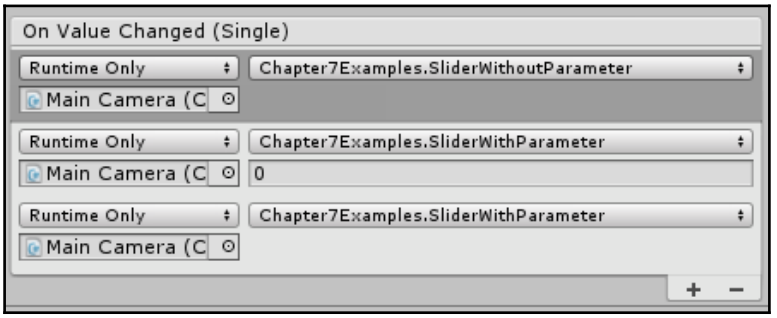

Toggle (Script)
Interactable
Transition
Color Tint
Target Graphic
Background (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Is On
Toggle Transition
Fade
Graphic
Checkmark (Image)
Group
None (Toggle Group)
On Value Changed (Boolean)
List is Empty

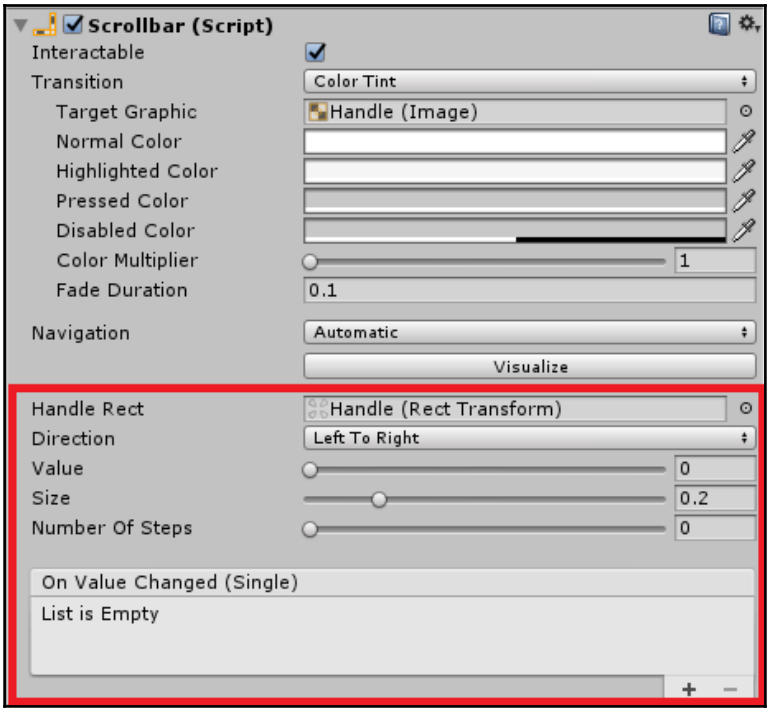

Dynamic bool
enabled
runInEditMode
useGUILayout
ToggleWithParameter
Static Parameters
bool enabled
string name
bool runInEditMode
string tag
bool useGUILayout
BroadcastMessage (string)
CancelInvoke (string)
CancelInvoke ()
SendMessage (string)
SendMessageUpwards (string)
StopAllCoroutines ()
StopCoroutine (string)
ToggleWithoutParameter ()
ToggleWithParameter (bool)
0.1
Automatic
Visualize
Fade
Checkmark (Image)
None (Toggle Group)
Chapter7Examples.ToggleWithoutParameter
Chapter7Examples.ToggleWithParameter
Chapter7Examples.ToggleWithParameter
No Function
GameObject
Transform
Camera
GUILayer
FlareLayer
AudioListener
Chapter7Examples

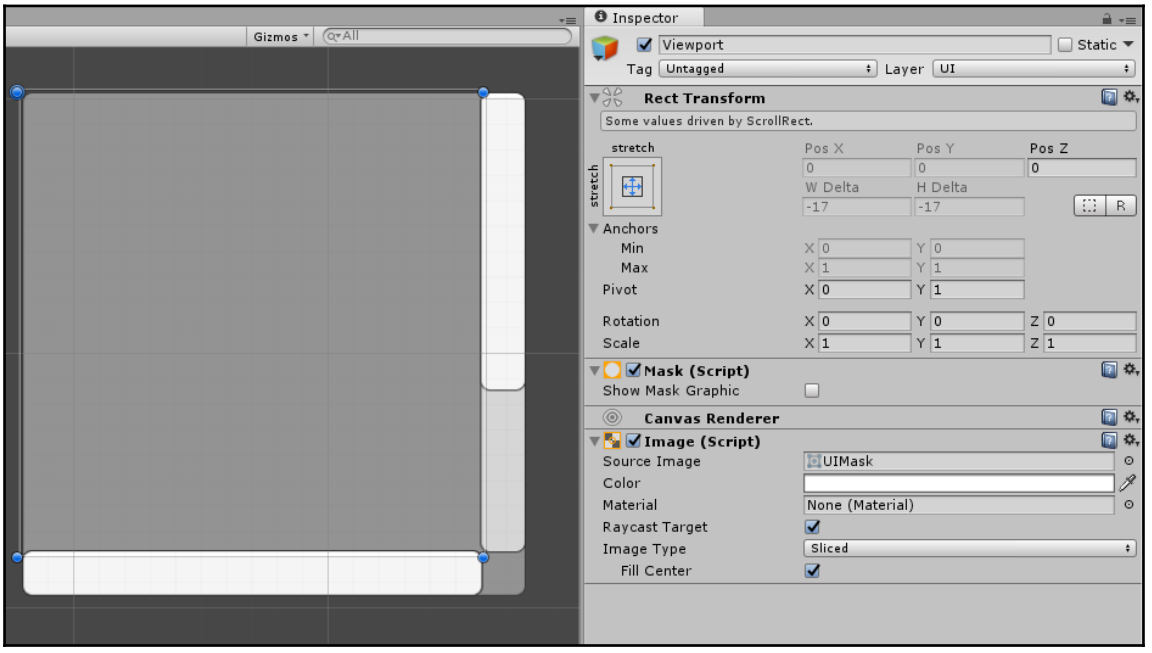

On Value Changed (Boolean)
Runtime Only
Chapter7Examples.ToggleWithoutParameter
Main Camera (C
Runtime Only
Chapter7Examples.ToggleWithParameter
Main Camera (C
Runtime Only
Chapter7Examples.ToggleWithParameter
Main Camera (C

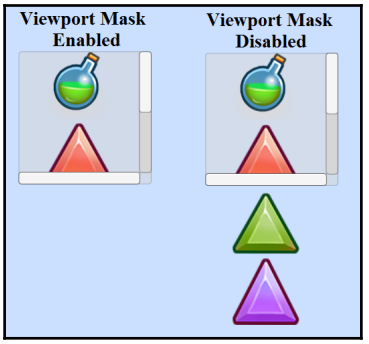
Toggle Group (Script)
Script
ToggleGroup
Allow Switch Off

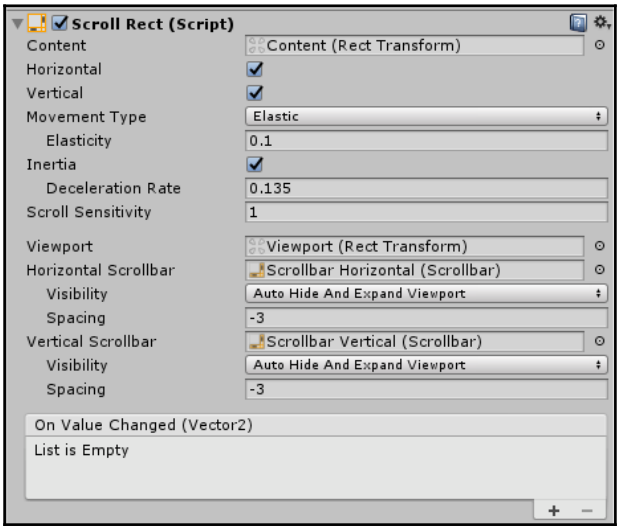

Slider (Script)
Interactable
Transition
Color Tint
Target Graphic
Handle (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Fill Rect
Fill (Rect Transform)
Handle Rect
Handle (Rect Transform)
Direction
Left To Right
Min Value
0
Max Value
1
Whole Numbers
Value
0.5
On Value Changed (Single)
List is Empty

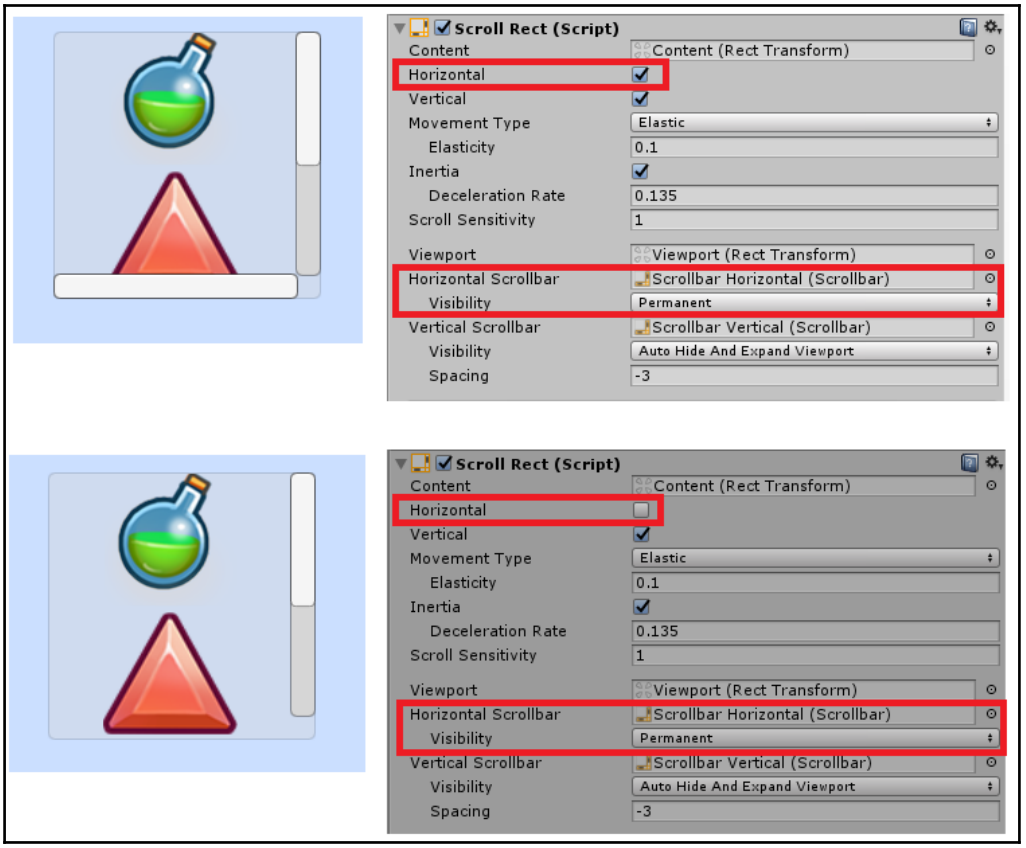

On Value Changed (Single)
Runtime Only
Chapter7Examples.SliderWithoutParameter
Main Camera (C
Runtime Only
Chapter7Examples.SliderWithParameter
Main Camera (C
0
Runtime Only
Chapter7Examples.SliderWithParameter
Main Camera (C

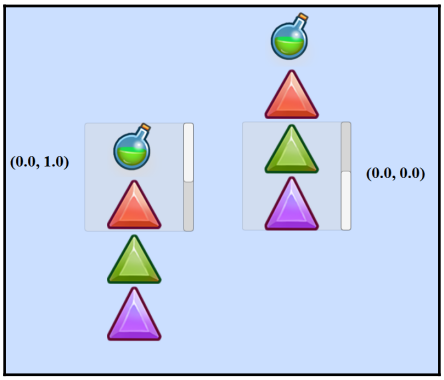

Scrollbar (Script)
Interactable
Transition
Color Tint
Target Graphic
Handle (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Handle Rect
Handle (Rect Transform)
Direction
Left To Right
Value
0
Size
0.2
Number Of Steps
0
On Value Changed (Single)
List is Empty

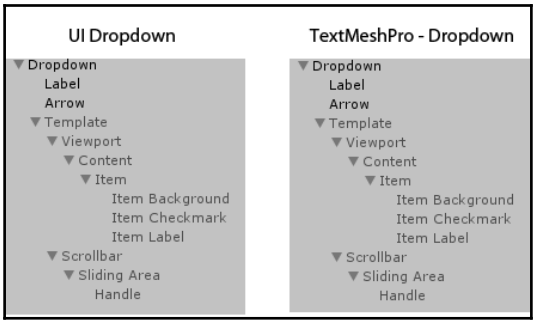

Gizmos
All
Inspector
Viewport
Static
Tag
Untagged
Layer
UI
Rect Transform
Some values driven by ScrollRect.
stretch
Pos X
Pos Y
Pos Z
W Delta
H Delta
Anchors
Min
Max
Pivot
Rotation
Scale
Mask (Script)
Show Mask Graphic
Canvas Renderer
Image (Script)
Source Image
UIMask
Color
Material
None (Material)
Raycast Target
Image Type
Sliced
Fill Center

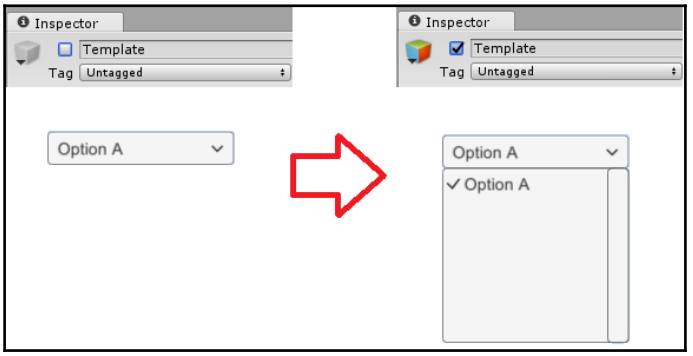

Viewport Mask Enabled
Viewport Mask Disabled

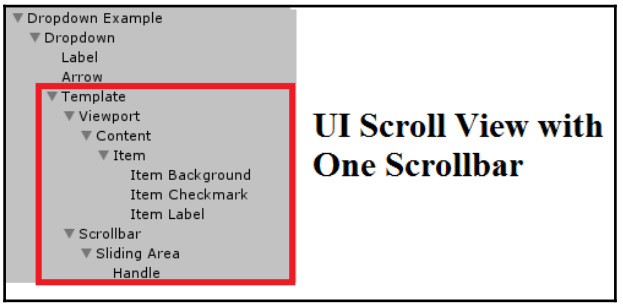

Scroll Rect (Script)
Content
Content (Rect Transform)
Horizontal
Vertical
Movement Type
Elastic
Elasticity
0.1
Inertia
Deceleration Rate
0.135
Scroll Sensitivity
1
Viewport
Viewport (Rect Transform)
Horizontal Scrollbar
Scrollbar Horizontal (Scrollbar)
Visibility
Auto Hide And Expand Viewport
Spacing
-3
Vertical Scrollbar
Scrollbar Vertical (Scrollbar)
Visibility
Auto Hide And Expand Viewport
Spacing
-3
On Value Changed (Vector2)
List is Empty

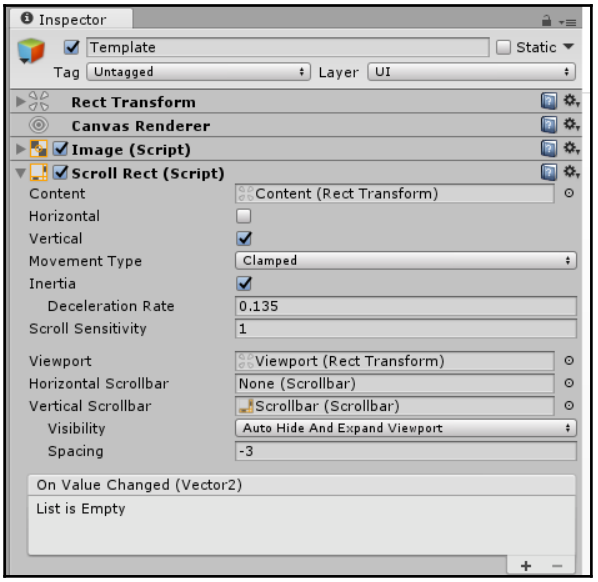

Scroll Rect (Script)
Content
Content (Rect Transform)
Horizontal
Vertical
Movement Type
Elastic
Elasticity
0.1
Inertia
Deceleration Rate
0.135
Scroll Sensitivity
1
Viewport
Viewport (Rect Transform)
Horizontal Scrollbar
Scrollbar Horizontal (Scrollbar)
Visibility
Permanent
Vertical Scrollbar
Scrollbar Vertical (Scrollbar)
Visibility
Auto Hide And Expand Viewport
Spacing
-3
Scroll Rect (Script)
Content
Content (Rect Transform)
Horizontal
Vertical
Movement Type
Elastic
Elasticity
0.1
Inertia
Deceleration Rate
0.135
Scroll Sensitivity
1
Viewport
Viewport (Rect Transform)
Horizontal Scrollbar
Scrollbar Horizontal (Scrollbar)
Visibility
Permanent
Vertical Scrollbar
Scrollbar Vertical (Scrollbar)
Visibility
Auto Hide And Expand Viewport
Spacing
-3

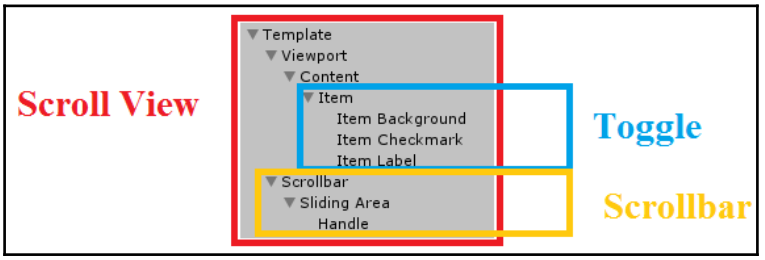

(0.0, 1.0)
(0.0, 0.0)

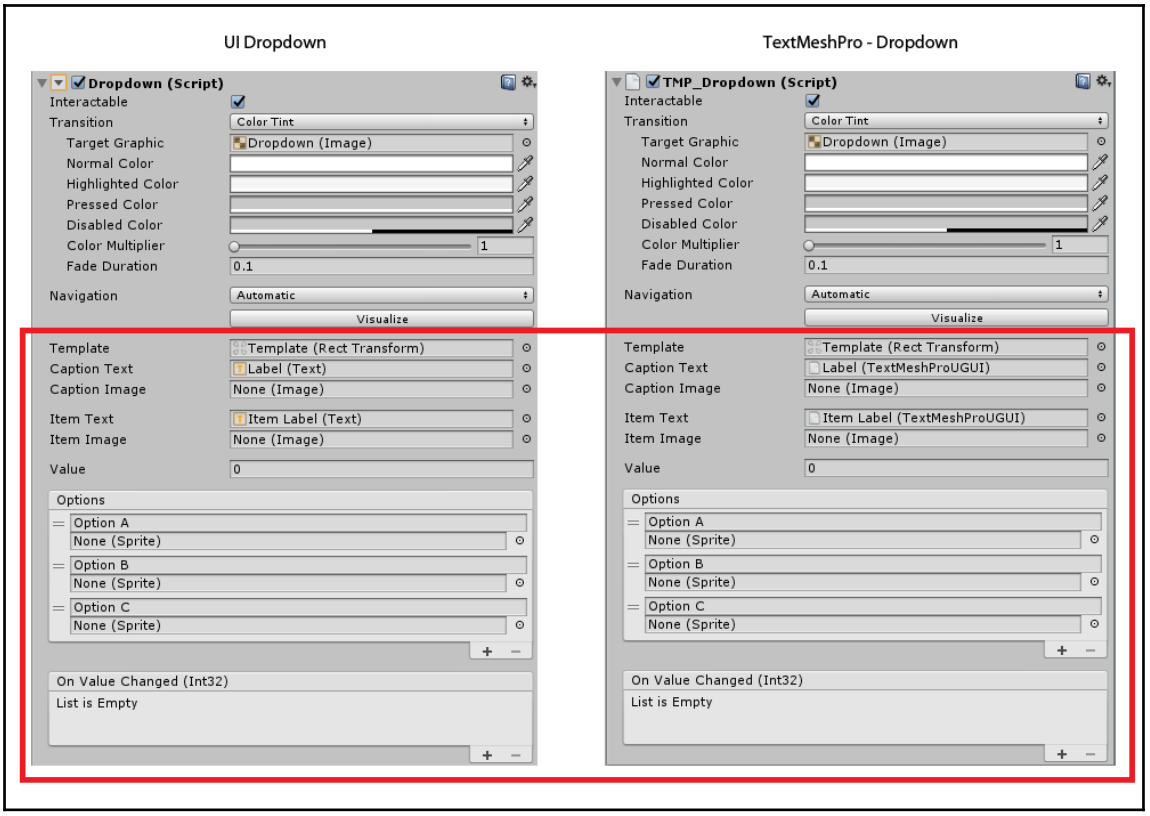

UI Dropdown
Dropdown
Label
Arrow
Template
Viewport
Content
Item
Item Background
Item Checkmark
Item Label
Scrollbar
Sliding Area
Handle
TextMeshPro - Dropdown
Dropdown
Label
Arrow
Template
Viewport
Content
Item
Item Background
Item Checkmark
Item Label
Scrollbar
Sliding Area
Handle

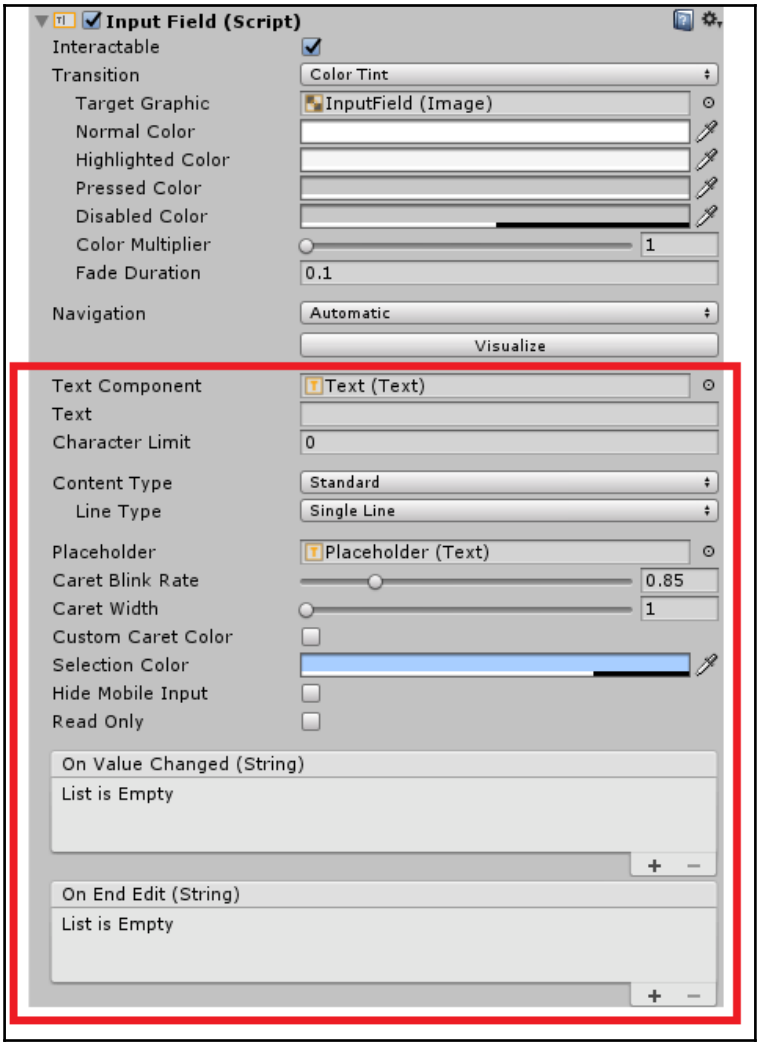

Inspector
Template
Tag
Untagged
Option A
Inspector
Template
Tag
Untagged
Option A
Option A

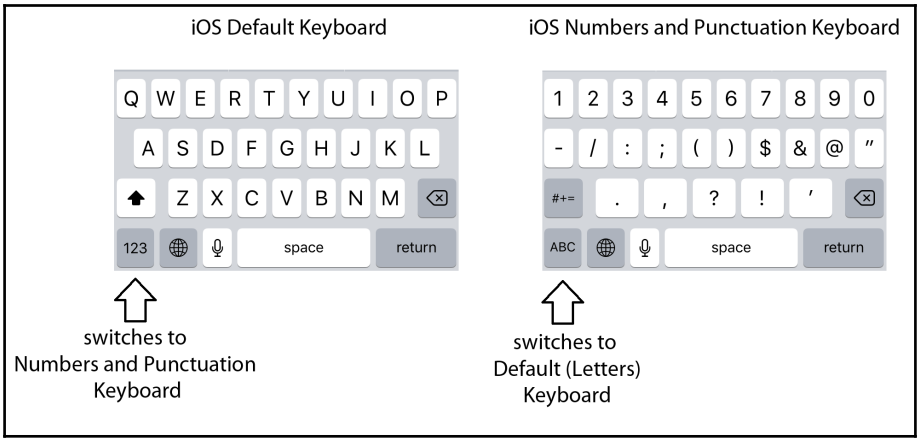

Dropdown Example
Dropdown
Label
Arrow
Template
Viewport
Content
Item
Item Background
Item Checkmark
Item Label
Scrollbar
Sliding Area
Handle
UI Scroll View with One Scrollbar

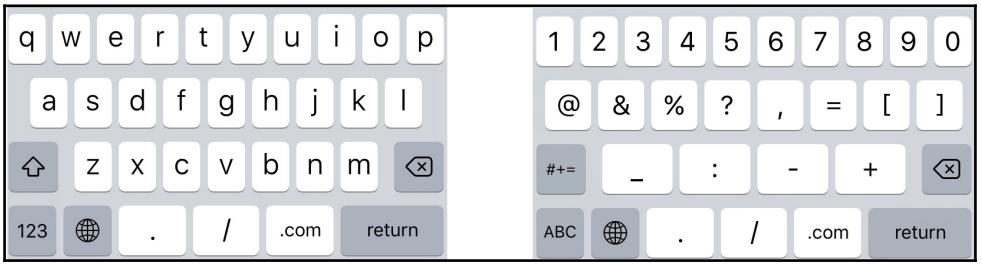

Inspector
Template
Static
Tag
Untagged
Layer
UI
Rect Transform
Canvas Renderer
Image (Script)
Scroll Rect (Script)
Content
Content (Rect Transform)
Horizontal
Vertical
Movement Type
Clamped
Inertia
Deceleration Rate
0.135
Scroll Sensitivity
1
Viewport
Viewport (Rect Transform)
Horizontal Scrollbar
None (Scrollbar)
Vertical Scrollbar
Scrollbar (Scrollbar)
Visibility
Auto Hide And Expand Viewport
Spacing
-3
On Value Changed (Vector2)
List is Empty

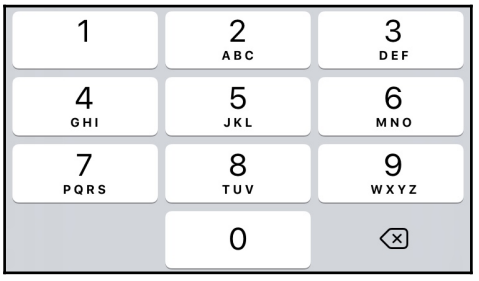

Scroll View
Template
Viewport
Content
Item
Item Background
Item Checkmark
Item Label
Scrollbar
Sliding Area
Handle
Toggle
Scrollbar

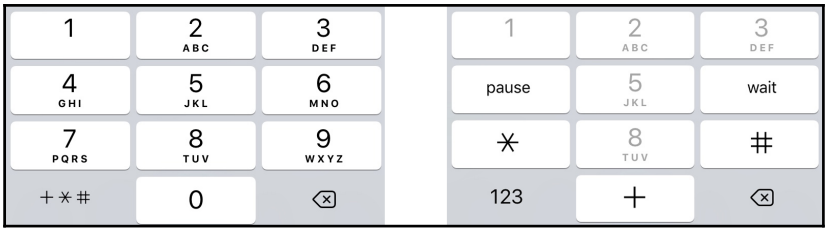

UI Dropdown
TextMeshPro - Dropdown
Dropdown (Script)
TMP_Dropdown (Script)
Interactable
Transition
Color Tint
Target Graphic
Dropdown (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Template
Template (Rect Transform)
Caption Text
Label (Text)
Label (TextMeshProUGUI)
Caption Image
None (Image)
Item Text
Item Label (Text)
Item Label (TextMeshProUGUI)
Item Image
Value
0
Options
Option A
Option B
Option C
None (Sprite)
On Value Changed (Int32)
List is Empty


Input Field (Script)
Interactable
Transition
Color Tint
Target Graphic
InputField (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Text Component
Text (Text)
Text
Character Limit
0
Content Type
Standard
Line Type
Single Line
Placeholder
Placeholder (Text)
Caret Blink Rate
0.85
Caret Width
1
Custom Caret Color
Selection Color
Hide Mobile Input
Read Only
On Value Changed (String)
List is Empty
On End Edit (String)
List is Empty

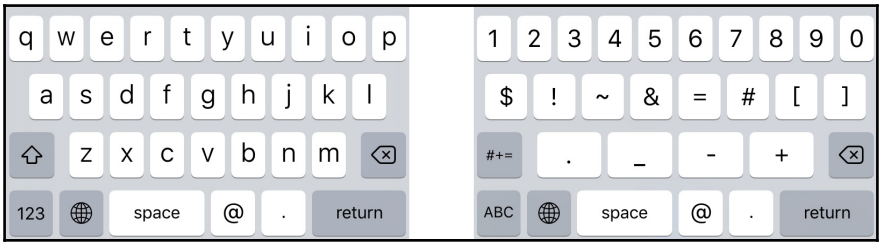

iOS Default Keyboard
iOS Numbers and Punctuation Keyboard
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
123
space
return
1 2 3 4 5 6 7 8 9 0
- / : ; ( ) $ & @ "
#+=
. , ? ! '
ABC
space
return
switches to Numbers and Punctuation Keyboard
switches to Default (Letters) Keyboard

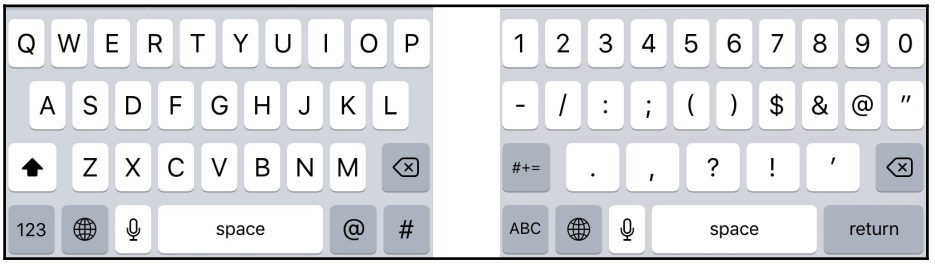

q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123
.
/
.com
return
1 2 3 4 5 6 7 8 9 0
@ & % ? , = [ ]
#+=
_ : - +
ABC
.
/
.com
return


1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
0

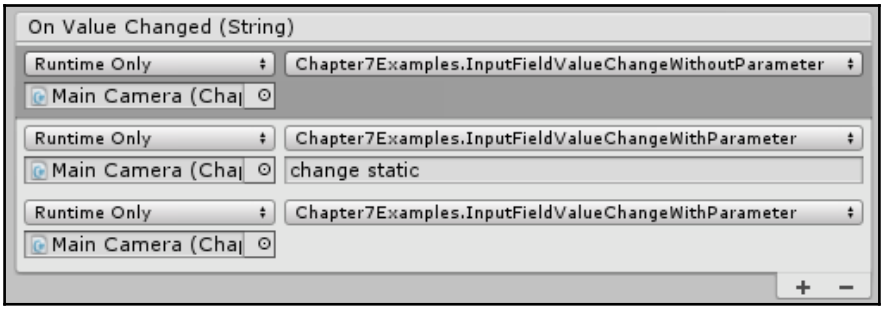

1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
+ * #
0
1
2 ABC
3 DEF
pause
5 JKL
wait
*
8 TUV
#
123
+

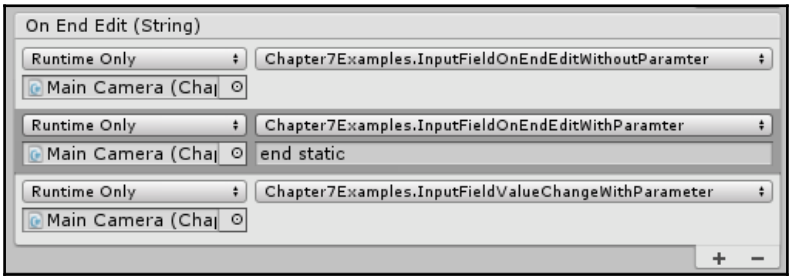
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
123
space
return
1
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
ABC
0


q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123
space
@
.
return
1 2 3 4 5 6 7 8 9 0
$! ~ & = # [ ]
#+=
. _ - +
ABC
space
@
.
return

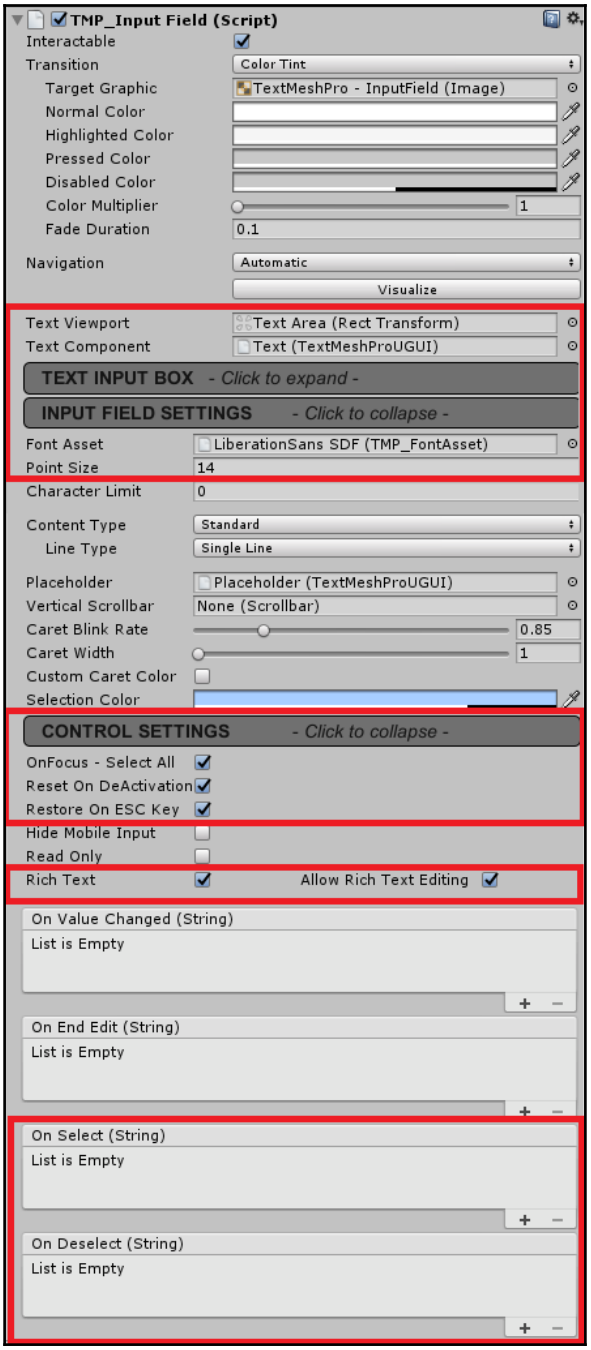

Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
123
space
@
#
1 2 3 4 5 6 7 8 9 0
- / : ; ( ) $ & @ ”
#+=
. , ? ! ’
ABC
space
return

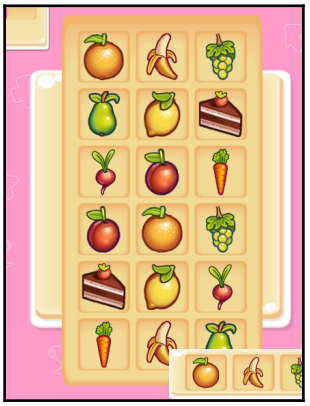
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123
space
.
Go
1 2 3 4 5 6 7 8 9 0
- / : ; ( ) $ & @ ”
#+=
. , ? ! ’
ABC
space
.
Go


On Value Changed (String)
Runtime Only
Chapter7Examples.InputFieldValueChangeWithoutParameter
Main Camera (Cha
Runtime Only
Chapter7Examples.InputFieldValueChangeWithParameter
Main Camera (Cha
change static
Runtime Only
Chapter7Examples.InputFieldValueChangeWithParameter
Main Camera (Cha

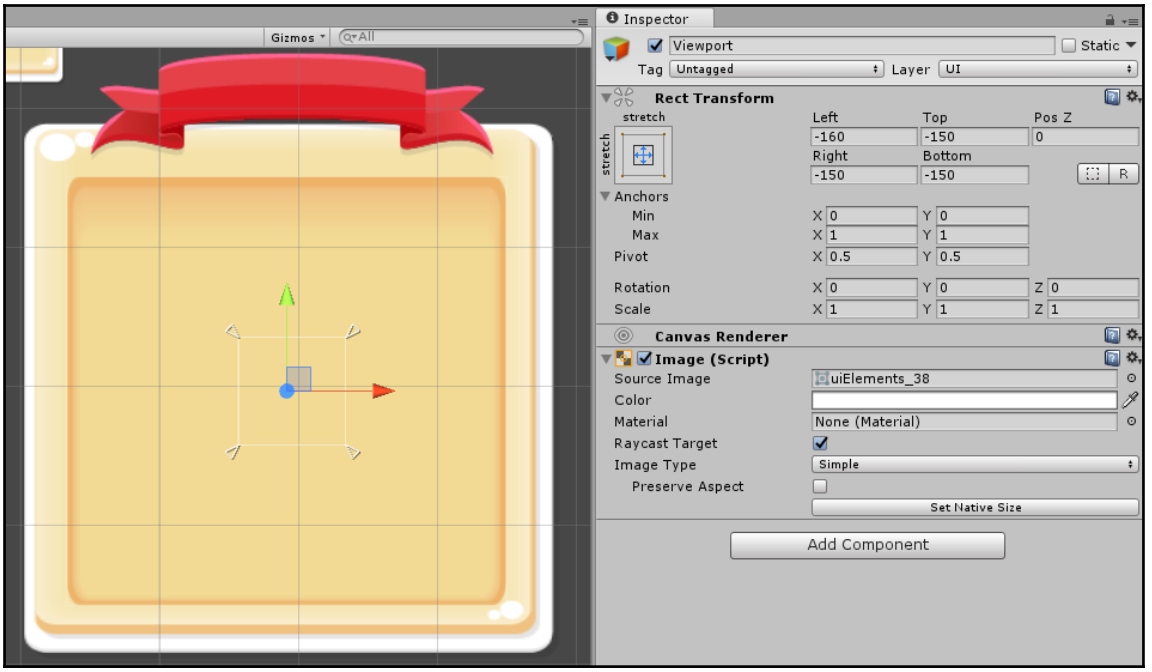

On End Edit (String)
Runtime Only
Chapter7Examples.InputFieldOnEndEditWithoutParamter
Main Camera (Cha
Runtime Only
Chapter7Examples.InputFieldOnEndEditWithParamter
Main Camera (Cha
end static
Runtime Only
Chapter7Examples.InputFieldValueChangeWithParameter
Main Camera (Cha

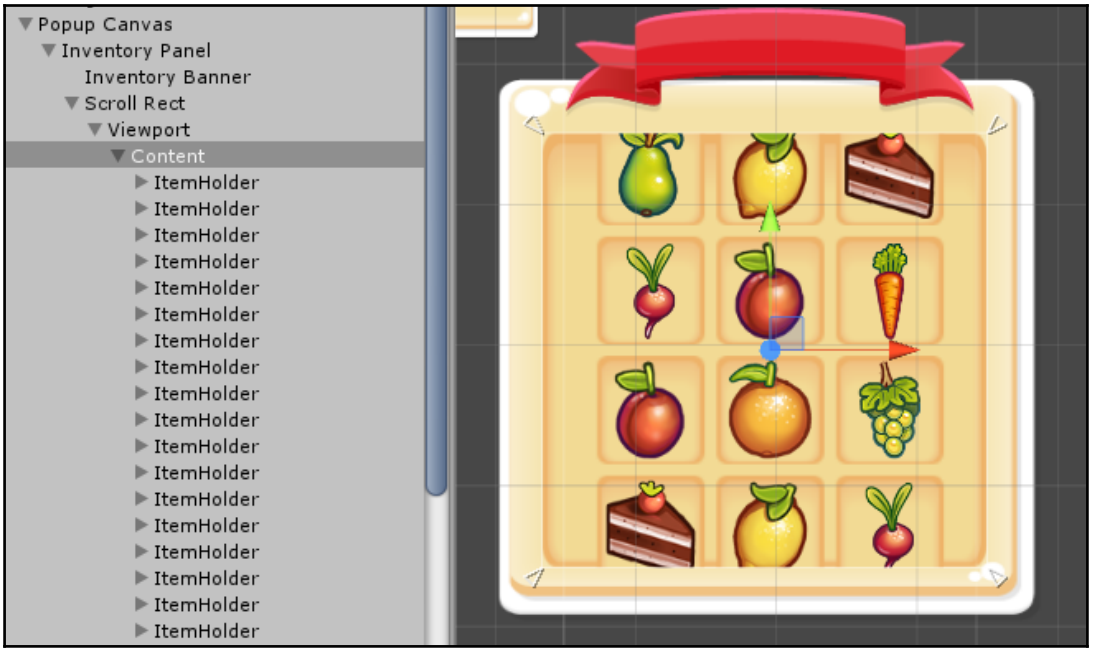
Enter text...

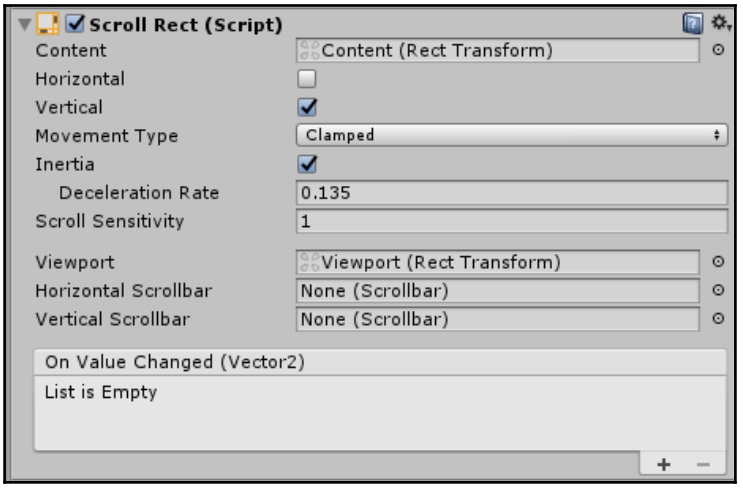

TMP_Input Field (Script)
Interactable
Transition
Color Tint
Target Graphic
TextMeshPro - InputField (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Text Viewport
Text Area (Rect Transform)
Text Component
Text (TextMeshProUGUI)
TEXT INPUT BOX - Click to expand -
INPUT FIELD SETTINGS - Click to collapse -
Font Asset
LiberationSans SDF (TMP_FontAsset)
Point Size
14
Character Limit
0
Content Type
Standard
Line Type
Single Line
Placeholder
Placeholder (TextMeshProUGUI)
Vertical Scrollbar
None (Scrollbar)
Caret Blink Rate
0.85
Caret Width
1
Custom Caret Color
Selection Color
CONTROL SETTINGS - Click to collapse -
OnFocus - Select All
Reset On DeActivation
Restore On ESC Key
Hide Mobile Input
Read Only
Rich Text
Allow Rich Text Editing
On Value Changed (String)
List is Empty
On End Edit (String)
List is Empty
On Select (String)
List is Empty
On Deselect (String)
List is Empty



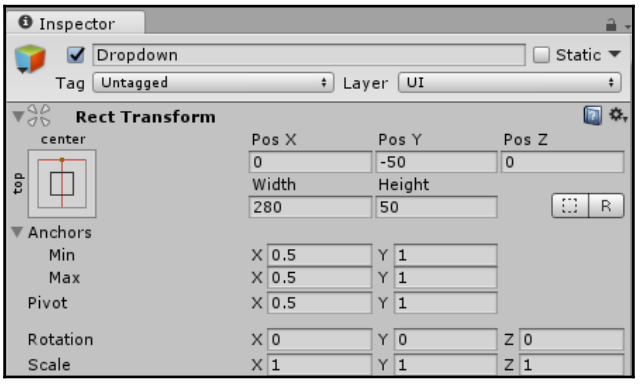
Parent/Child Relationship	Components
▼ Scroll Rect	Scroll Rect
▼ Viewport	Image Mask
▼ Content	Content Size Fitter Layout Group
Item	
Item	
⋮	

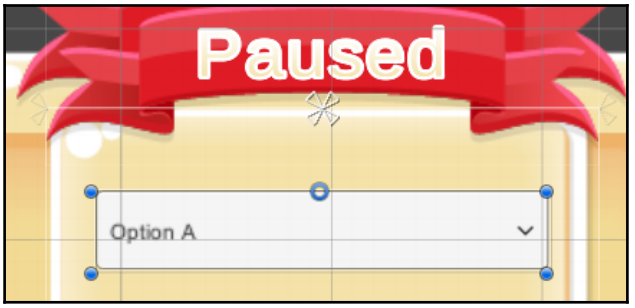

Gizmos
All
Inspector
Viewport
Static
Tag
Untagged
Layer
UI
Rect Transform
stretch
Left
Top
Pos Z
-160
-150
0
Right
Bottom
-150
-150
R
Anchors
Min
X 0
Y 0
Max
X 1
Y 1
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_38
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size
Add Component

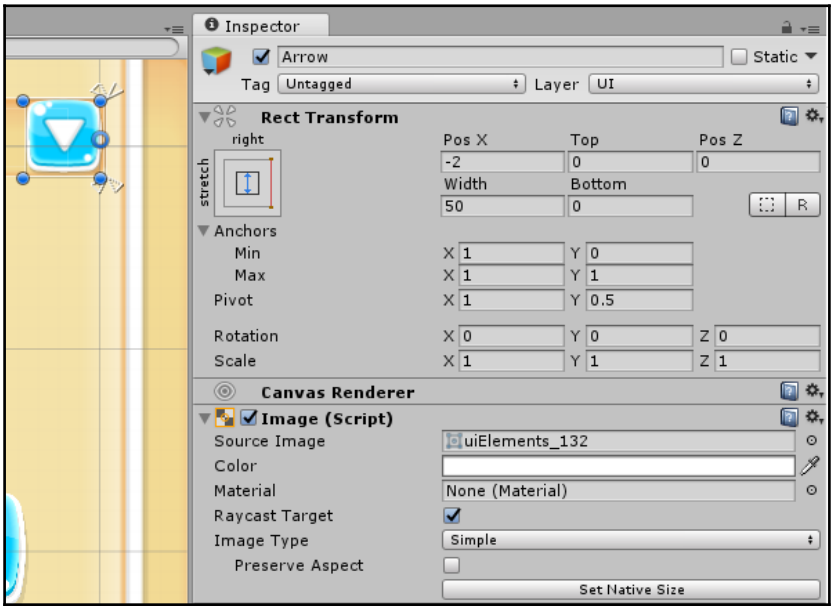

Popup Canvas
Inventory Panel
Inventory Banner
Scroll Rect
Viewport
Content
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder
ItemHolder

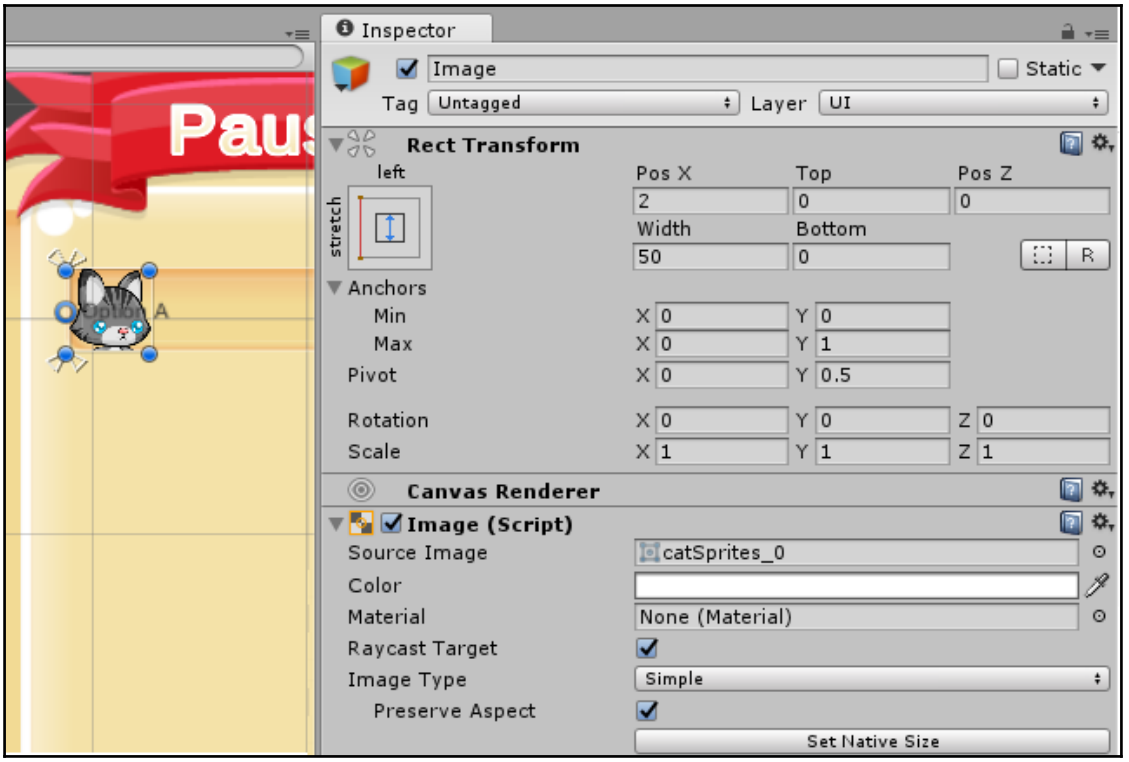

Scroll Rect (Script)
Content
Content (Rect Transform)
Horizontal
Vertical
Movement Type
Clamped
Inertia
Deceleration Rate
0.135
Scroll Sensitivity
1
Viewport
Viewport (Rect Transform)
Horizontal Scrollbar
None (Scrollbar)
Vertical Scrollbar
None (Scrollbar)
On Value Changed (Vector2)
List is Empty

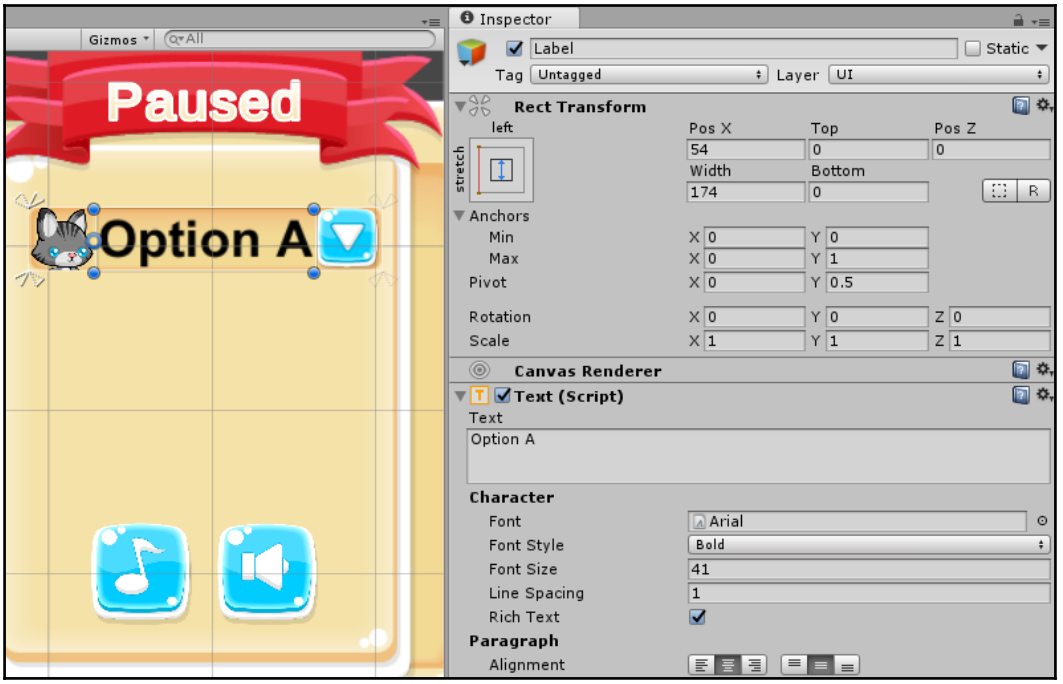
Paused
Cat
Cat
Dog

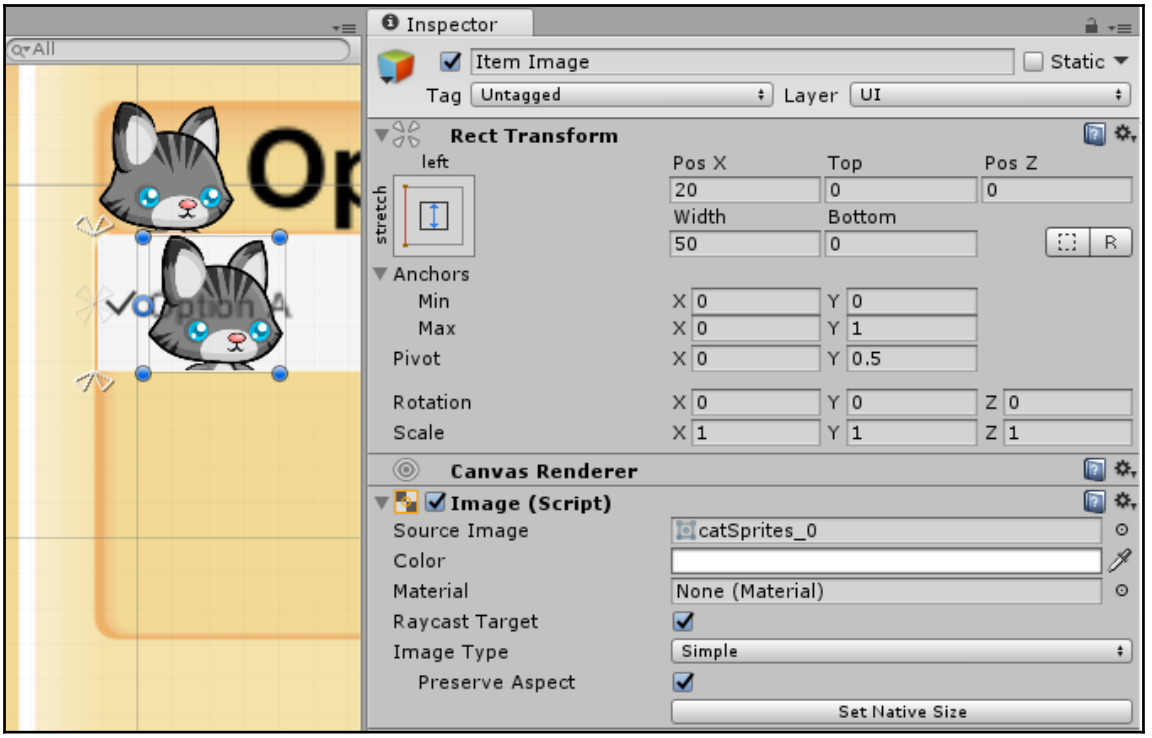

Inspector
Dropdown
Static
Tag
Untagged
Layer
UI
Rect Transform
center
top
Pos X
Pos Y
Pos Z
0
-50
0
Width
Height
280
50
Anchors
Min
X 0.5
Y 1
Max
X 0.5
Y 1
Pivot
X 0.5
Y 1
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1

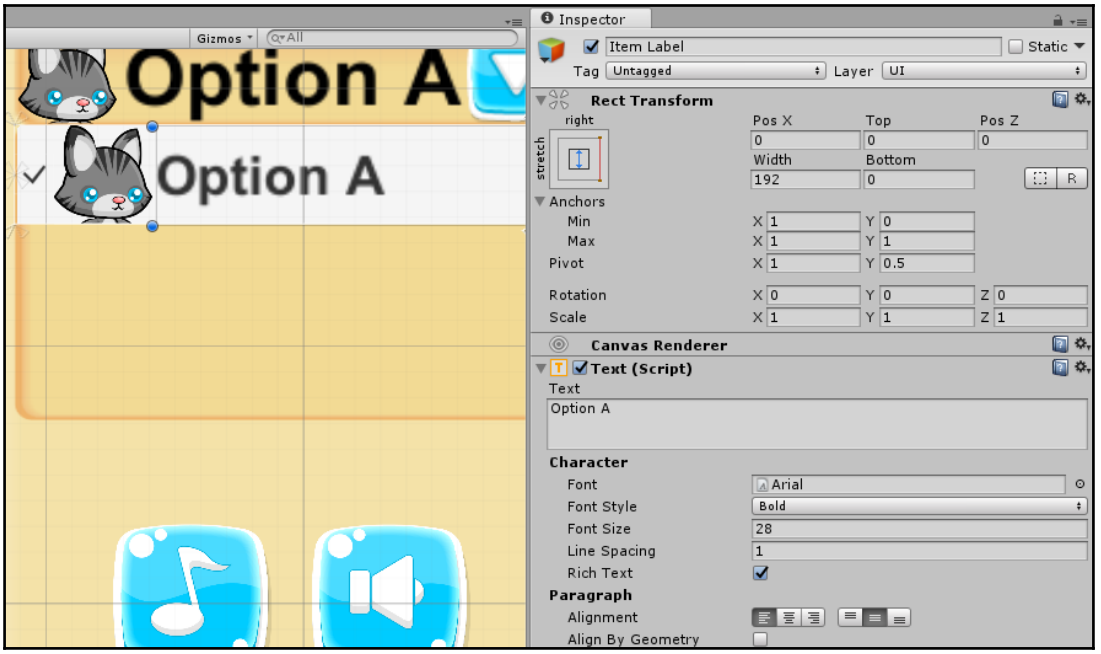

Paused
Option A


Inspector
Arrow
Static
Tag
Untagged
Layer
UI
Rect Transform
right
stretch
Pos X
Top
Pos Z
-2
0
0
Width
Bottom
50
0
R
Anchors
Min
X 1
Y 0
Max
X 1
Y 1
Pivot
X 1
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
uiElements_132
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

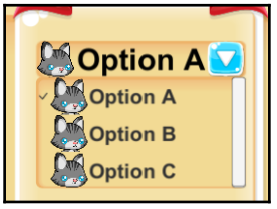

Inspector
Image
Static
Tag
Untagged
Layer
UI
Rect Transform
left
stretch
Pos X
Top
Pos Z
2
0
0
Width
Bottom
50
0
R
Anchors
Min
X 0
Y 0
Max
X 0
Y 1
Pivot
X 0
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
catSprites_0
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

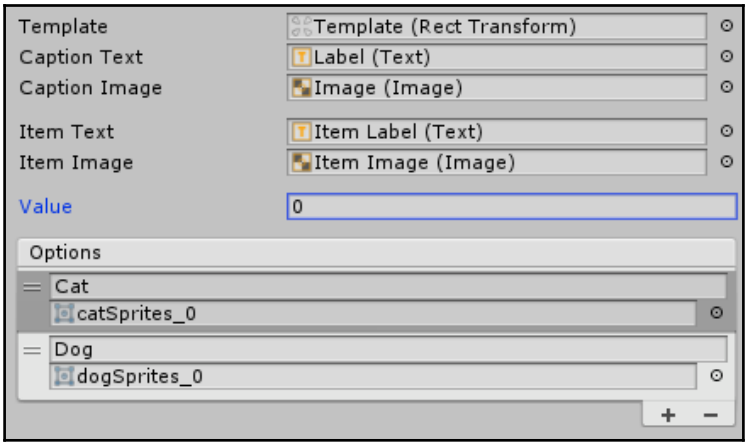

Gizmos
All
Paused
Option A
Inspector
Label
Static
Tag
Untagged
Layer
UI
Rect Transform
left
stretch
Pos X
Top
Pos Z
54
0
0
Width
Bottom
174
0
R
Anchors
Min
X 0
Y 0
Max
X 0
Y 1
Pivot
X 0
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Text (Script)
Text
Option A
Character
Font
Arial
Font Style
Bold
Font Size
41
Line Spacing
1
Rich Text
Paragraph
Alignment


All
Inspector
Item Image
Static
Tag
Untagged
Layer
UI
Rect Transform
left
stretch
Pos X
Top
Pos Z
20
0
0
Width
Bottom
50
0
R
Anchors
Min
X 0
Y 0
Max
X 0
Y 1
Pivot
X 0
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Image (Script)
Source Image
catSprites_0
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size

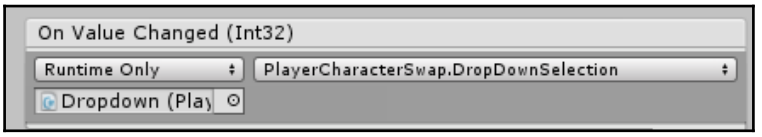

Gizmos
All
Option A
Option A
Inspector
Item Label
Static
Tag
Untagged
Layer
UI
Rect Transform
right
stretch
Pos X
Top
Pos Z
0
0
0
Width
Bottom
192
0
R
Anchors
Min
X 1
Y 0
Max
X 1
Y 1
Pivot
X 1
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer
Text (Script)
Text
Option A
Character
Font
Arial
Font Style
Bold
Font Size
28
Line Spacing
1
Rich Text
Paragraph
Alignment
Align By Geometry

Option A
Option A


Option A
Option A
Option B
Option C

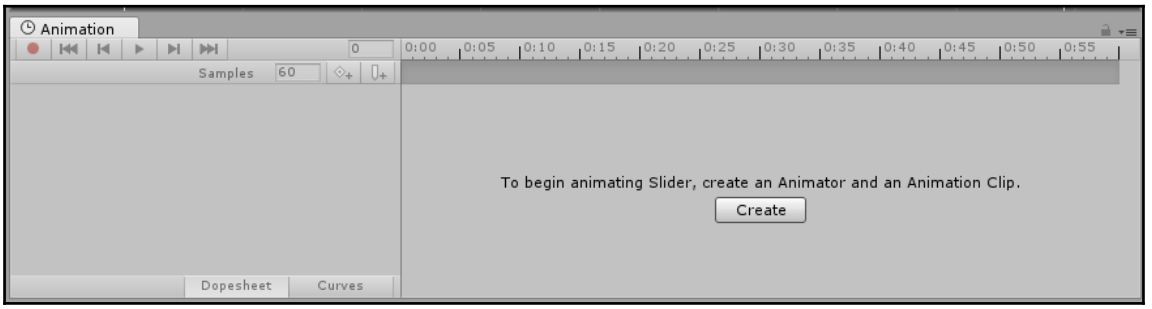

Template
Template (Rect Transform)
Caption Text
Label (Text)
Caption Image
Image (Image)
Item Text
Item Label (Text)
Item Image
Item Image (Image)
Value
0
Options
Cat
catSprites_0
Dog
dogSprites_0

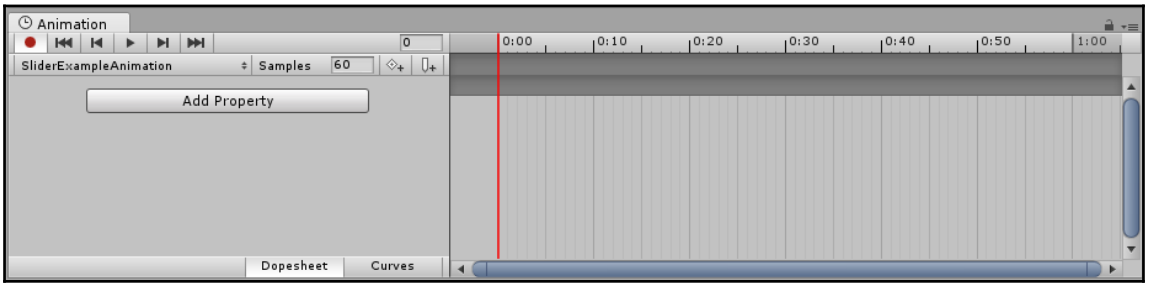
Dog
Cat
Dog

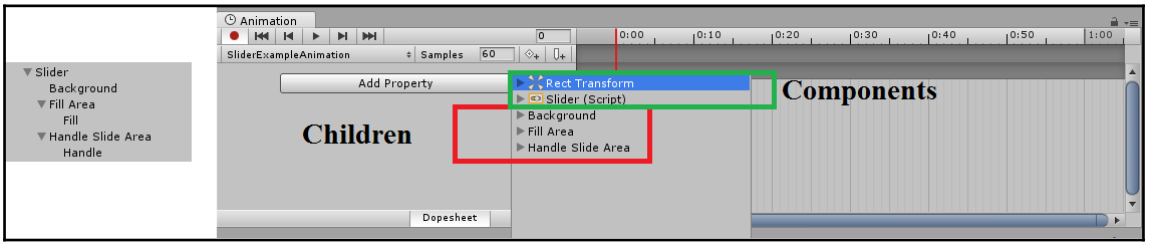

On Value Changed (Int32)
Runtime Only
PlayerCharacterSwap.DropDownSelection
Dropdown (Play

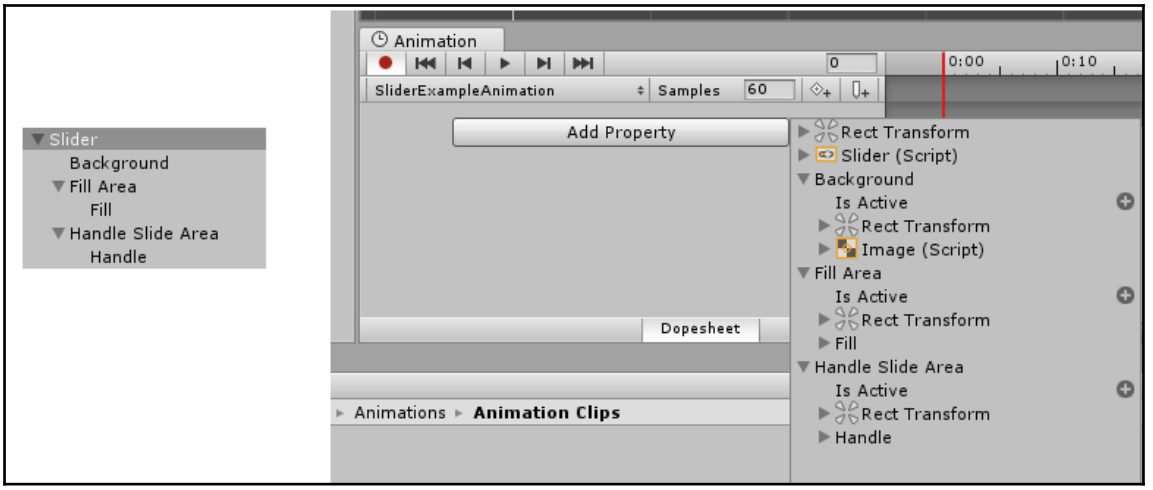
Paused
Dog
Cat
Dog

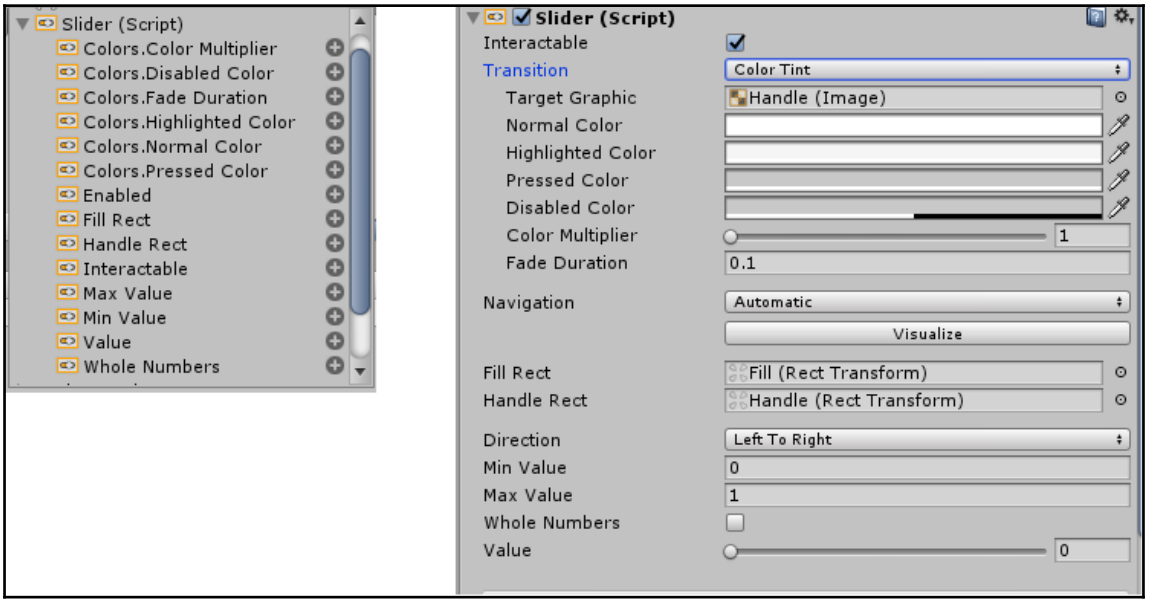
Chapter 8: Animations and Particles in the UI

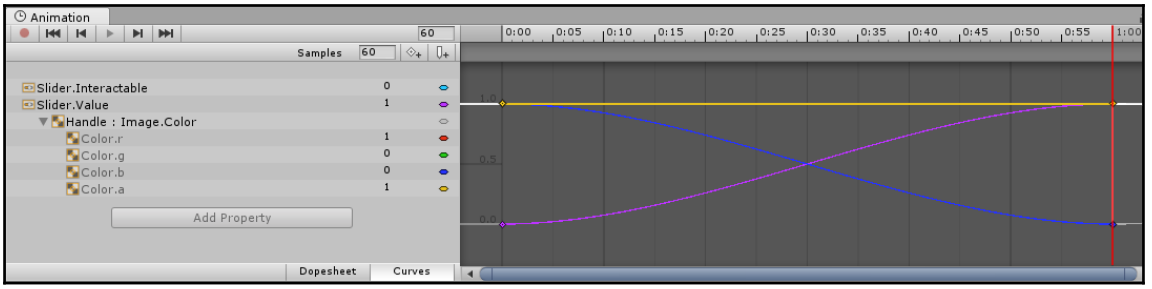


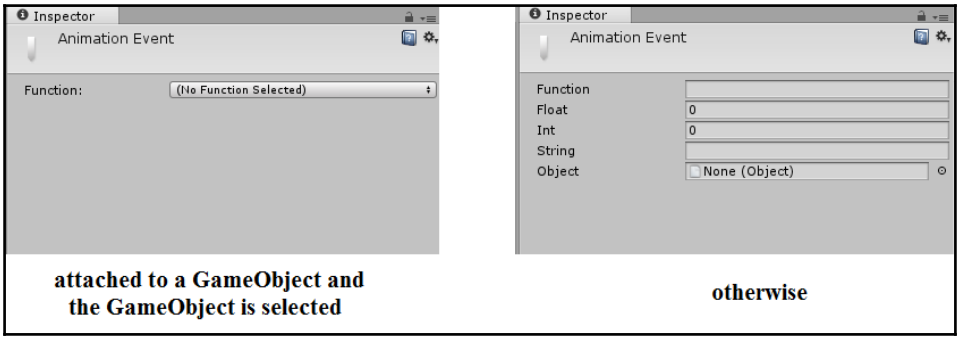


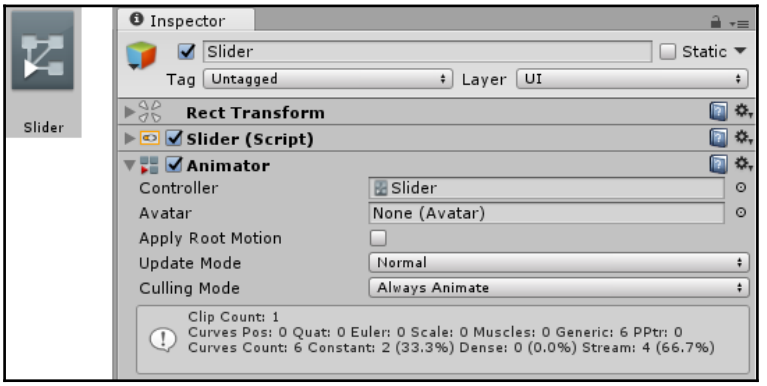


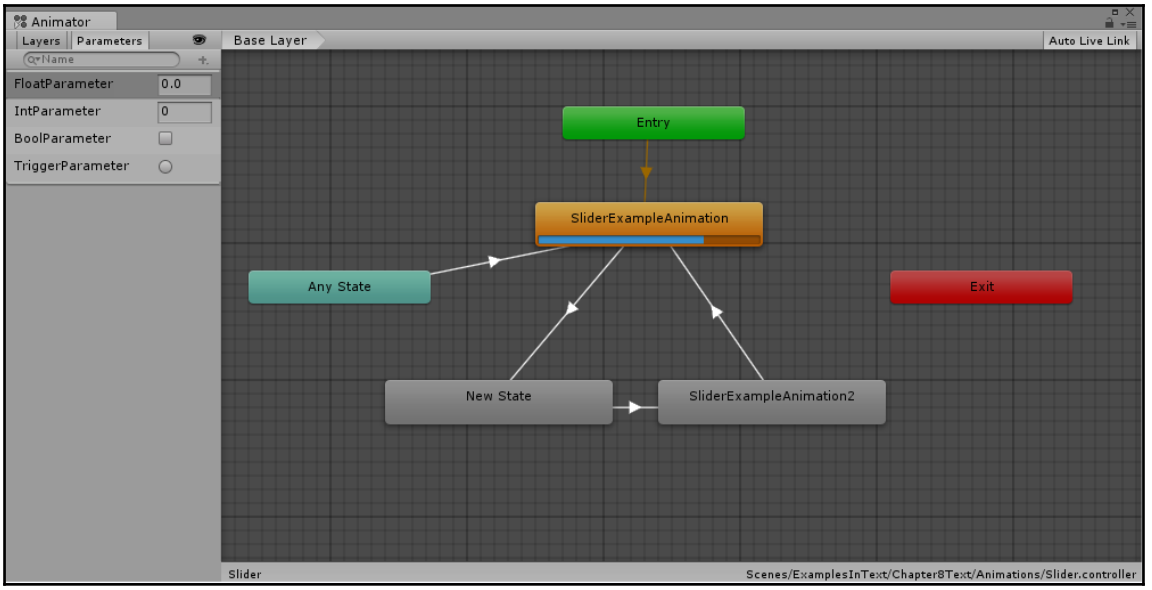

Slider
Background
Fill Area
Fill
Handle Slide Area
Handle
Animation
SliderExampleAnimation
Samples
60
0
0:00
0:10
Add Property
Dopesheet
Animations
Animation Clips
Rect Transform
Slider (Script)
Background
Is Active
Rect Transform
Image (Script)
Fill Area
Is Active
Rect Transform
Fill
Handle Slide Area
Is Active
Rect Transform
Handle

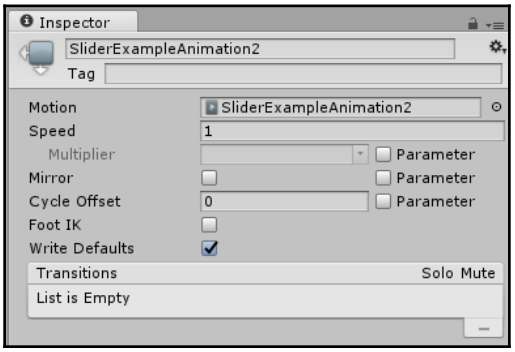

Slider (Script)
Colors.Color Multiplier
Colors.Disabled Color
Colors.Fade Duration
Colors.Highlighted Color
Colors.Normal Color
Colors.Pressed Color
Enabled
Fill Rect
Handle Rect
Interactable
Max Value
Min Value
Value
Whole Numbers
Slider (Script)
Interactable
Transition
Color Tint
Target Graphic
Handle (Image)
Normal Color
Highlighted Color
Pressed Color
Disabled Color
Color Multiplier
1
Fade Duration
0.1
Navigation
Automatic
Visualize
Fill Rect
Fill (Rect Transform)
Handle Rect
Handle (Rect Transform)
Direction
Left To Right
Min Value
0
Max Value
1
Whole Numbers
Value
0

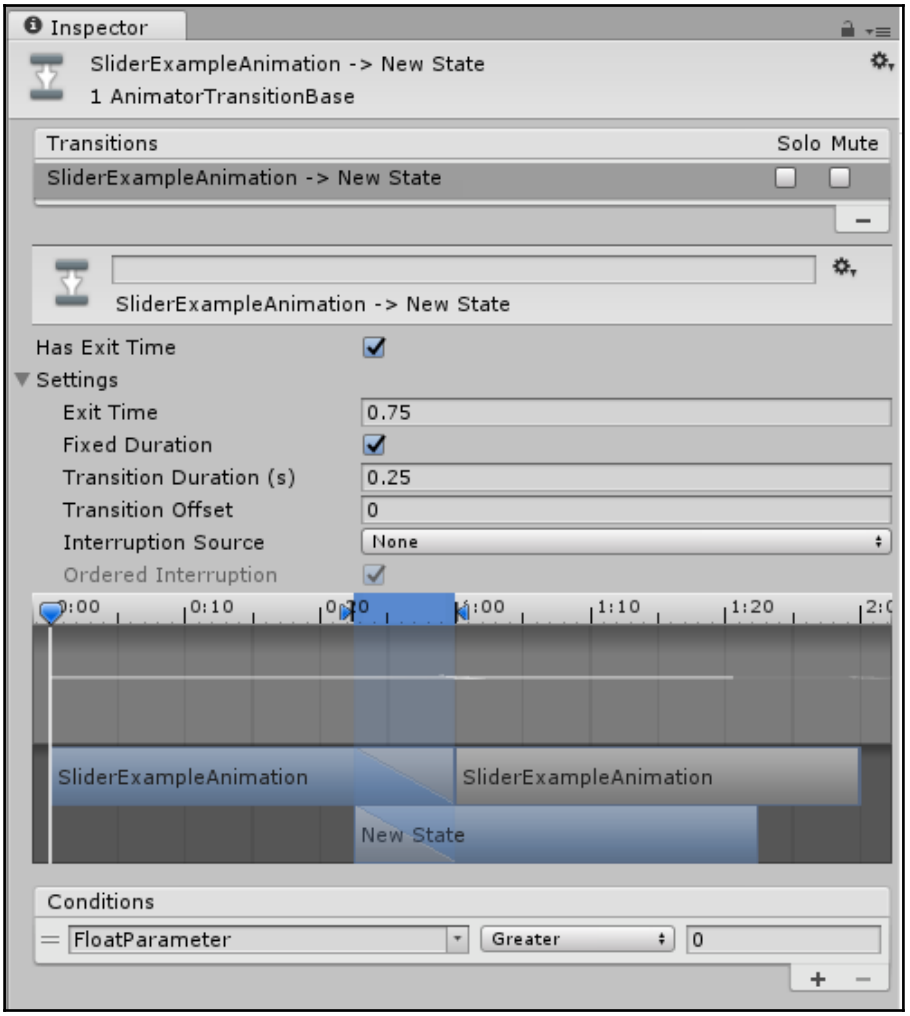

Animation
Samples
60
Slider.Interactable
Slider.Value
Handle : Image.Color
Color.r
Color.g
Color.b
Color.a
Add Property
Dopesheet
Curves

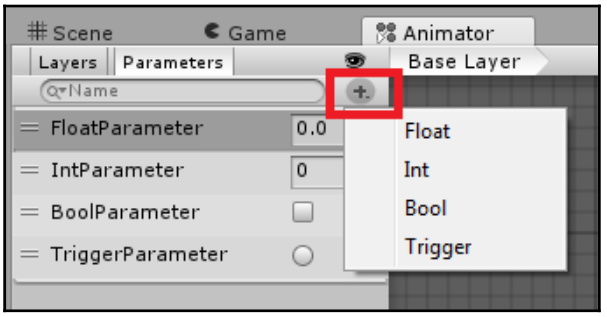

Inspector
Animation Event
Function:
(No Function Selected)
Inspector
Animation Event
Function
Float
Int
String
Object
None (Object)
attached to a GameObject and the GameObject is selected
otherwise

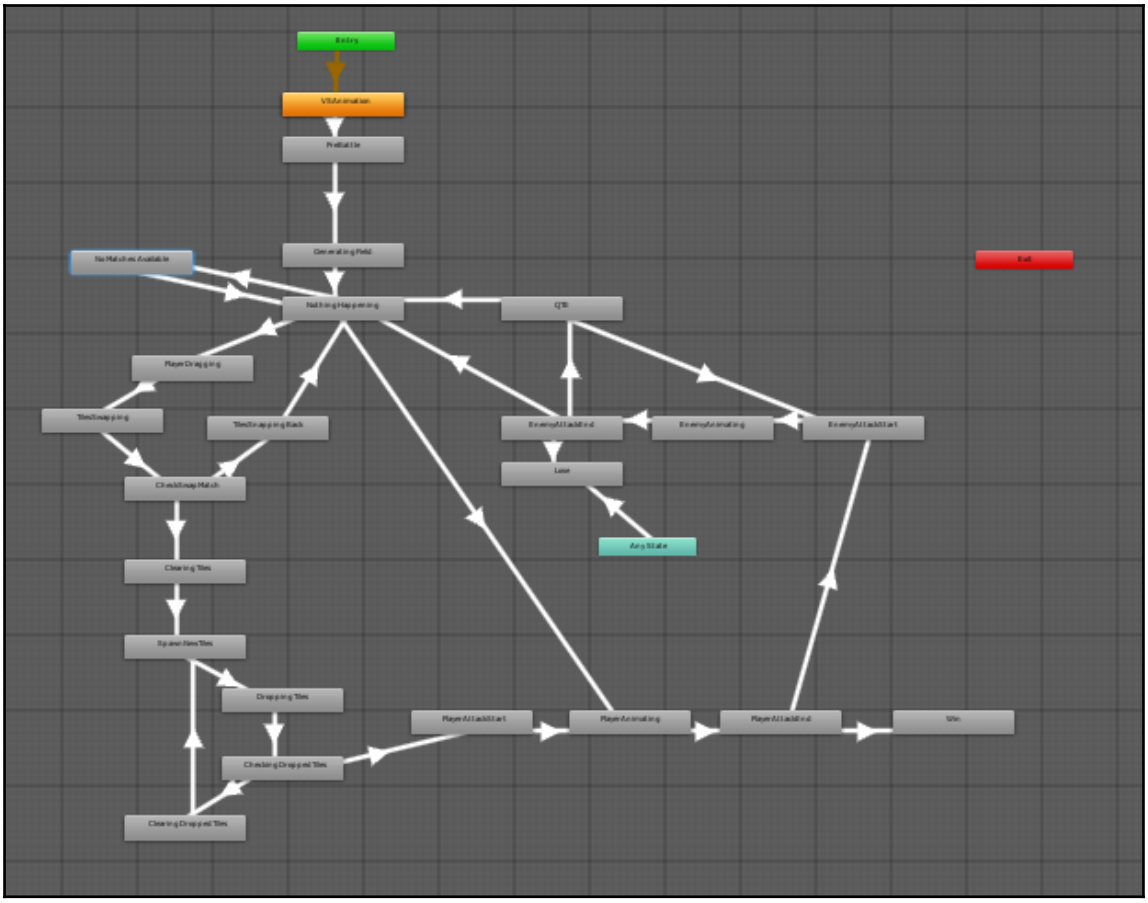

Inspector
Slider
Static
Tag
Untagged
Layer
UI
Rect Transform
Slider (Script)
Animator
Controller
Slider
Avatar
None (Avatar)
Apply Root Motion
Update Mode
Normal
Culling Mode
Always Animate
Clip Count: 1
Curves Pos: 0 Quat: 0 Euler: 0 Scale: 0 Muscles: 0 Generic: 6 PPtr: 0
Curves Count: 6 Constant: 2 (33.3%) Dense: 0 (0.0%) Stream: 4 (66.7%)

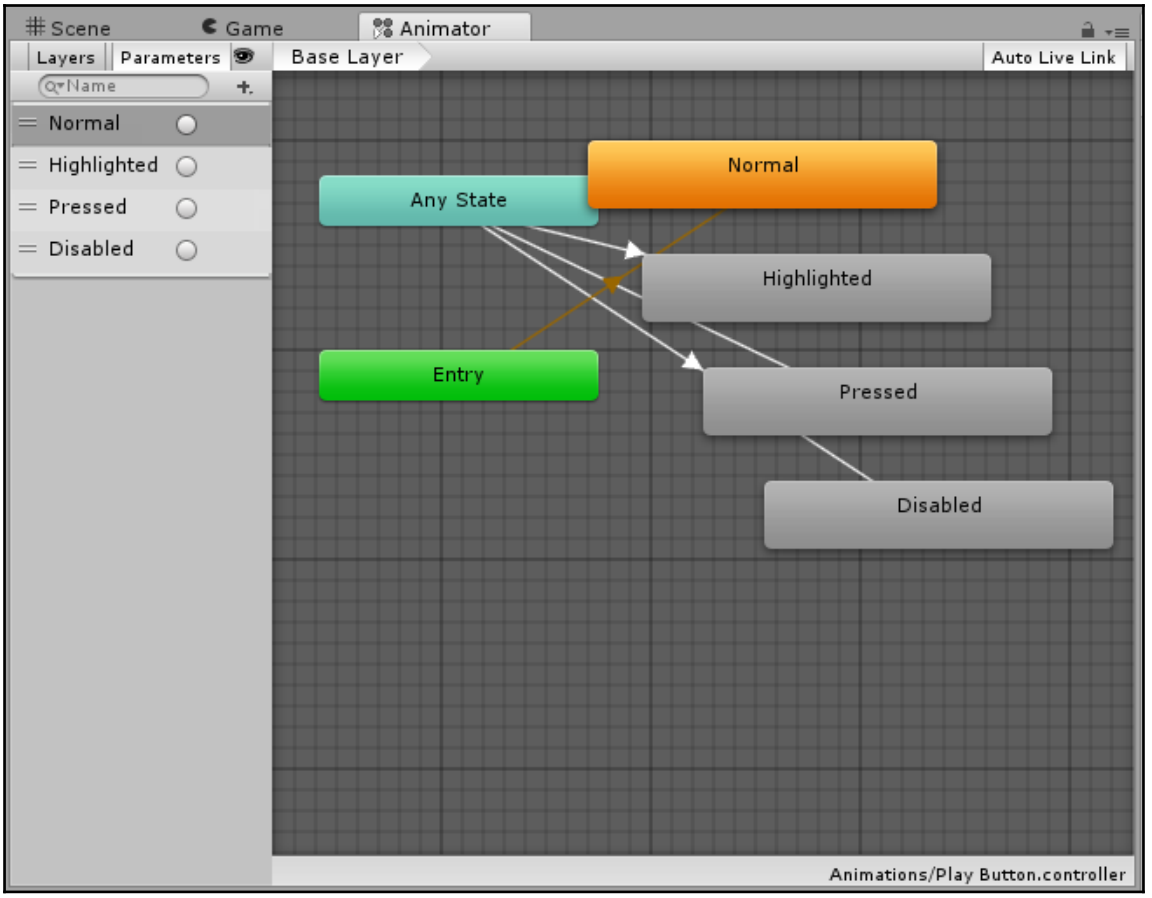

Animator
Layers
Parameters
Name
FloatParameter
0.0
IntParameter
0
BoolParameter
TriggerParameter
Base Layer
Auto Live Link
Entry
SliderExampleAnimation
Any State
Exit
New State
SliderExampleAnimation2
Slider
Scenes/ExamplesInText/Chapter8Text/Animations/Slider.controller

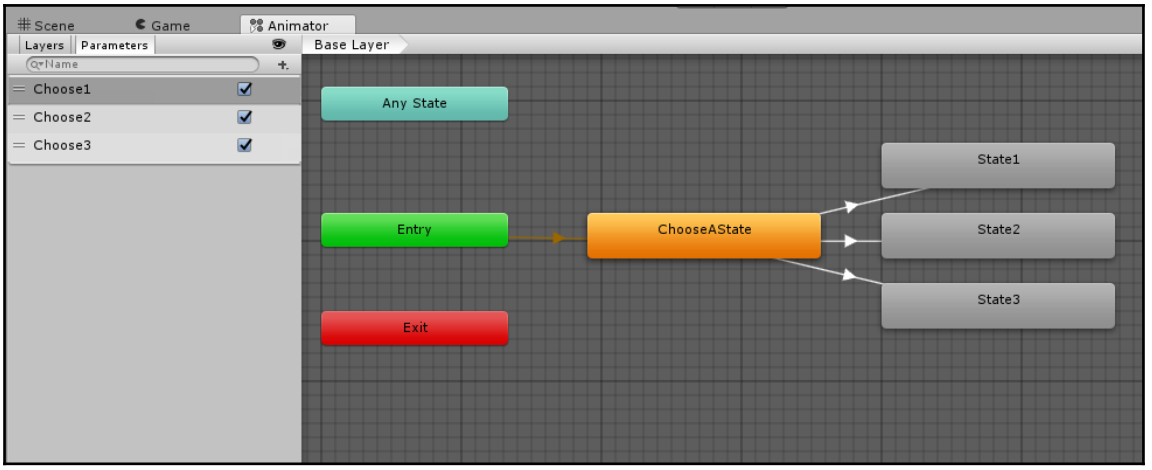

Inspector
SliderExampleAnimation2
Tag
Motion
SliderExampleAnimation2
Speed
1
Multiplier
Parameter
Mirror
Parameter
Cycle Offset
0
Parameter
Foot IK
Write Defaults
Transitions
Solo Mute
List is Empty

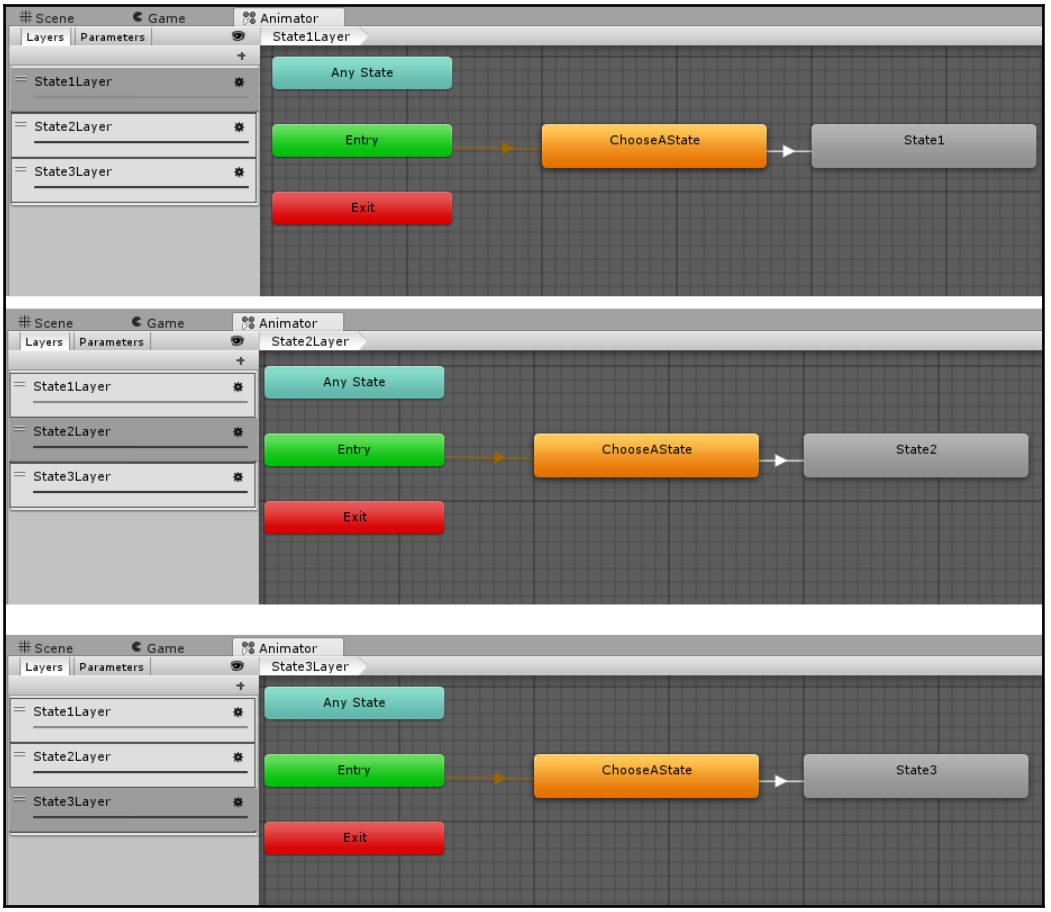

Inspector
SliderExampleAnimation -> New State
1 AnimatorTransitionBase
Transitions
Solo
Mute
SliderExampleAnimation -> New State
SliderExampleAnimation -> New State
Has Exit Time
Settings
Exit Time
0.75
Fixed Duration
Transition Duration (s)
0.25
Transition Offset
0
Interruption Source
None
Ordered Interruption
0:00
0:10
1:00
1:10
1:20
SliderExampleAnimation
SliderExampleAnimation
New State
Conditions
FloatParameter
Greater
0

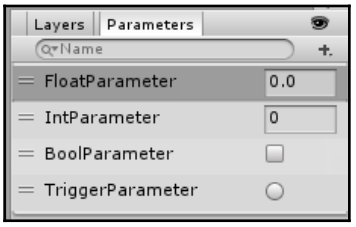

Scene
Game
Animator
Layers
Parameters
Base Layer
Name
FloatParameter
0.0
IntParameter
0
BoolParameter
TriggerParameter
Float
Int
Bool
Trigger

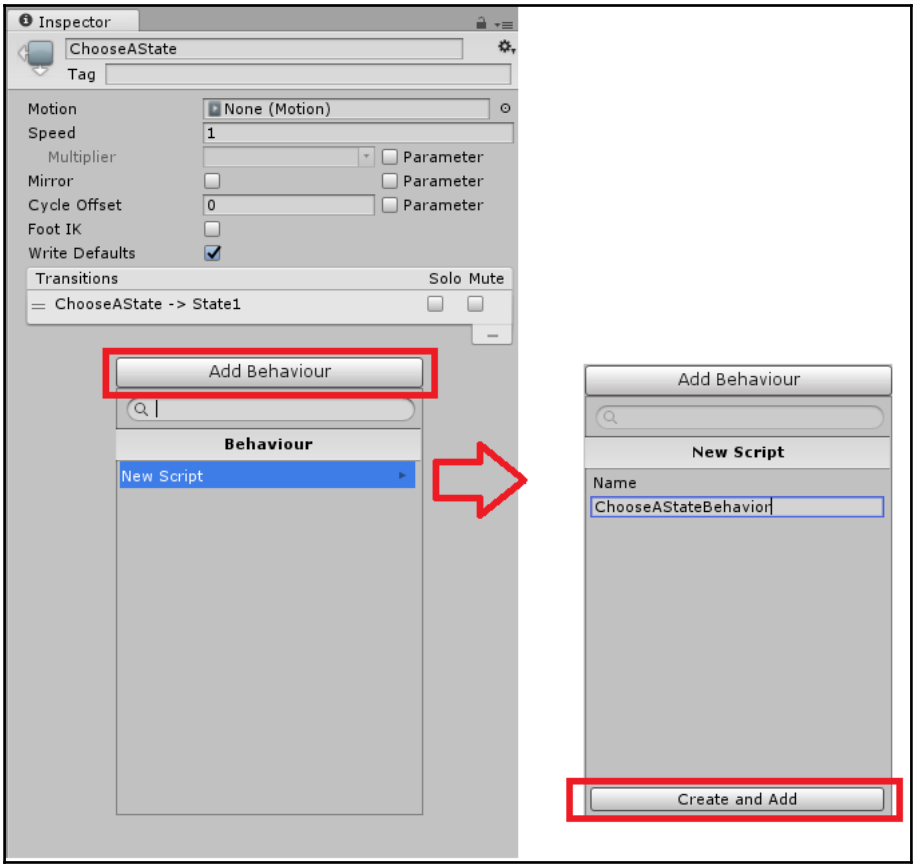

Entry
VfxAnimation
Preinit
GeneratingField
NoMatchesAvailable
Exit
NothingHappening
QTE
PlayerDragging
TileSnapping
TileSnappingBack
EnemyAttackEnd
EnemyAnimating
EnemyAttackStart
Lose
CheckSnapMatch
Any State
ClearingTiles
SpawnNewTiles
DroppingTiles
PlayerAttackStart
PlayerAnimating
PlayerAttackEnd
Win
CheckingDroppedTiles
ClearingDroppedTiles

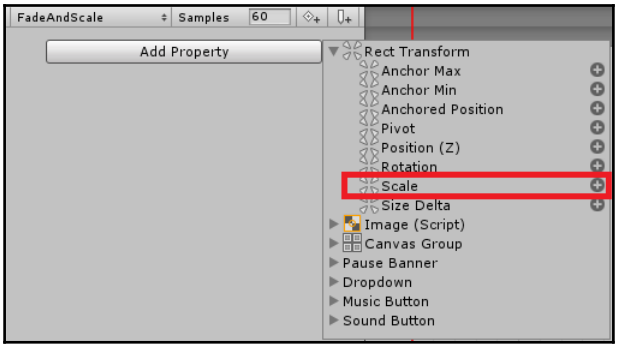

Scene
Game
Animator
Layers
Parameters
Base Layer
Auto Live Link
Name
Normal
Highlighted
Pressed
Disabled
Any State
Normal
Highlighted
Entry
Pressed
Disabled
Animations/Play Button.controller

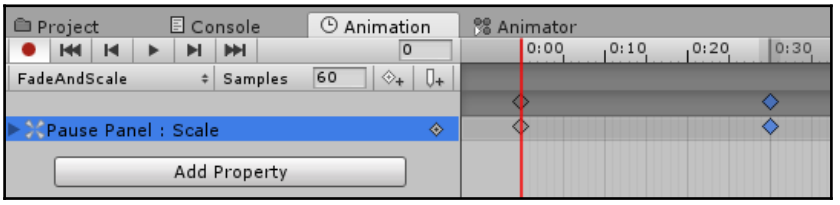

Scene
Game
Animator
Layers
Parameters
Base Layer
Name
Choose1
Choose2
Choose3
Any State
State1
Entry
ChooseAState
State2
State3
Exit

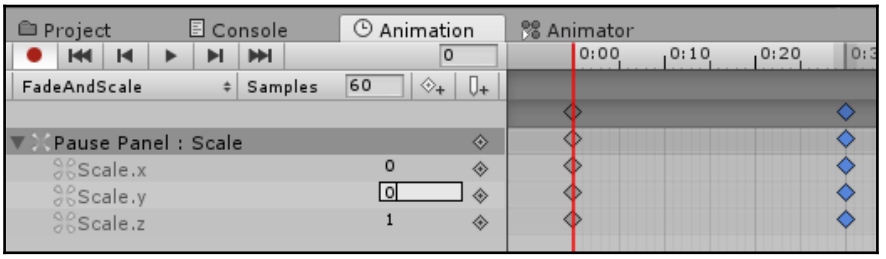

Scene
Game
Animator
Layers
Parameters
State1Layer
State1Layer
State2Layer
State3Layer
Any State
Entry
ChooseAState
State1
Exit
Scene
Game
Animator
Layers
Parameters
State2Layer
State1Layer
State2Layer
State3Layer
Any State
Entry
ChooseAState
State2
Exit
Scene
Game
Animator
Layers
Parameters
State3Layer
State1Layer
State2Layer
State3Layer
Any State
Entry
ChooseAState
State3
Exit

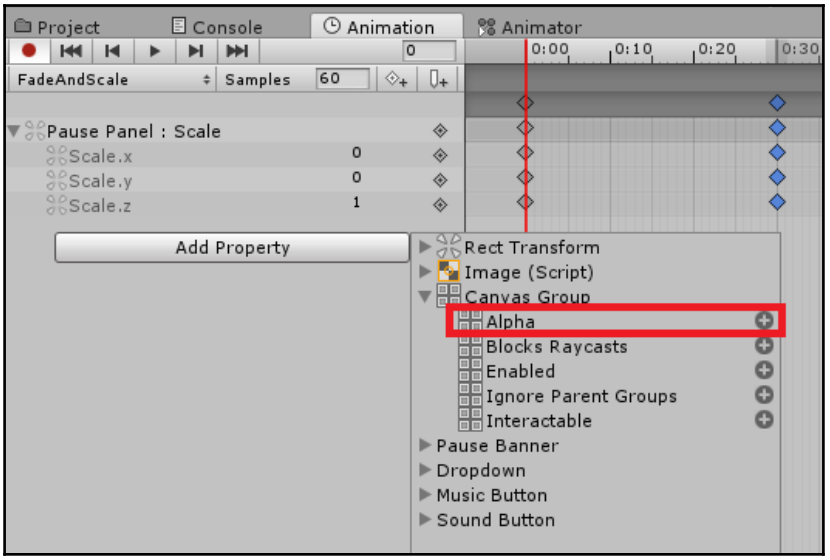

Layers
Parameters
Name
FloatParameter
0.0
IntParameter
0
BoolParameter
TriggerParameter

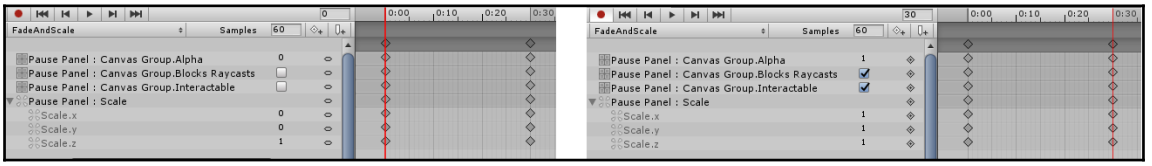

Inspector
ChooseAState
Tag
Motion
None (Motion)
Speed
1
Multiplier
Parameter
Mirror
Parameter
Cycle Offset
0
Parameter
Foot IK
Write Defaults
Transitions
Solo
Mute
ChooseAState -> State1
Add Behaviour
Behaviour
New Script
Add Behaviour
New Script
Name
ChooseAStateBehavior
Create and Add

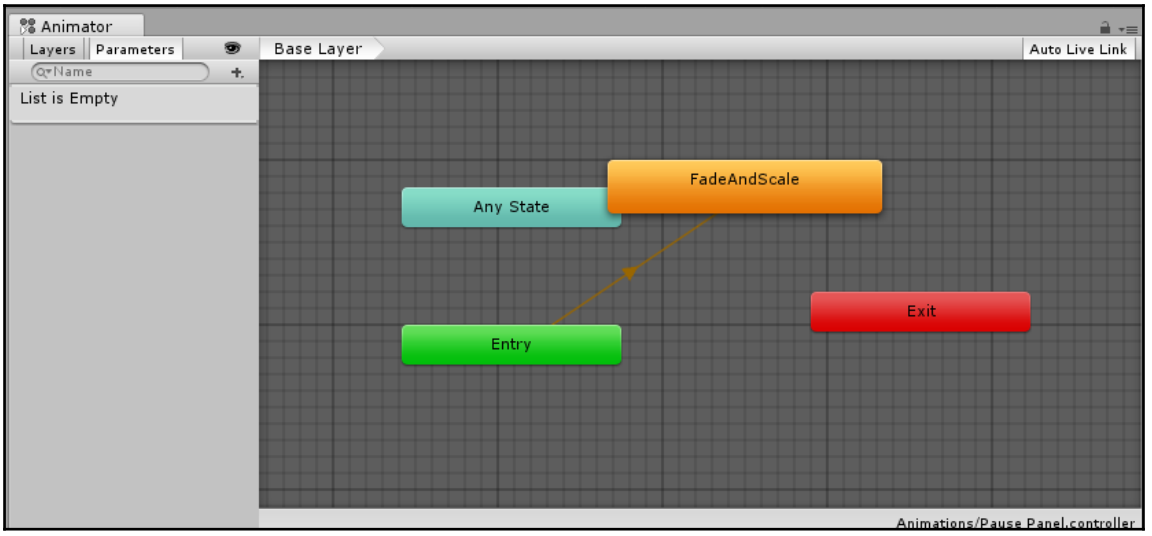

FadeAndScale
Samples
60
Add Property
Rect Transform
Anchor Max
Anchor Min
Anchored Position
Pivot
Position (Z)
Rotation
Scale
Size Delta
Image (Script)
Canvas Group
Pause Banner
Dropdown
Music Button
Sound Button

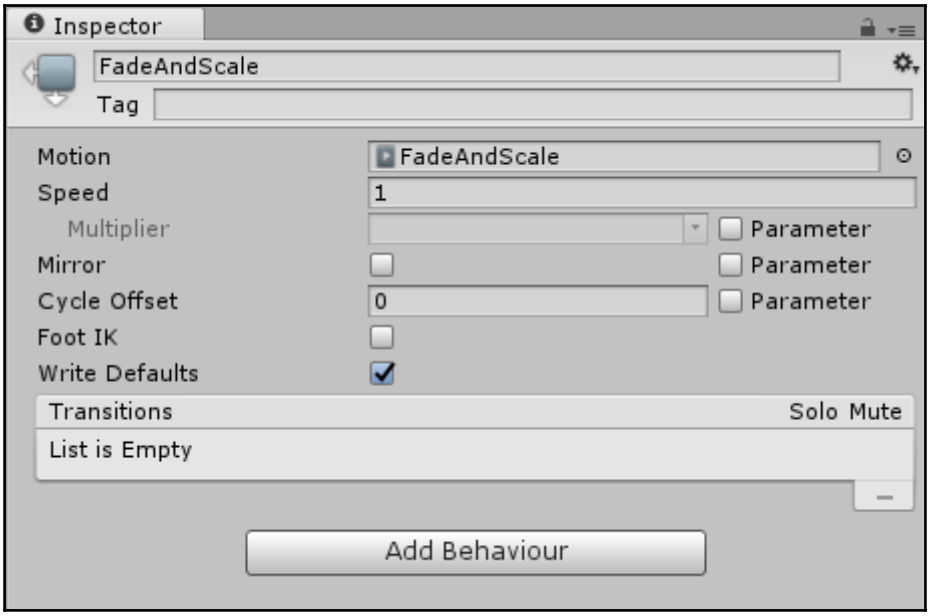

Project
Console
Animation
Animator
0
0:00
0:10
0:20
0:30
FadeAndScale
Samples
60
Pause Panel : Scale
Add Property

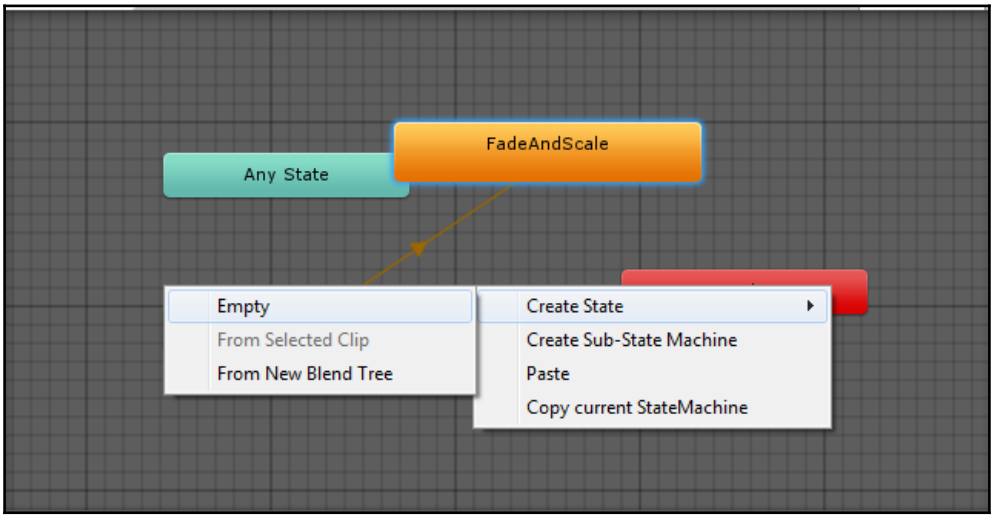

Project
Console
Animation
Animator
0
0:00
0:10
0:20
FadeAndScale
Samples
60
Pause Panel : Scale
Scale.x
0
Scale.y
0
Scale.z
1

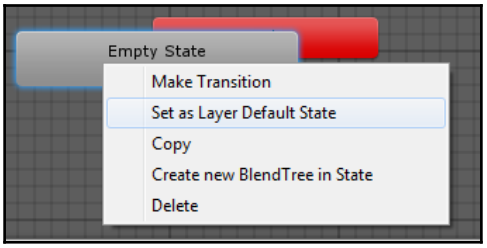

Project
Console
Animation
Animator
FadeAndScale
Samples
60
Pause Panel : Scale
Scale.x
Scale.y
Scale.z
Add Property
Rect Transform
Image (Script)
Canvas Group
Alpha
Blocks Raycasts
Enabled
Ignore Parent Groups
Interactable
Pause Banner
Dropdown
Music Button
Sound Button

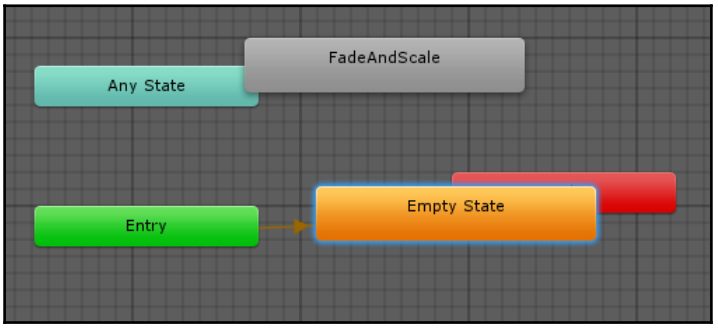

FadeAndScale
Samples
Pause Panel : Canvas Group.Alpha
Pause Panel : Canvas Group.Blocks Raycasts
Pause Panel : Canvas Group.Interactable
Pause Panel : Scale
Scale.x
Scale.y
Scale.z

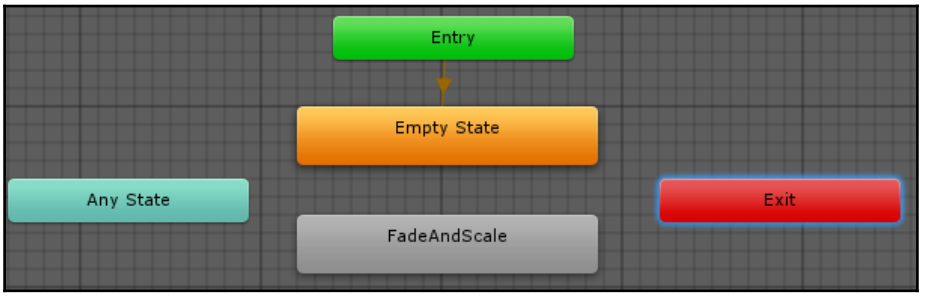

Animator
Layers
Parameters
Base Layer
Auto Live Link
Name
List is Empty
Any State
FadeAndScale
Exit
Entry
Animations/Pause Panel.controller

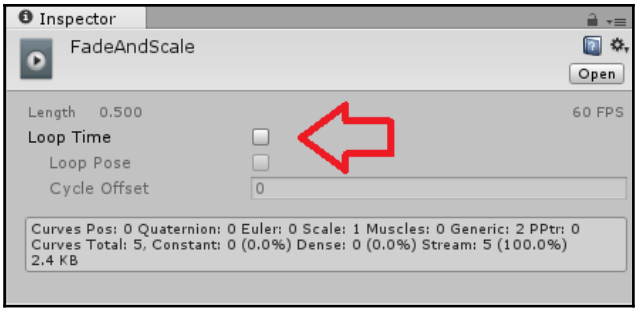

Inspector
FadeAndScale
Tag
Motion
FadeAndScale
Speed
1
Multiplier
Parameter
Mirror
Parameter
Cycle Offset
0
Parameter
Foot IK
Write Defaults
Transitions
Solo Mute
List is Empty
Add Behaviour

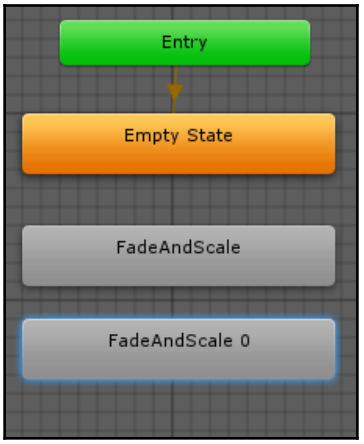

Any State
FadeAndScale
Empty
From Selected Clip
From New Blend Tree
Create State
Create Sub-State Machine
Paste
Copy current StateMachine

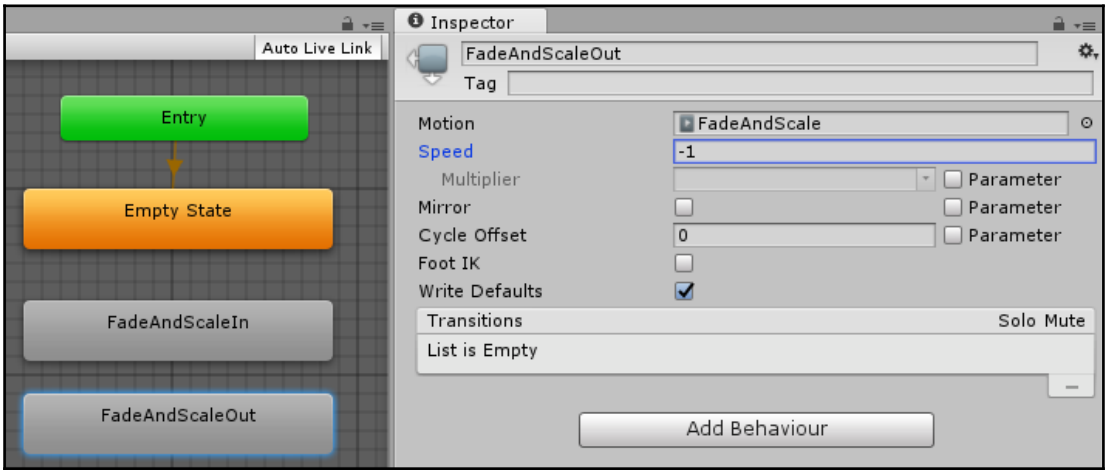

Empty State
Make Transition
Set as Layer Default State
Copy
Create new BlendTree in State
Delete

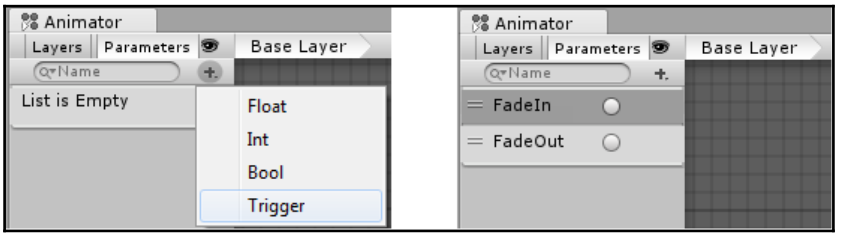

FadeAndScale
Any State
Entry
Empty State

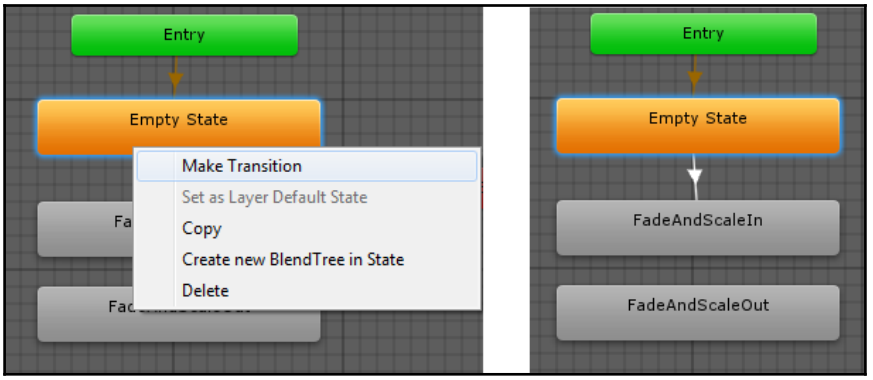

Entry
Empty State
Any State
Exit
FadeAndScale

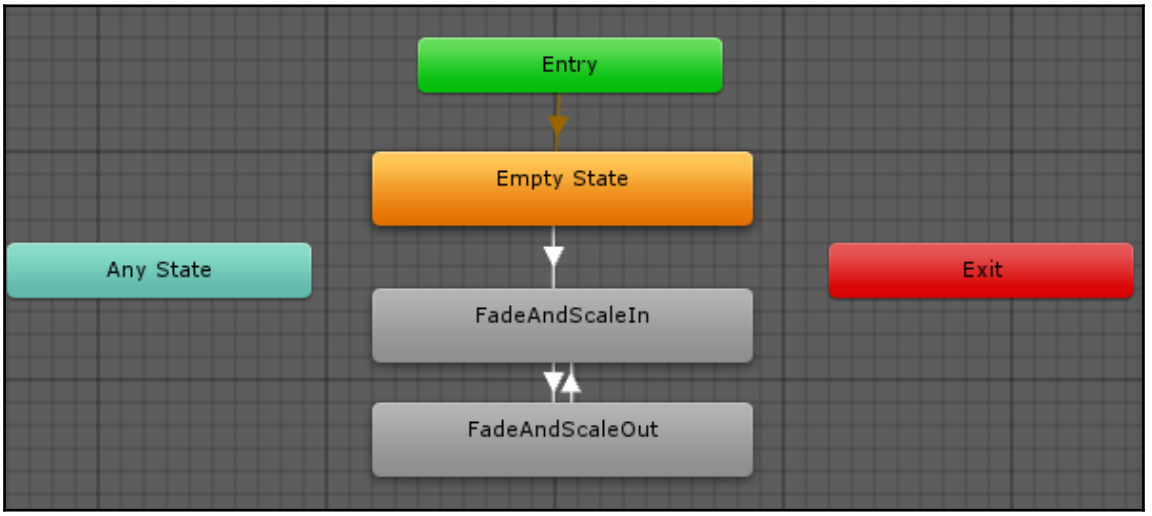

Inspector
FadeAndScale
Open
Length 0.500
60 FPS
Loop Time
Loop Pose
Cycle Offset
0
Curves Pos: 0 Quaternion: 0 Euler: 0 Scale: 1 Muscles: 0 Generic: 2 PPtr: 0
Curves Total: 5, Constant: 0 (0.0%) Dense: 0 (0.0%) Stream: 5 (100.0%)
2.4 KB

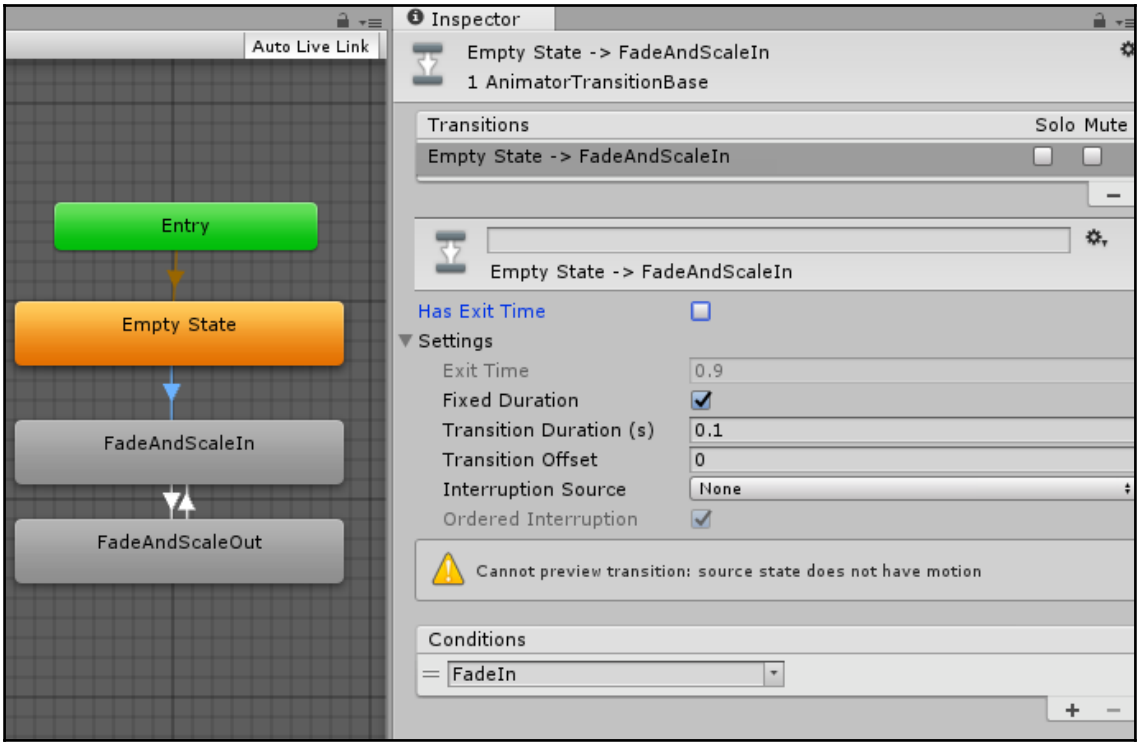

Entry
Empty State
FadeAndScale
FadeAndScale 0

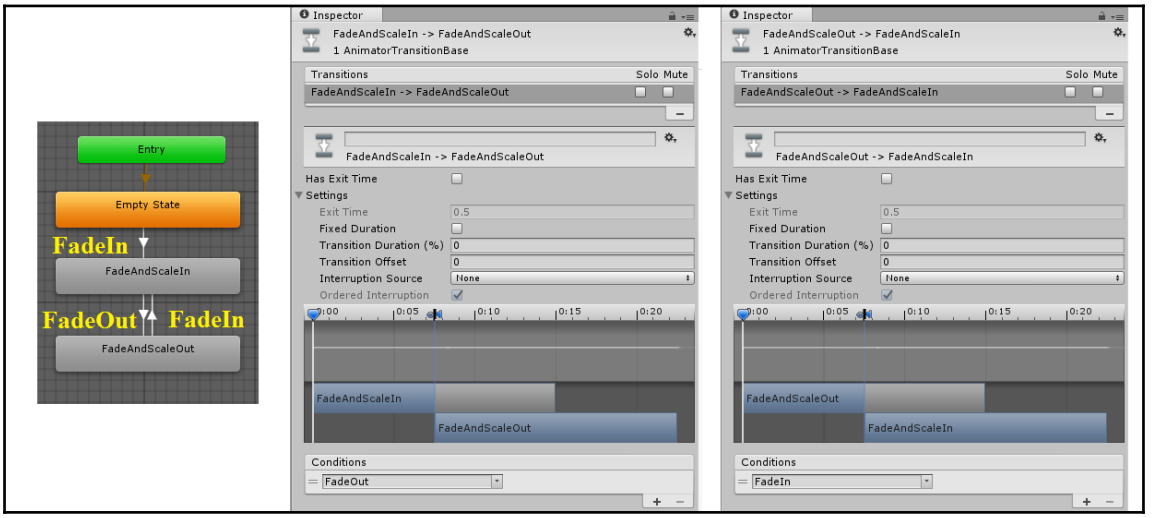

Auto Live Link
Entry
Empty State
FadeAndScaleIn
FadeAndScaleOut
Inspector
FadeAndScaleOut
Tag
Motion
FadeAndScale
Speed
-1
Multiplier
Parameter
Mirror
Parameter
Cycle Offset
0
Parameter
Foot IK
Write Defaults
Transitions
Solo Mute
List is Empty
Add Behaviour


Animator
Layers
Parameters
Base Layer
Name
List is Empty
Float
Int
Bool
Trigger
Animator
Layers
Parameters
Base Layer
Name
FadeIn
FadeOut

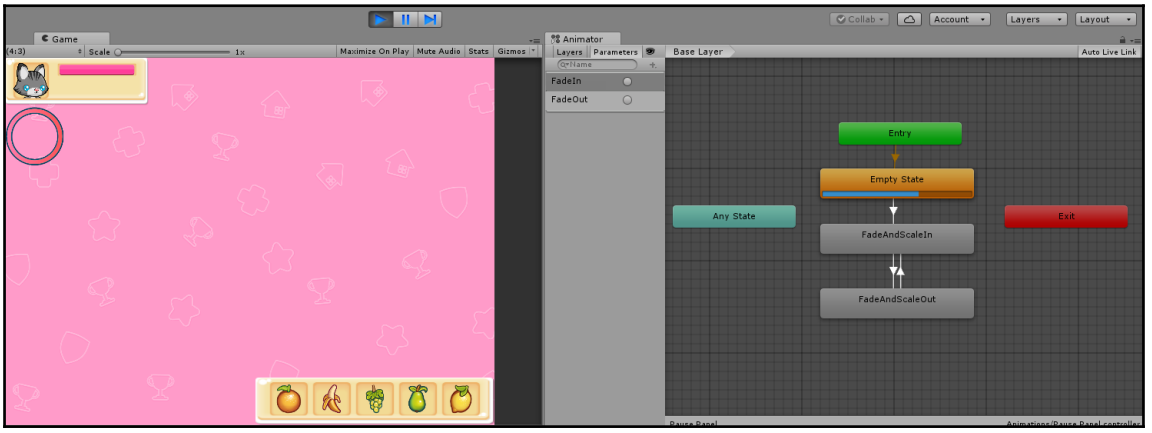

Entry
Empty State
Make Transition
Set as Layer Default State
Copy
Create new BlendTree in State
Delete
Entry
Empty State
FadeAndScaleIn
FadeAndScaleOut

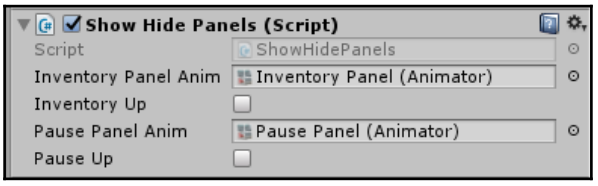

Entry
Empty State
Any State
FadeAndScaleIn
Exit
FadeAndScaleOut

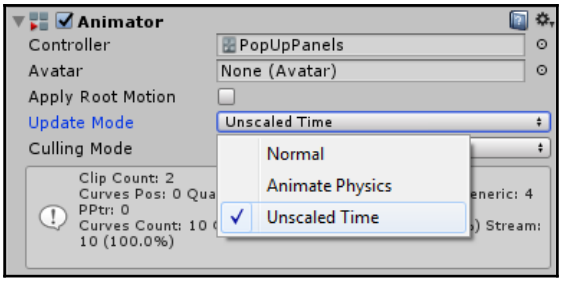

Auto Live Link
Entry
Empty State
FadeAndScaleIn
FadeAndScaleOut
Inspector
Empty State -> FadeAndScaleIn
1 AnimatorTransitionBase
Transitions
Solo Mute
Empty State -> FadeAndScaleIn
Empty State -> FadeAndScaleIn
Has Exit Time
Settings
Exit Time
0.9
Fixed Duration
Transition Duration (s)
0.1
Transition Offset
0
Interruption Source
None
Ordered Interruption
Cannot preview transition: source state does not have motion
Conditions
FadeIn

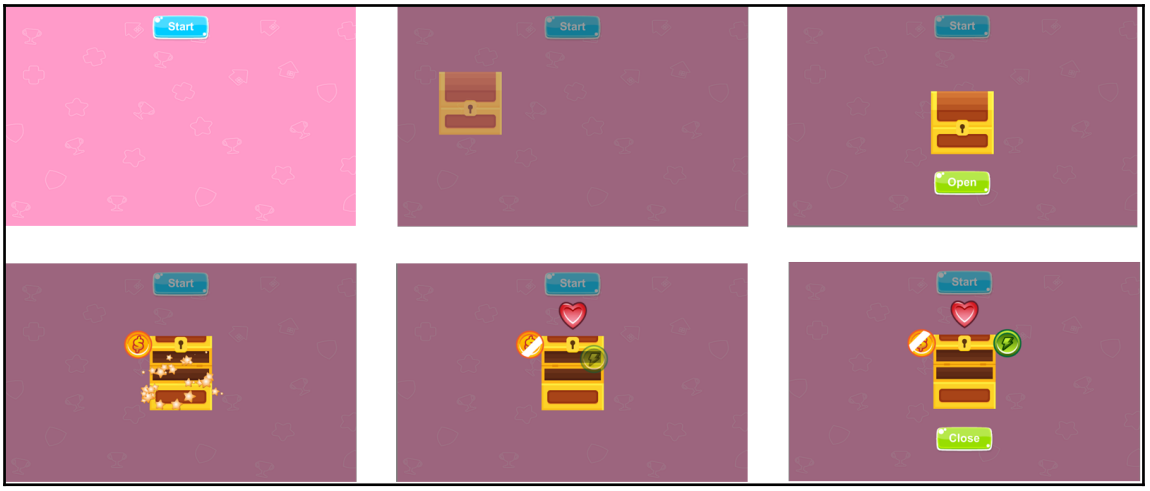

Entry
Empty State
FadeIn
FadeAndScaleIn
FadeOut
FadeIn
FadeAndScaleOut
Inspector
FadeAndScaleIn -> FadeAndScaleOut
1 AnimatorTransitionBase
Transitions
Solo Mute
FadeAndScaleIn -> FadeAndScaleOut
Has Exit Time
Settings
Exit Time
0.5
Fixed Duration
Transition Duration (%)
0
Transition Offset
0
Interruption Source
None
Ordered Interruption
FadeAndScaleIn
FadeAndScaleOut
Conditions
FadeOut
Inspector
FadeAndScaleOut -> FadeAndScaleIn
1 AnimatorTransitionBase
Transitions
Solo Mute
FadeAndScaleOut -> FadeAndScaleIn
Has Exit Time
Settings
Exit Time
0.5
Fixed Duration
Transition Duration (%)
0
Transition Offset
0
Interruption Source
None
Ordered Interruption
FadeAndScaleOut
FadeAndScaleIn
Conditions
FadeIn

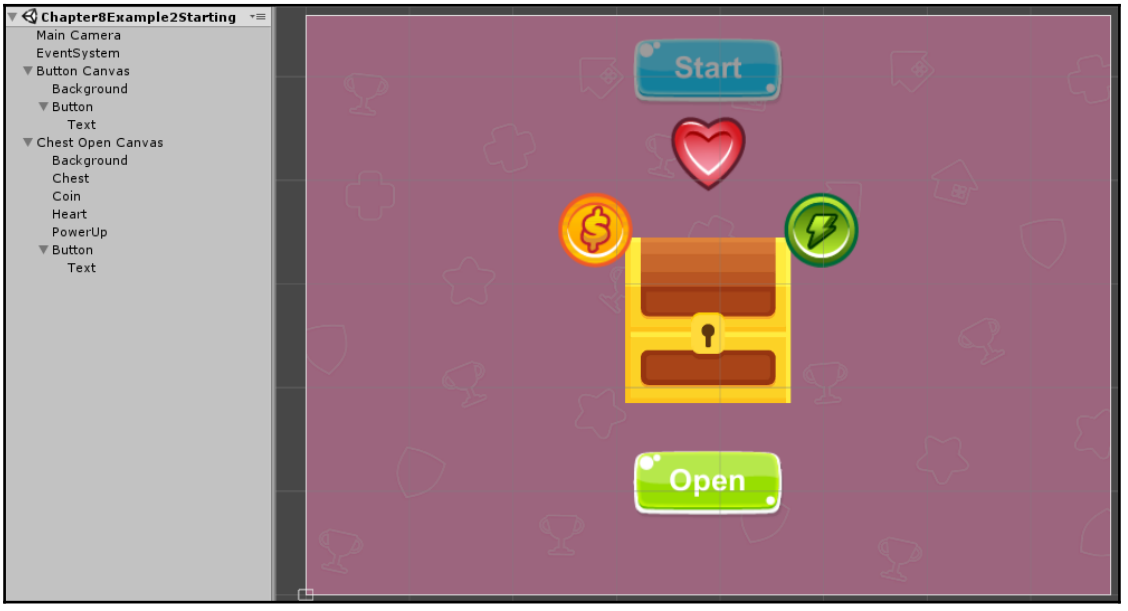
Canvas Group
Alpha
0
Interactable
Blocks Raycasts
Ignore Parent Groups

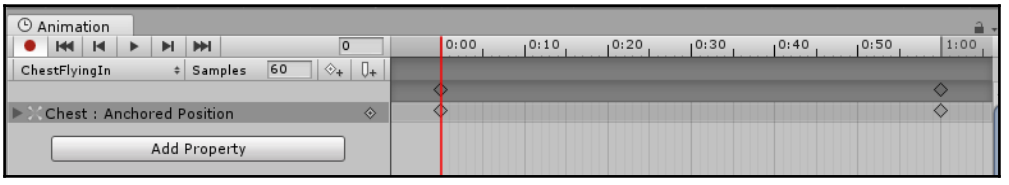

Game
Animator
Base Layer
FadeIn
FadeOut
Entry
Empty State
Any State
Exit
FadeAndScaleIn
FadeAndScaleOut

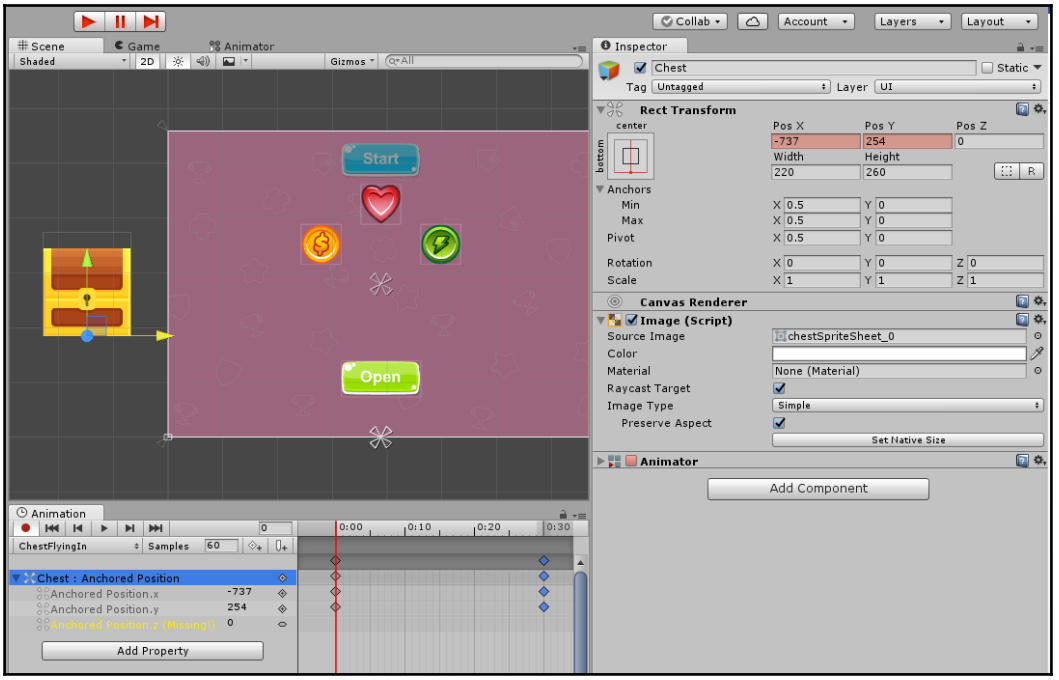

Show Hide Panels (Script)
Script
ShowHidePanels
Inventory Panel Anim
Inventory Panel (Animator)
Inventory Up
Pause Panel Anim
Pause Panel (Animator)
Pause Up

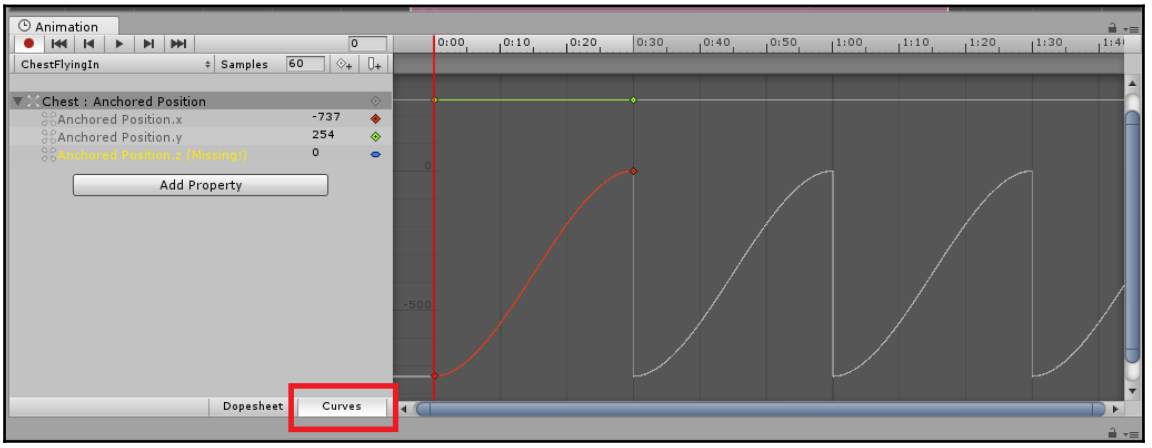

Animator
Controller
PopUpPanels
Avatar
None (Avatar)
Apply Root Motion
Update Mode
Unscaled Time
Culling Mode
Normal
Animate Physics
Unscaled Time

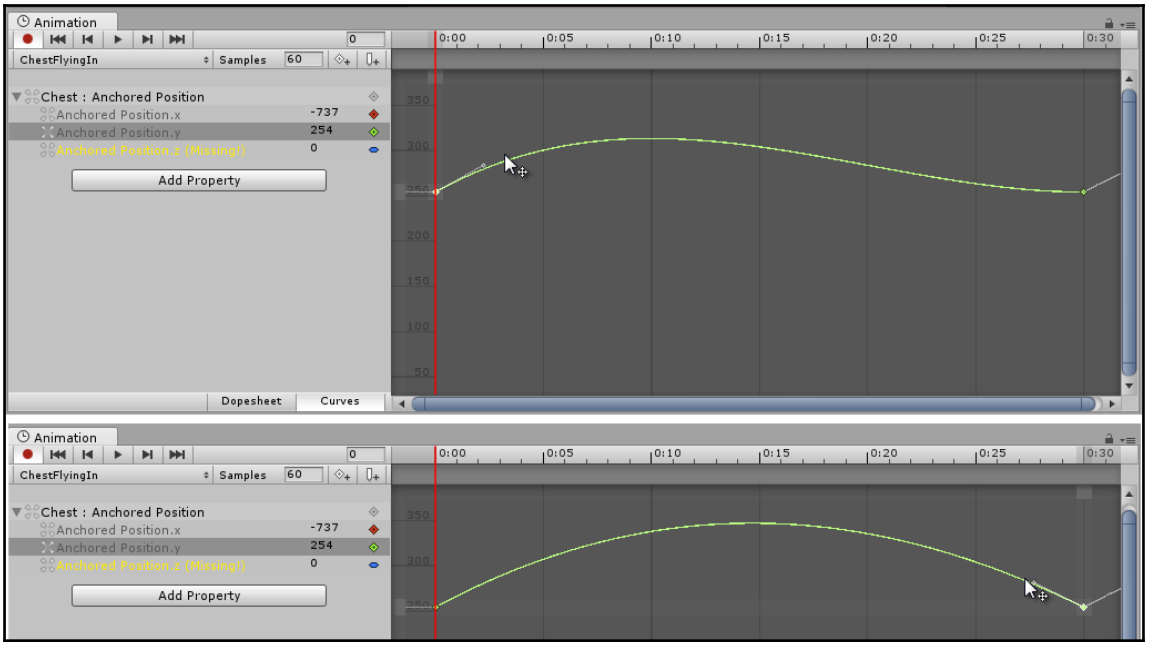

Start
Open
Close

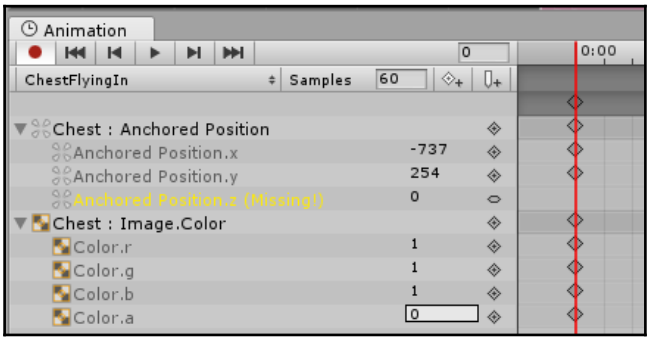

Chapter8Example2Starting
Main Camera
EventSystem
Button Canvas
Background
Button
Text
Chest Open Canvas
Background
Chest
Coin
Heart
PowerUp
Button
Text
Start
Open

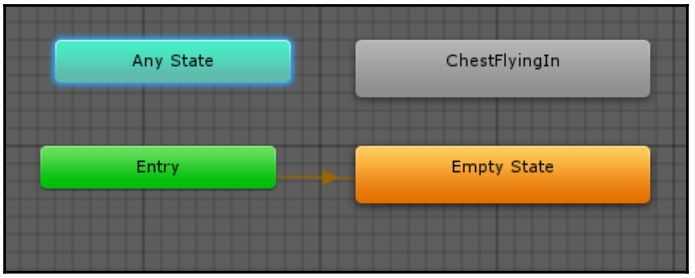

Animation
0
0:00
0:10
0:20
0:30
0:40
0:50
1:00
ChestFlyingIn
Samples
60
Chest : Anchored Position
Add Property

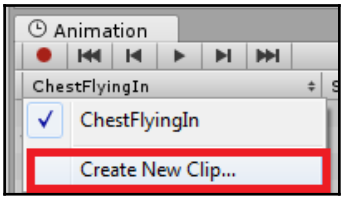

Collab
Account
Layers
Layout
Scene
Game
Animator
Shaded
2D
Gizmos
Start
Open
Inspector
Chest
Static
Tag
Untagged
Layer
UI
Rect Transform
center
bottom
Pos X
Pos Y
Pos Z
-737
254
0
Width
Height
220
260
Anchors
Min
Max
Pivot
Rotation
Scale
Canvas Renderer
Image (Script)
Source Image
chestSpriteSheet_0
Color
Material
None (Material)
Raycast Target
Image Type
Simple
Preserve Aspect
Set Native Size
Animator
Add Component
Animation
ChestFlyingIn
Samples
60
Chest : Anchored Position
Anchored Position.x
Anchored Position.y
Add Property

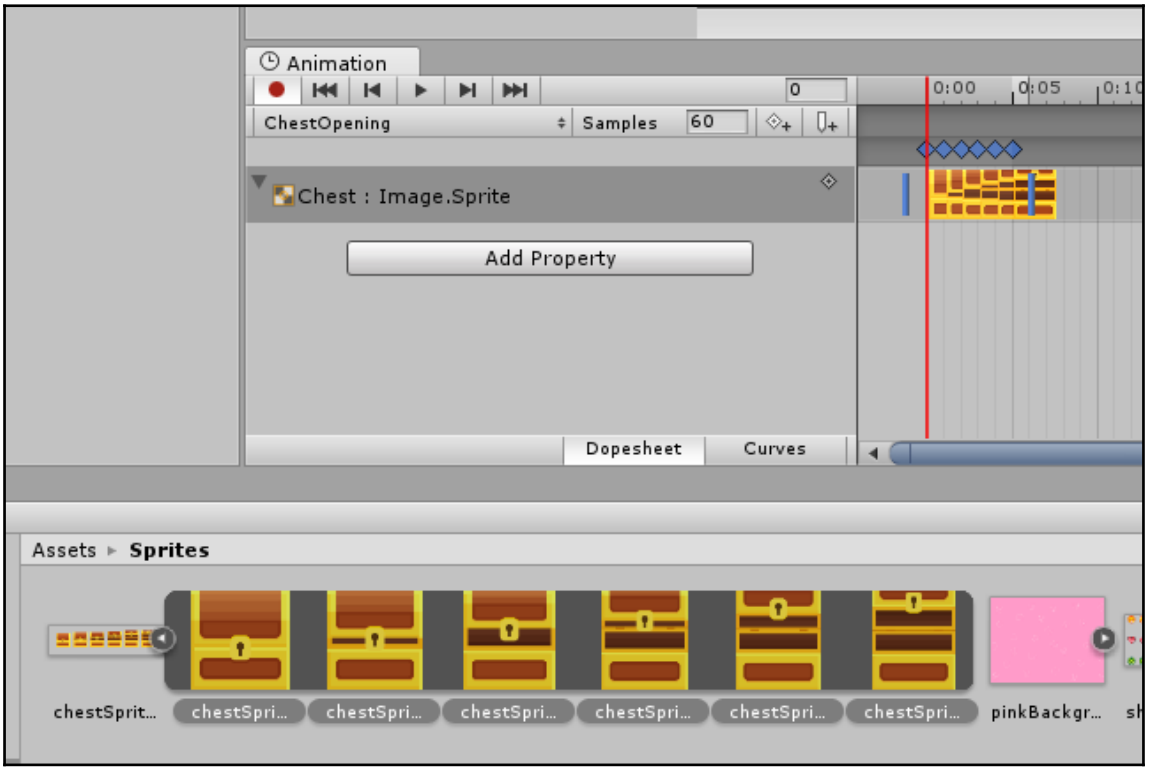

Animation
ChestFlyingIn
Samples
60
Chest : Anchored Position
Anchored Position.x
-737
Anchored Position.y
254
Anchored Position.z (Missing)
0
Add Property
Dopesheet
Curves

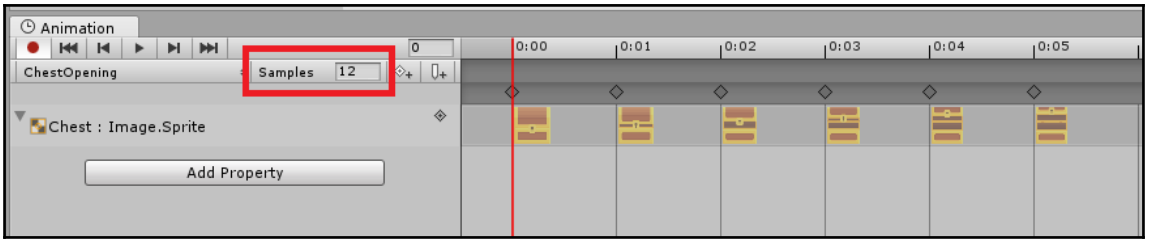

Animation
ChestFlyingIn
Samples
60
Chest : Anchored Position
Anchored Position.x
-737
Anchored Position.y
254
Anchored Position.z (Missing!)
0
Add Property
Dopesheet
Curves
0:00
0:05
0:10
0:15
0:20
0:25
0:30


Animation
ChestFlyingIn
Samples
60
Chest : Anchored Position
Anchored Position.x
-737
Anchored Position.y
254
Anchored Position.z (Missing!)
0
Chest : Image.Color
Color.r
1
Color.g
1
Color.b
1
Color.a
0
0:00

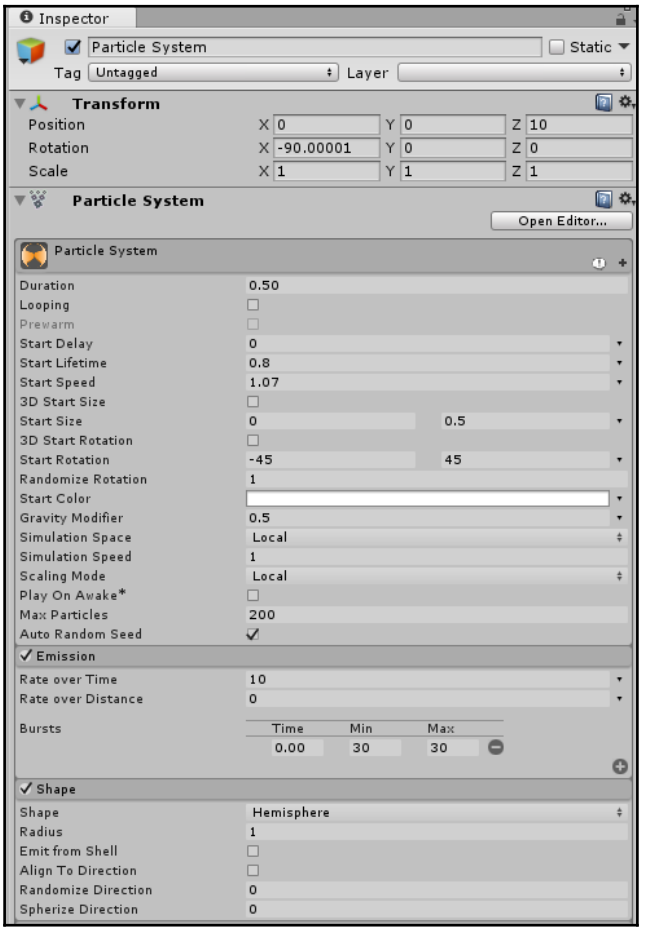

Any State
ChestFlyingIn
Entry
Empty State

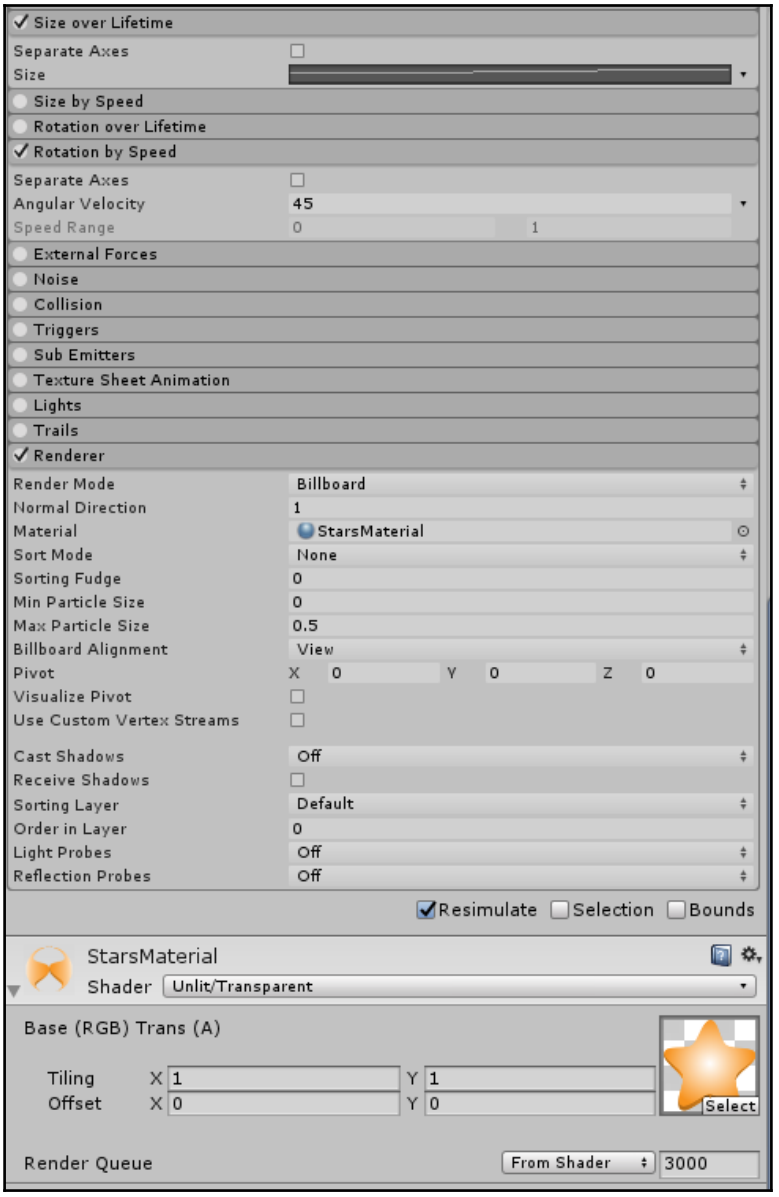

Animation
ChestFlyingIn
ChestFlyingIn
Create New Clip...

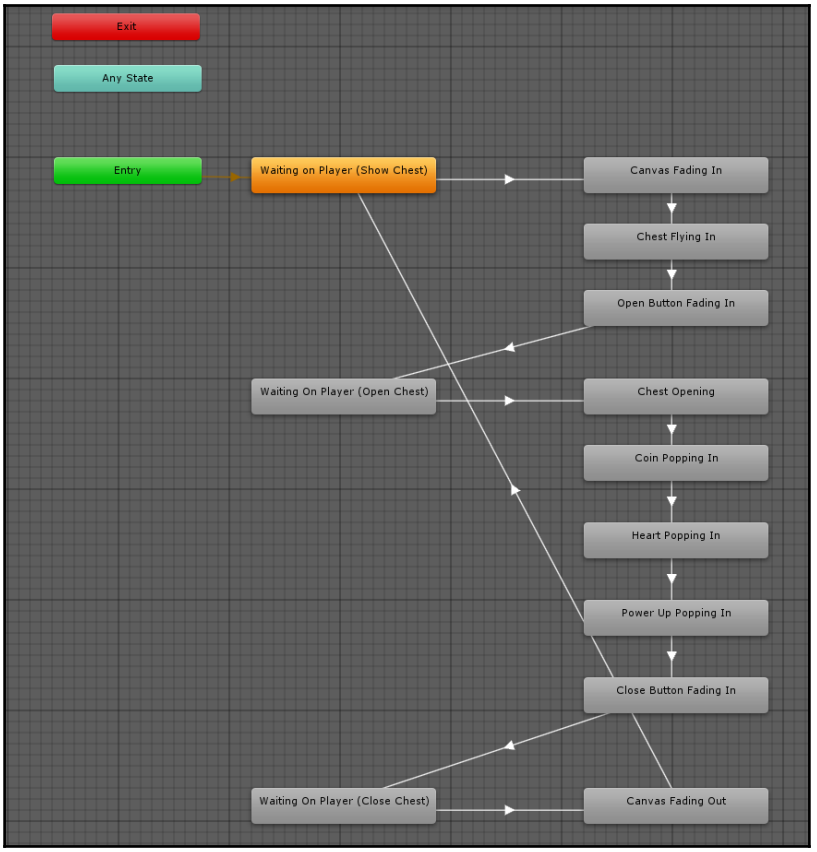

Animation
ChestOpening
Samples
60
Chest : Image.Sprite
Add Property
Dopesheet
Curves
Assets
Sprites
chestSprit...
chestSpri...
pinkBackgr...

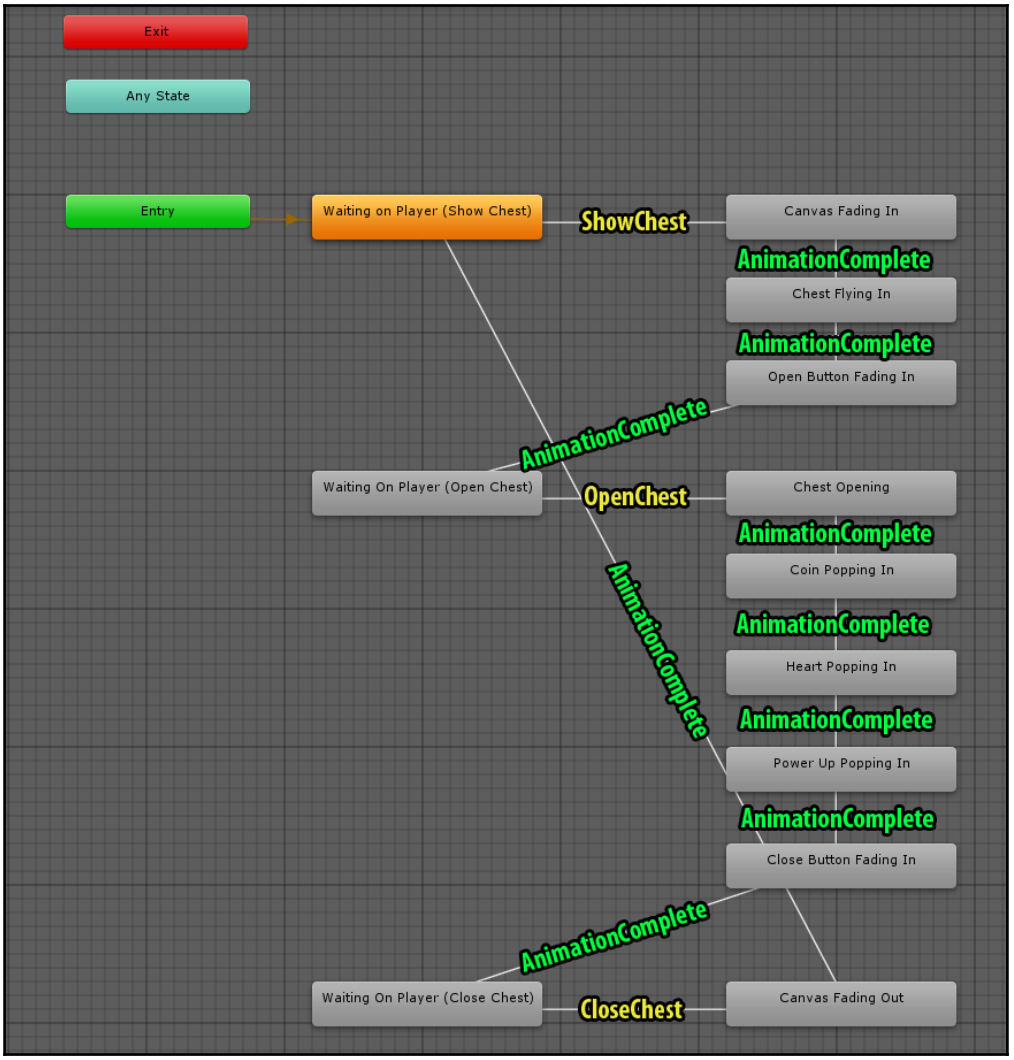

Animation
ChestOpening
Samples
12
Chest : Image.Sprite
Add Property

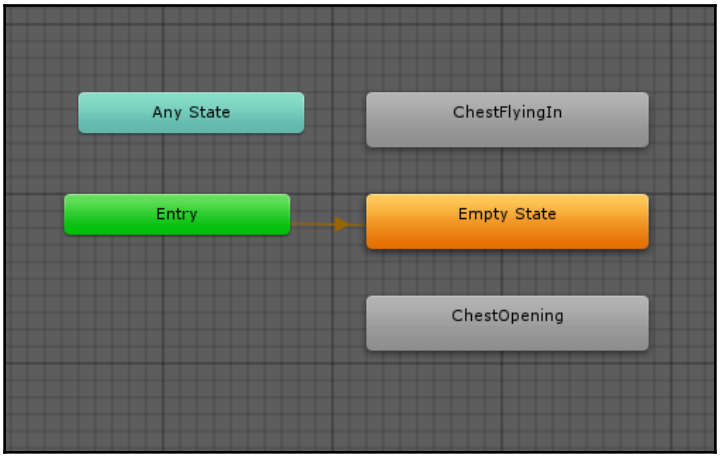
Animation
ChestOpening
Samples
12
0:00
0:01
0:02
0:03
0:04
0:05
Chest : Image.Color
Color.r
Color.g
Color.b
Color.a
Chest : Image.Sprite

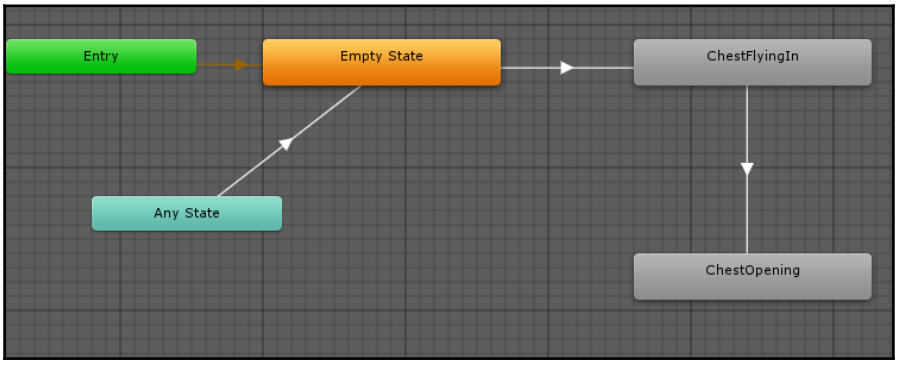

Inspector
Particle System
Static
Tag
Untagged
Layer
Transform
Position
Rotation
Scale
Particle System
Open Editor...
Duration
Looping
Prewarm
Start Delay
Start Lifetime
Start Speed
3D Start Size
Start Size
3D Start Rotation
Start Rotation
Randomize Rotation
Start Color
Gravity Modifier
Simulation Space
Simulation Speed
Scaling Mode
Play On Awake*
Max Particles
Auto Random Seed
Emission
Rate over Time
Rate over Distance
Bursts
Time
Min
Max
Shape
Radius
Emit from Shell
Align To Direction
Randomize Direction
Spherize Direction

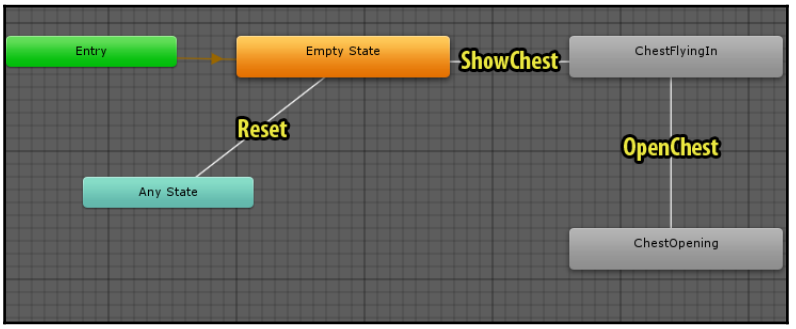

Size over Lifetime
Separate Axes
Size
Size by Speed
Rotation over Lifetime
Rotation by Speed
Separate Axes
Angular Velocity
45
Speed Range
0
1
External Forces
Noise
Collision
Triggers
Sub Emitters
Texture Sheet Animation
Lights
Trails
Renderer
Render Mode
Billboard
Normal Direction
1
Material
StarsMaterial
Sort Mode
None
Sorting Fudge
0
Min Particle Size
0
Max Particle Size
0.5
Billboard Alignment
View
Pivot
X 0
Y 0
Z 0
Visualize Pivot
Use Custom Vertex Streams
Cast Shadows
Off
Receive Shadows
Sorting Layer
Default
Order in Layer
0
Light Probes
Off
Reflection Probes
Off
Resimulate
Selection
Bounds
StarsMaterial
Shader
Unlit/Transparent
Base (RGB) Trans (A)
Tiling
X 1
Y 1
Offset
X 0
Y 0
Select
Render Queue
From Shader
3000

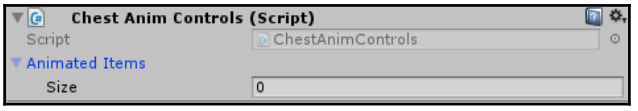

Exit
Any State
Entry
Waiting on Player (Show Chest)
Canvas Fading In
Chest Flying In
Open Button Fading In
Waiting On Player (Open Chest)
Chest Opening
Coin Popping In
Heart Popping In
Power Up Popping In
Close Button Fading In
Waiting On Player (Close Chest)
Canvas Fading Out

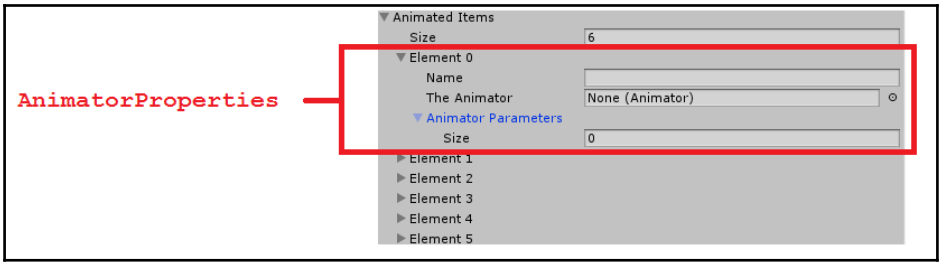

Exit
Any State
Entry
Waiting on Player (Show Chest)
ShowChest
Canvas Fading In
AnimationComplete
Chest Flying In
AnimationComplete
Open Button Fading In
AnimationComplete
Waiting On Player (Open Chest)
OpenChest
Chest Opening
AnimationComplete
Coin Popping In
AnimationComplete
Heart Popping In
AnimationComplete
Power Up Popping In
AnimationComplete
Close Button Fading In
AnimationComplete
Waiting On Player (Close Chest)
CloseChest
Canvas Fading Out

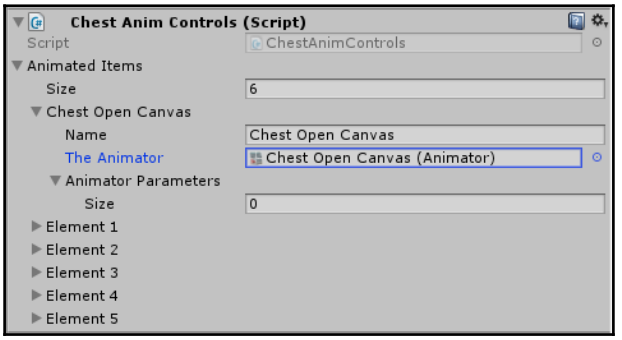

Any State
ChestFlyingIn
Entry
Empty State
ChestOpening

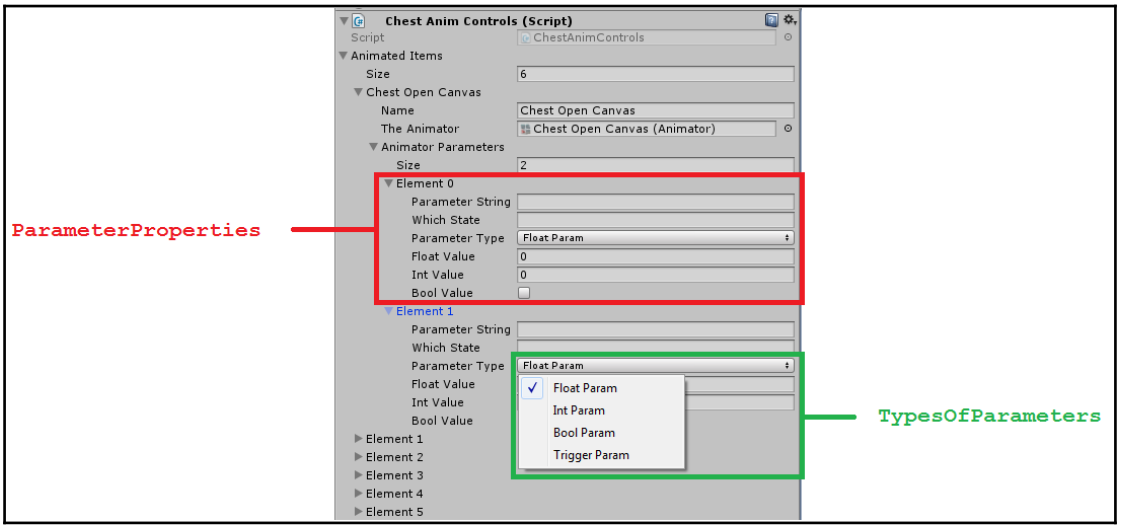

Entry
Empty State
ChestFlyingIn
Any State
ChestOpening

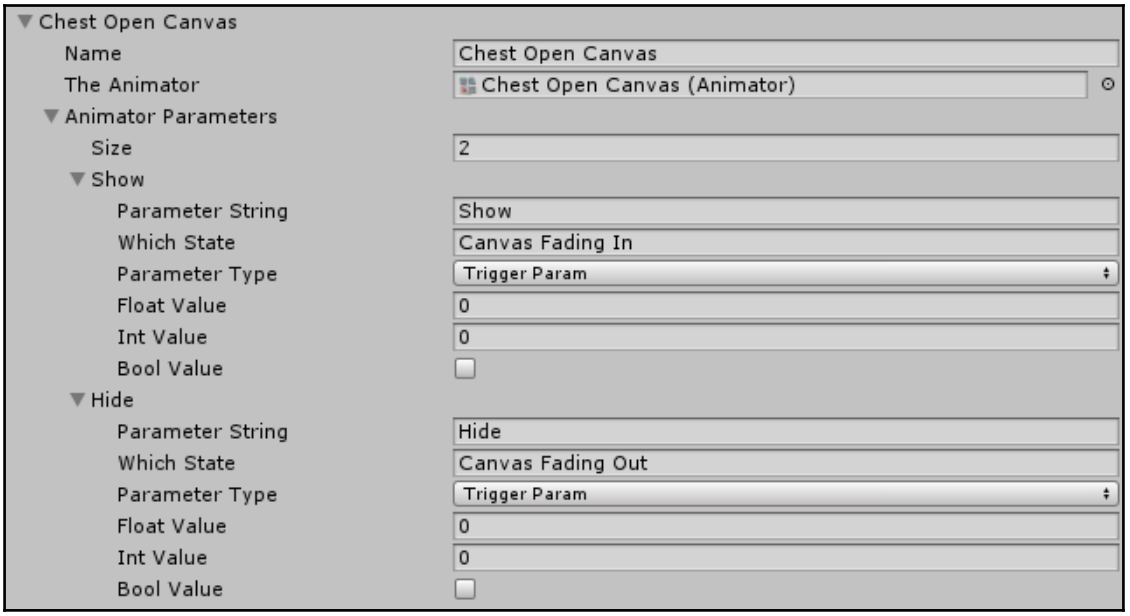

Entry
Empty State
ShowChest
ChestFlyingIn
Reset
OpenChest
Any State
ChestOpening

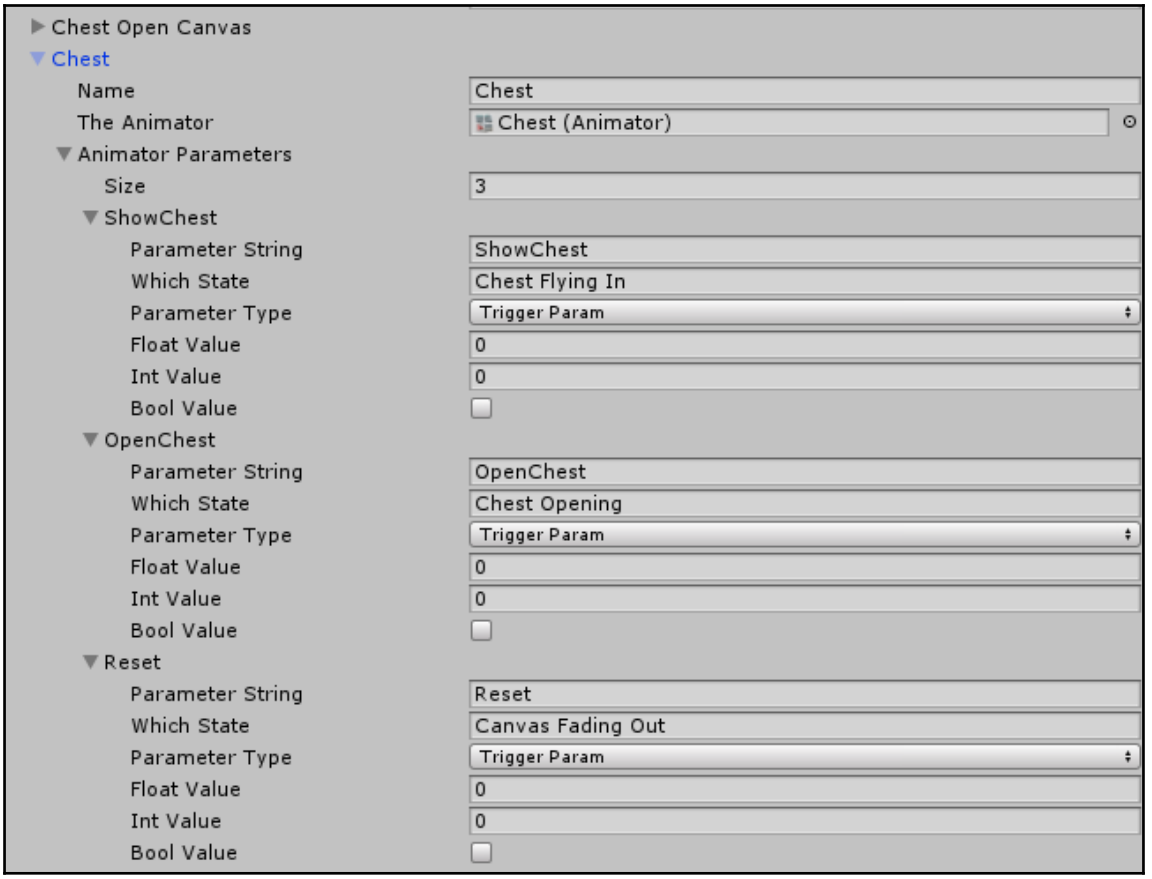

Chest Anim Controls (Script)
Script
ChestAnimControls
Animated Items
Size
0

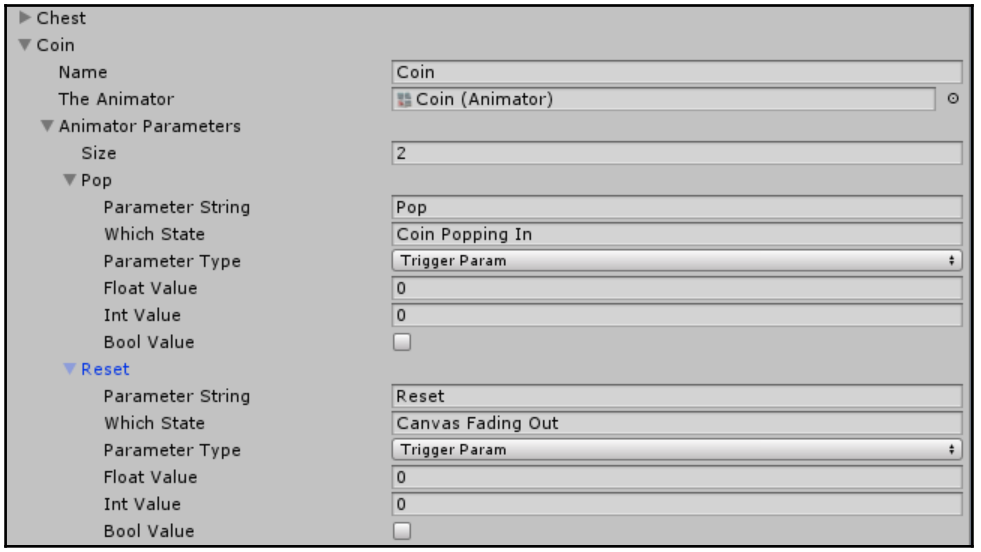

AnimatorProperties
Animated Items
Size
6
Element 0
Name
The Animator
None (Animator)
Animator Parameters
Size
0
Element 1
Element 2
Element 3
Element 4
Element 5

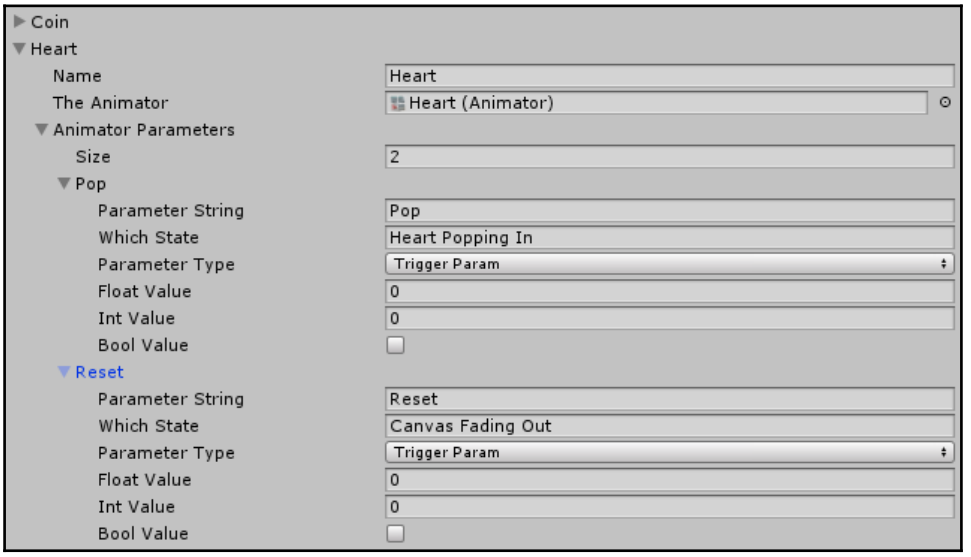

Chest Anim Controls (Script)
Script
ChestAnimControls
Animated Items
Size
6
Chest Open Canvas
Name
Chest Open Canvas
The Animator
Chest Open Canvas (Animator)
Animator Parameters
Size
0
Element 1
Element 2
Element 3
Element 4
Element 5

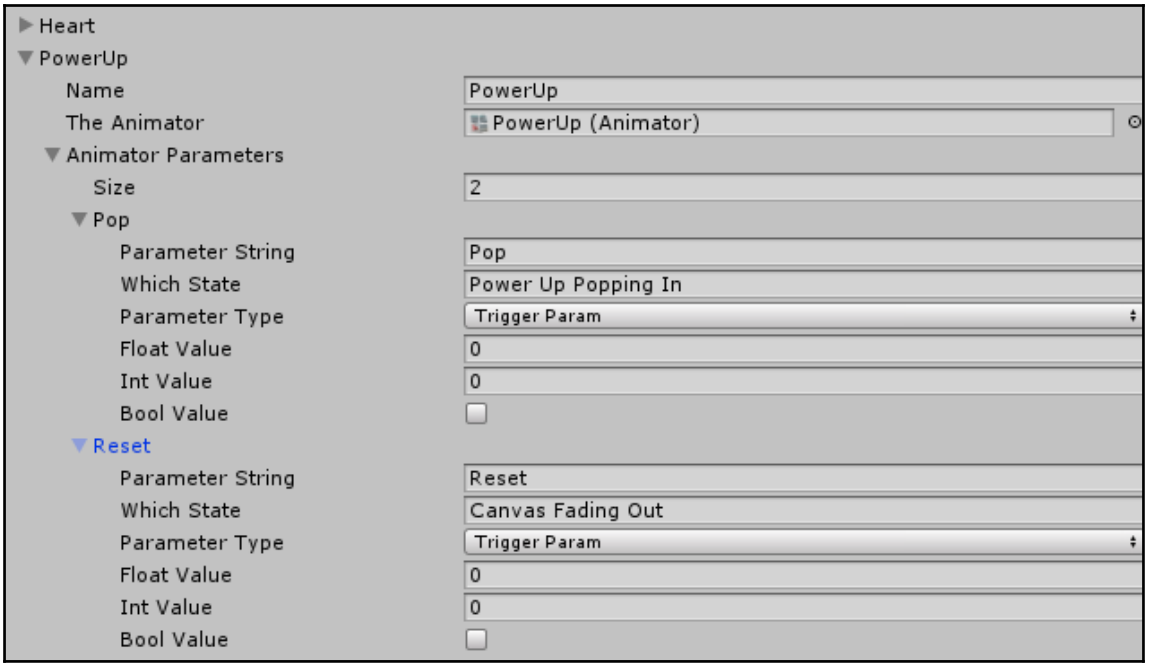

ParameterProperties
Chest Anim Controls (Script)
Script
ChestAnimControls
Animated Items
Size
6
Chest Open Canvas
Name
Chest Open Canvas
The Animator
Chest Open Canvas (Animator)
Animator Parameters
Size
2
Element 0
Parameter String
Which State
Parameter Type
Float Param
Float Value
0
Int Value
0
Bool Value
Element 1
Parameter String
Which State
Parameter Type
Float Param
Float Value
Int Value
Bool Value
Element 1
Element 2
Element 3
Element 4
Element 5
Float Param
Int Param
Bool Param
Trigger Param
TypesOfParameters

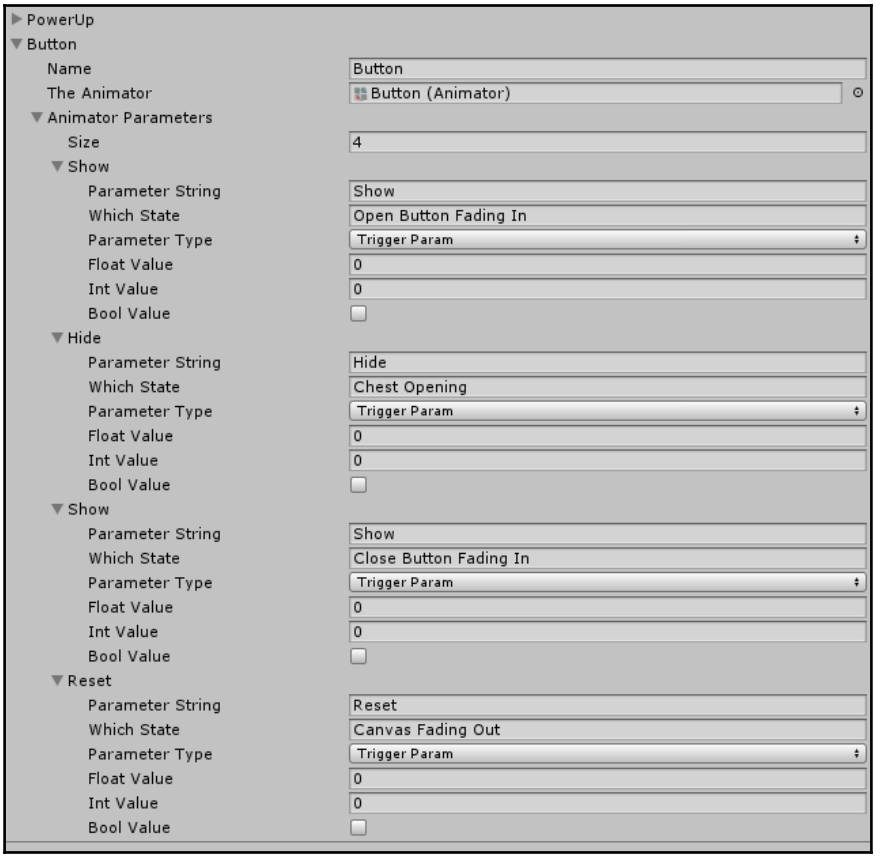

Chest Open Canvas
Name
Chest Open Canvas
The Animator
Chest Open Canvas (Animator)
Animator Parameters
Size
2
Show
Parameter String
Show
Which State
Canvas Fading In
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
Hide
Parameter String
Hide
Which State
Canvas Fading Out
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value


Chest Open Canvas
Chest
Name
Chest
The Animator
Chest (Animator)
Animator Parameters
Size
3
ShowChest
Parameter String
ShowChest
Which State
Chest Flying In
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
OpenChest
Parameter String
OpenChest
Which State
Chest Opening
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
Reset
Parameter String
Reset
Which State
Canvas Fading Out
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value

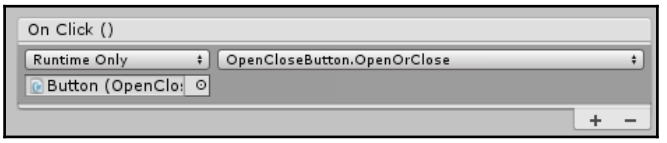

Chest
Coin
Name
Coin
The Animator
Coin (Animator)
Animator Parameters
Size
2
Pop
Parameter String
Pop
Which State
Coin Popping In
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
Reset
Parameter String
Reset
Which State
Canvas Fading Out
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value

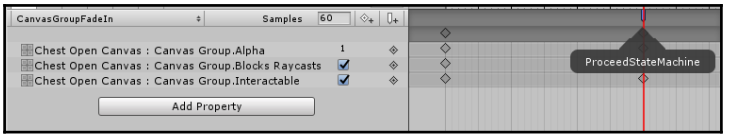

Coin
Heart
Name
Heart
The Animator
Heart (Animator)
Animator Parameters
Size
2
Pop
Parameter String
Pop
Which State
Heart Popping In
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
Reset
Parameter String
Reset
Which State
Canvas Fading Out
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value

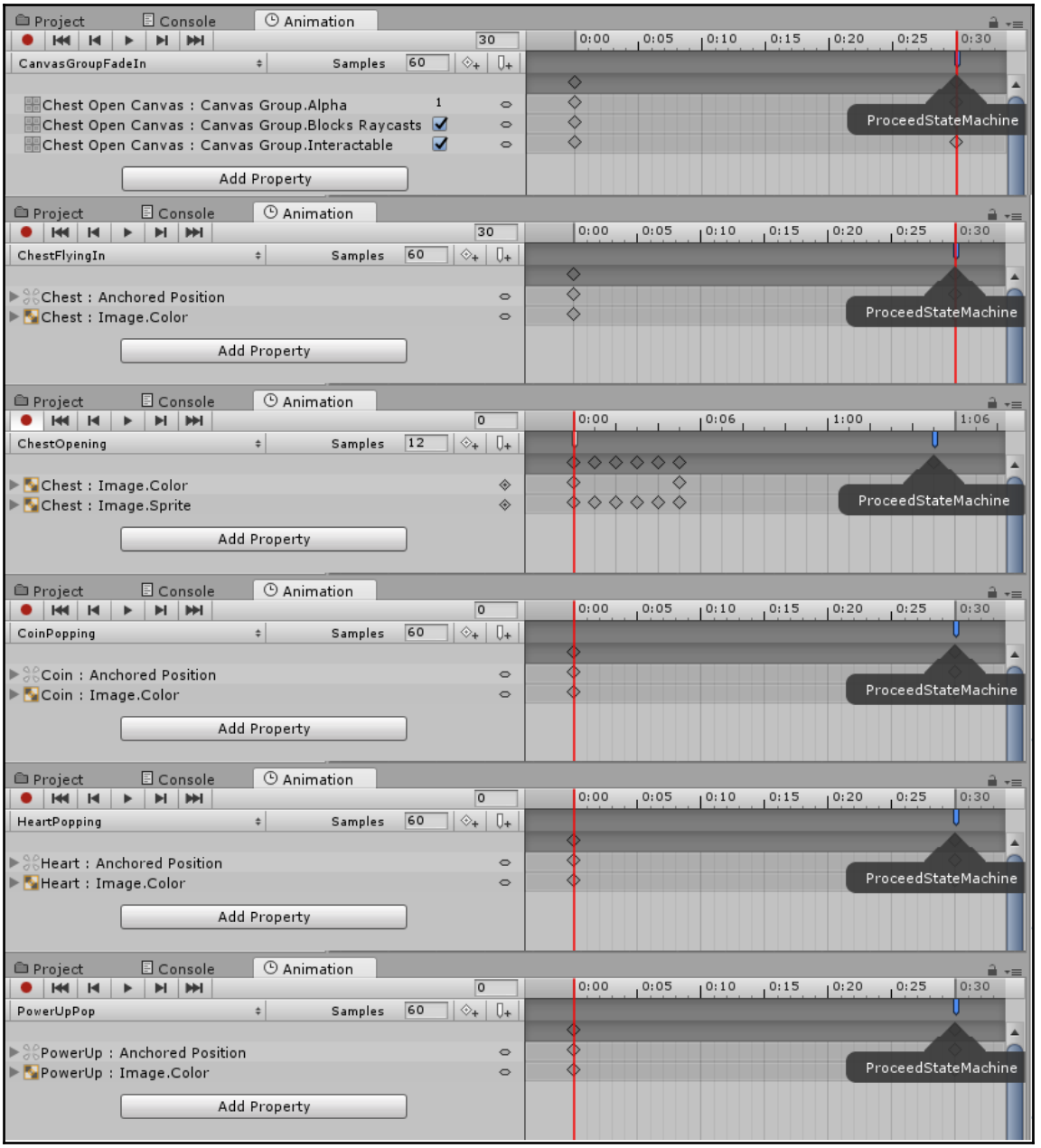

Heart
PowerUp
Name
PowerUp
The Animator
PowerUp (Animator)
Animator Parameters
Size
2
Pop
Parameter String
Pop
Which State
Power Up Popping In
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
Reset
Parameter String
Reset
Which State
Canvas Fading Out
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value


PowerUp
Button
Name
Button
The Animator
Button (Animator)
Animator Parameters
Size
4
Show
Parameter String
Show
Which State
Open Button Fading In
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
Hide
Parameter String
Hide
Which State
Chest Opening
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
Show
Parameter String
Show
Which State
Close Button Fading In
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value
Reset
Parameter String
Reset
Which State
Canvas Fading Out
Parameter Type
Trigger Param
Float Value
0
Int Value
0
Bool Value

On Click ()
Runtime Only
ChestAnimControls.PlayerInputTrigger
Main Camera (Cl
ShowChest


On Click ()
Runtime Only
OpenCloseButton.OpenOrClose
Button (OpenClo:

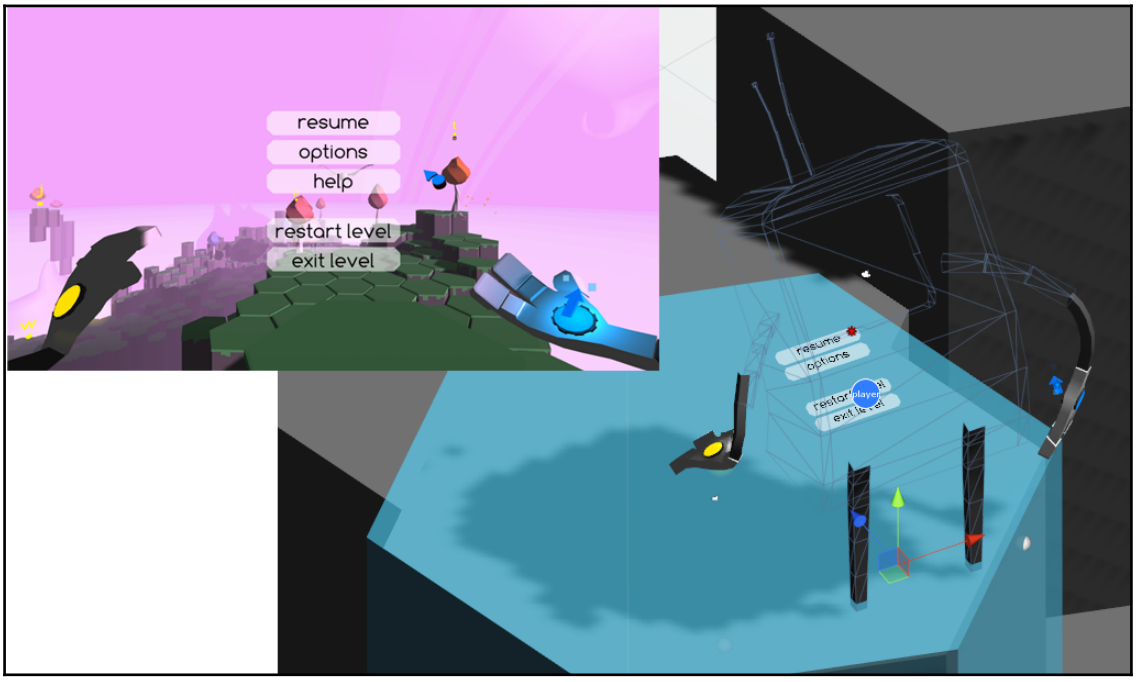

CanvasGroupFadeIn
Samples
60
Chest Open Canvas : Canvas Group.Alpha
1
Chest Open Canvas : Canvas Group.Blocks Raycasts
Chest Open Canvas : Canvas Group.Interactable
Add Property
ProceedStateMachine


Project
Console
Animation
CanvasGroupFadeIn
Samples 60
Chest Open Canvas : Canvas Group.Alpha 1
Chest Open Canvas : Canvas Group.Blocks Raycasts
Chest Open Canvas : Canvas Group.Interactable
Add Property
ProceedStateMachine
ChestFlyingIn
Chest : Anchored Position
Chest : Image.Color
ChestOpening
Chest : Image.Sprite
CoinPopping
Coin : Anchored Position
Coin : Image.Color
HeartPopping
Heart : Anchored Position
Heart : Image.Color
PowerUpPop
PowerUp : Anchored Position
PowerUp : Image.Color

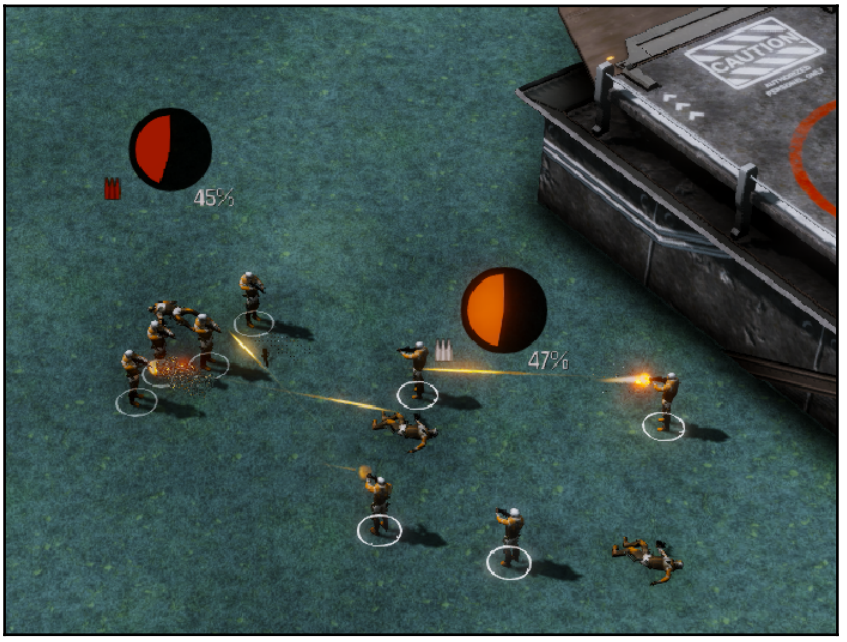
Animation
0
ChestOpening
Samples
12
0:00
0:06
1:00
Chest : Image.Color
Chest : Image.Sprite
PlayTheParticles
Add Property

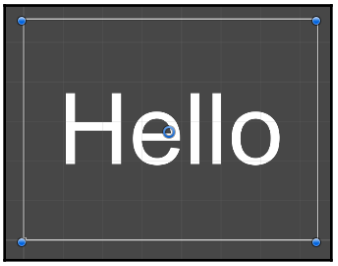
Chapter 9: World Space UI

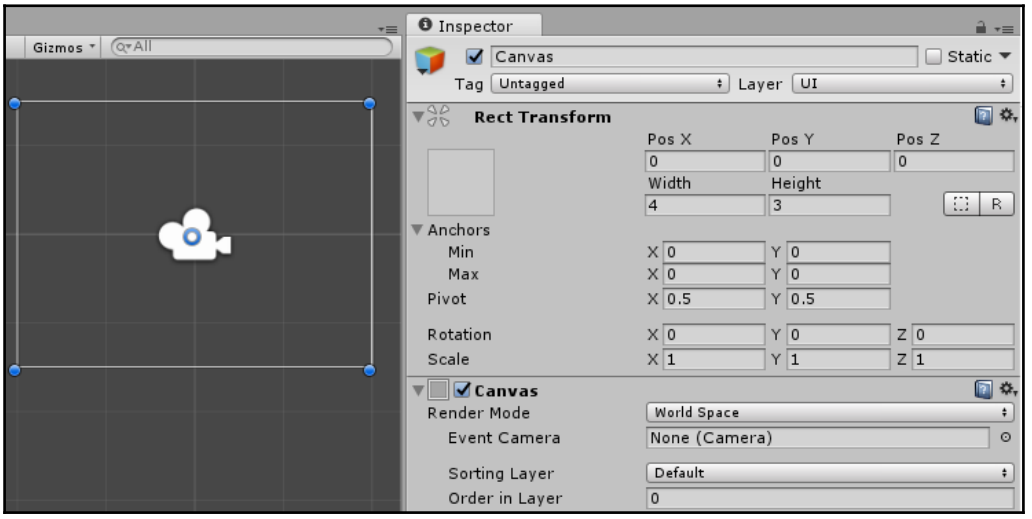
index
Help: basic combat
Shoot with left click.
Move tiles with right click to launch enemies! The fall will hurt them.
Flying enemies are hurt by the initial impact, too!
Depending on the weapon, holding down left click will make it fire differently. Try it out!
You will find special powers. They're very useful, but they need fuel!
next: powers and fuel

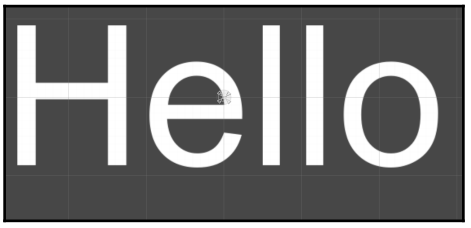

resume
options
help
restart level
exit level

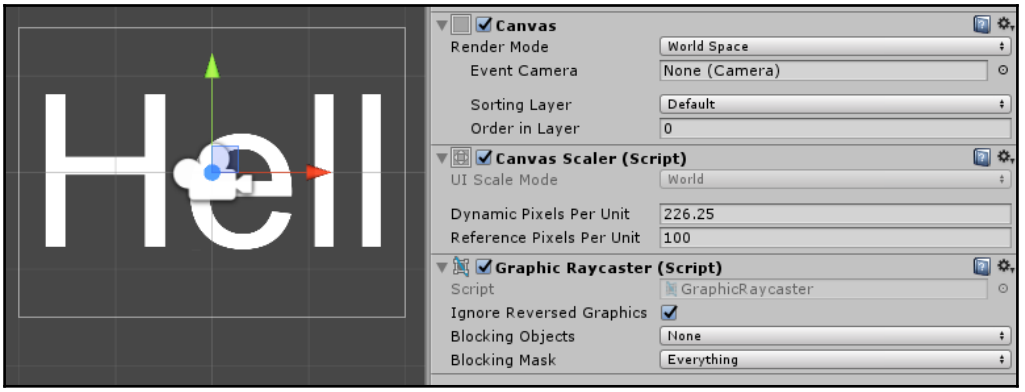
You're getting slow out there, friend
Select Reply

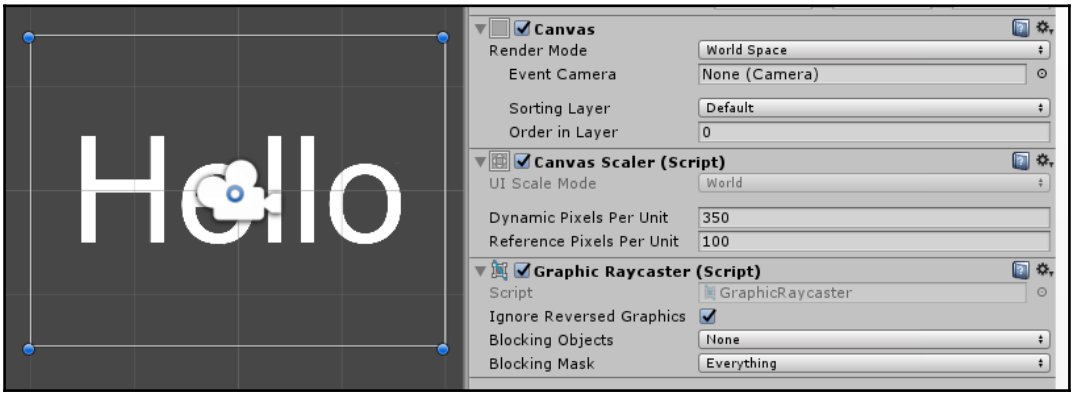

45%
47%
CAUTION

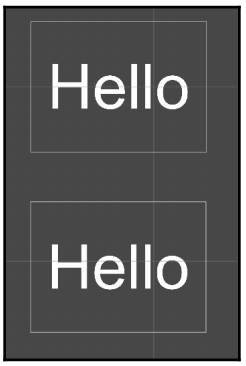

Hello

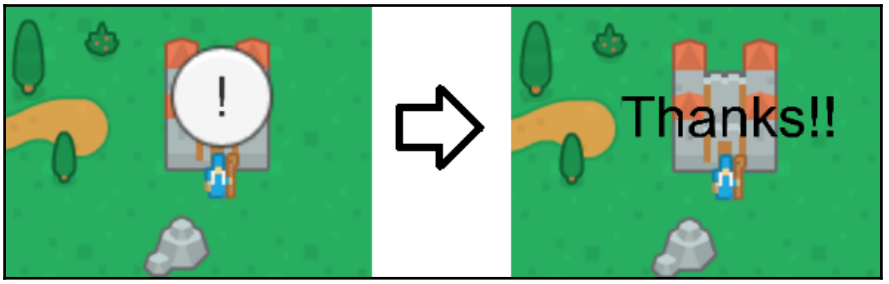

Gizmos
All
Inspector
Canvas
Static
Tag
Untagged
Layer
UI
Rect Transform
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
4
3
Anchors
Min
X 0
Y 0
Max
X 0
Y 0
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas
Render Mode
World Space
Event Camera
None (Camera)
Sorting Layer
Default
Order in Layer
0

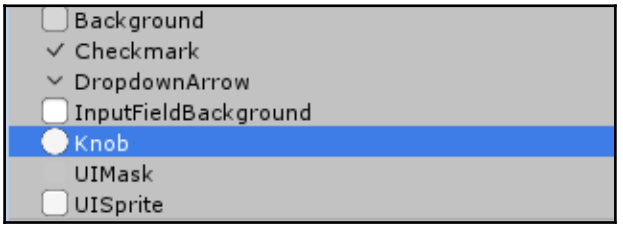

Hello

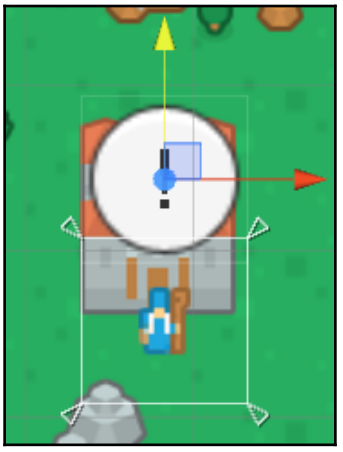

Hell
Canvas
Render Mode
World Space
Event Camera
None (Camera)
Sorting Layer
Default
Order in Layer
0
Canvas Scaler (Script)
UI Scale Mode
World
Dynamic Pixels Per Unit
226.25
Reference Pixels Per Unit
100
Graphic Raycaster (Script)
Script
GraphicRaycaster
Ignore Reversed Graphics
Blocking Objects
None
Blocking Mask
Everything

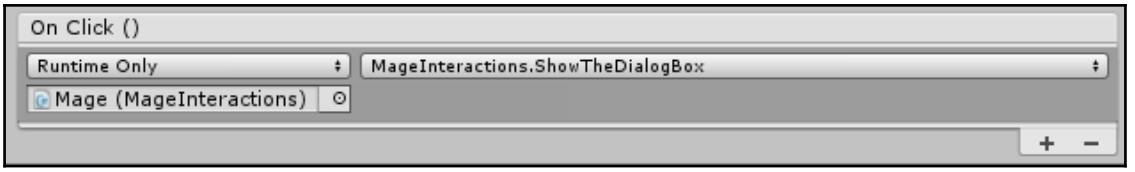

Hello
Canvas
Render Mode
World Space
Event Camera
None (Camera)
Sorting Layer
Default
Order in Layer
0
Canvas Scaler (Script)
UI Scale Mode
World
Dynamic Pixels Per Unit
350
Reference Pixels Per Unit
100
Graphic Raycaster (Script)
Script
GraphicRaycaster
Ignore Reversed Graphics
Blocking Objects
None
Blocking Mask
Everything


Hello
Hello

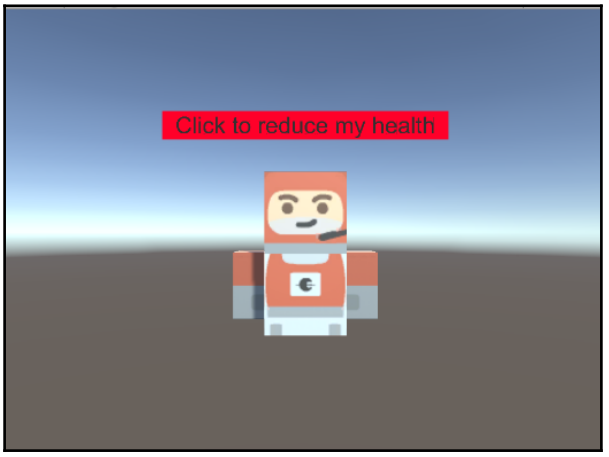

!
Thanks!!

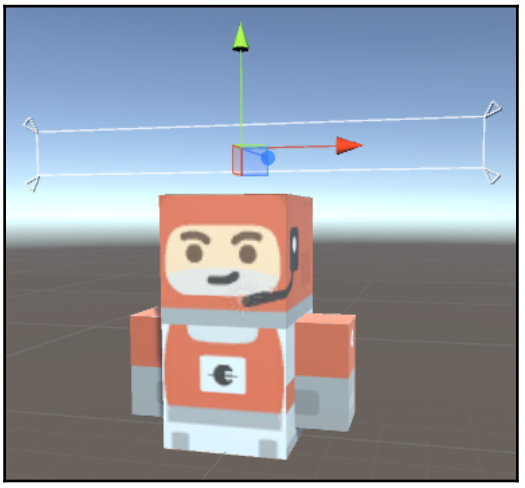

Background
Checkmark
DropdownArrow
InputFieldBackground
Knob
UIMask
UISprite

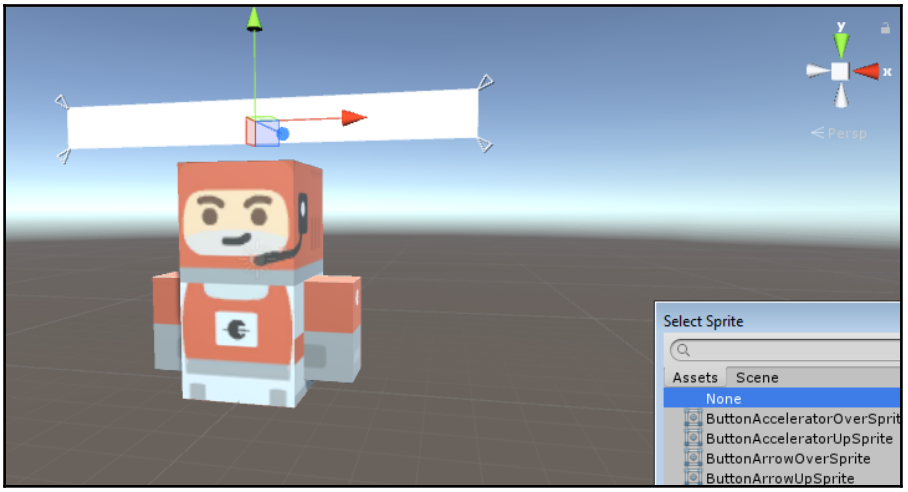


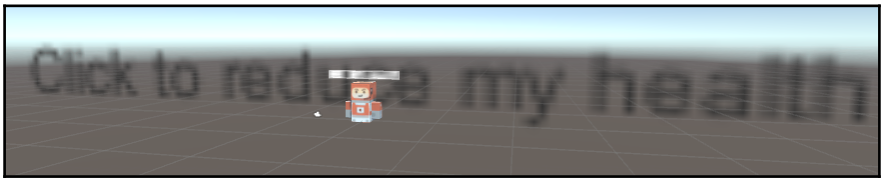

On Click ()
Runtime Only
MageInteractions.ShowTheDialogBox
Mage (MageInteractions)

Thanks!!!

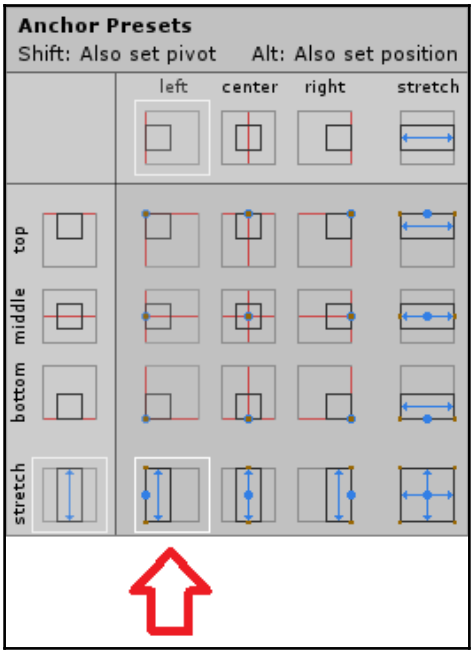

Click to reduce my health

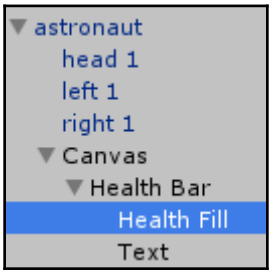


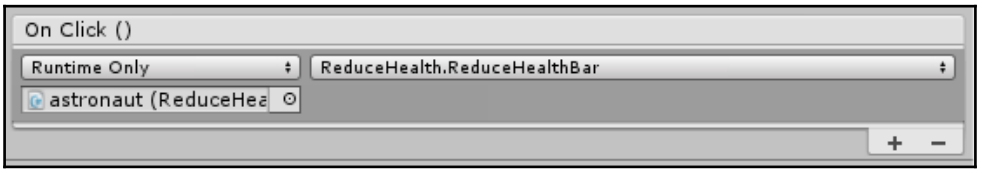

Persp
Select Sprite
Assets
Scene
None
ButtonAcceleratorOverSprit
ButtonAcceleratorUpSprite
ButtonArrowOverSprite
ButtonArrowUpSprite



Click to reduce my health

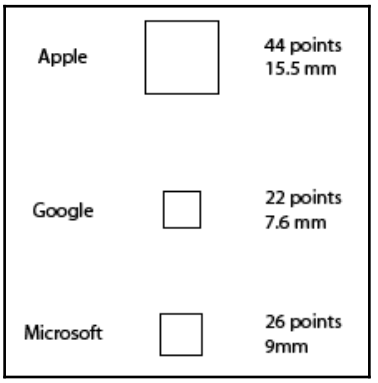

Anchor Presets
Shift: Also set pivot
Alt: Also set position
left
center
right
stretch
top
middle
bottom
stretch

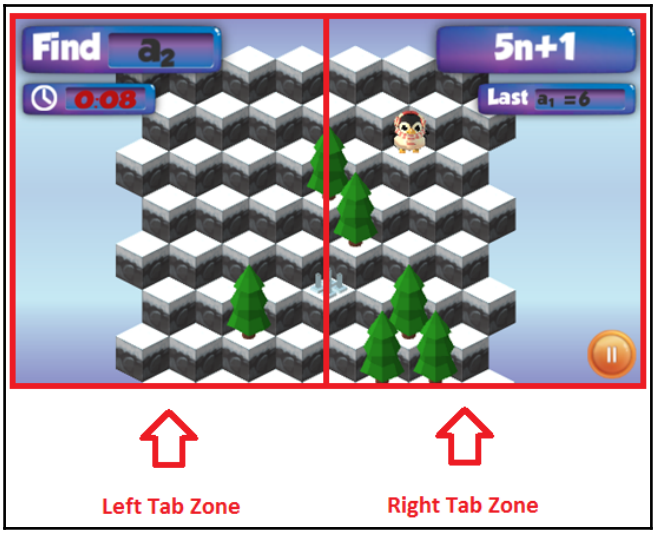

astronaut
head 1
left 1
right 1
Canvas
Health Bar
Health Fill
Text

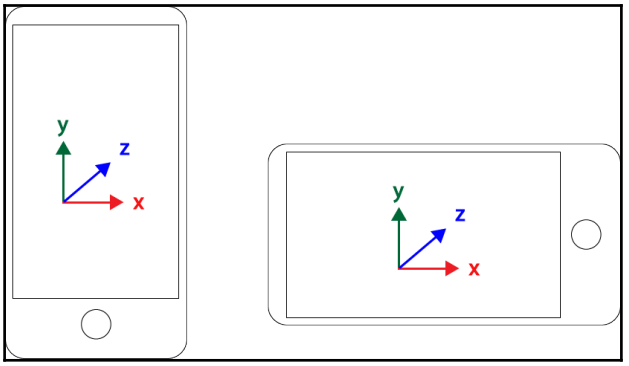

On Click ()
Runtime Only
ReduceHealth.ReduceHealthBar
astronaut (ReduceHea

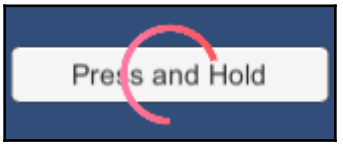
Click to reduce my health

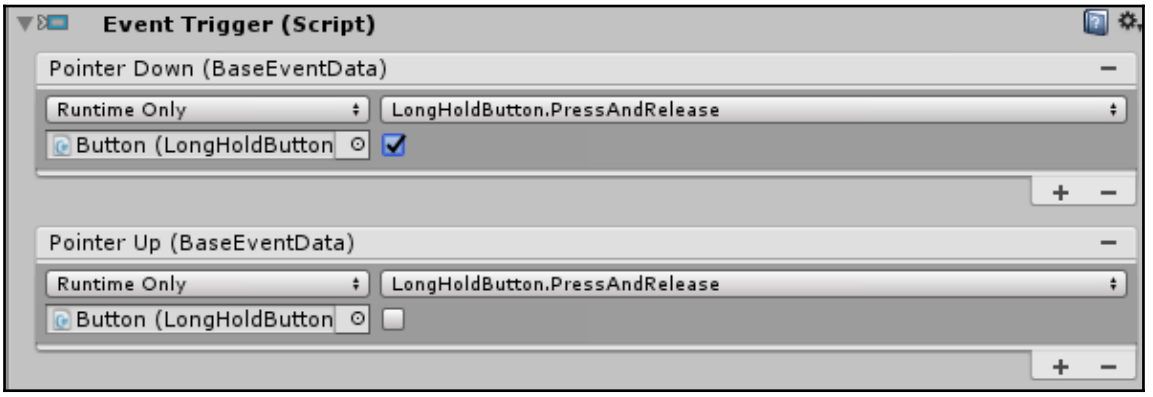
Chapter 10: Mobile-Specific UI

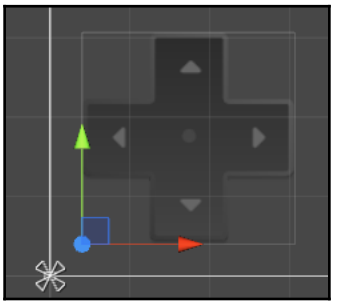


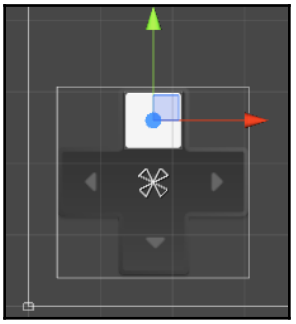


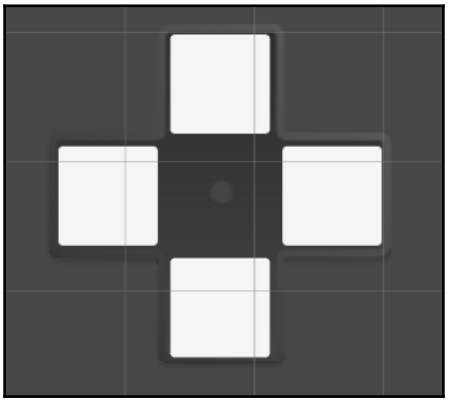

y
z
x
y
z
x

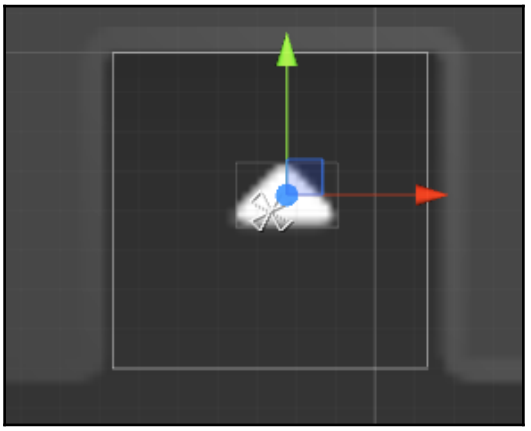

Press and Hold

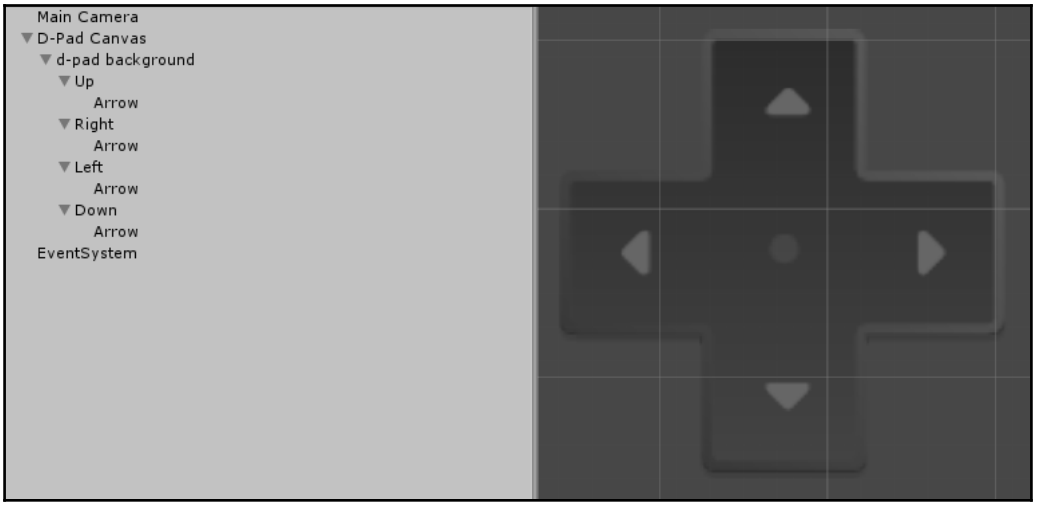

Event Trigger (Script)
Pointer Down (BaseEventData)
Runtime Only
LongHoldButton.PressAndRelease
Button (LongHoldButton
Pointer Up (BaseEventData)
Runtime Only
LongHoldButton.PressAndRelease
Button (LongHoldButton

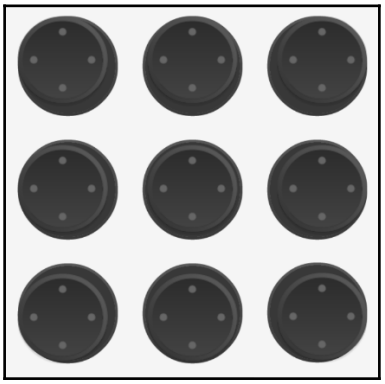


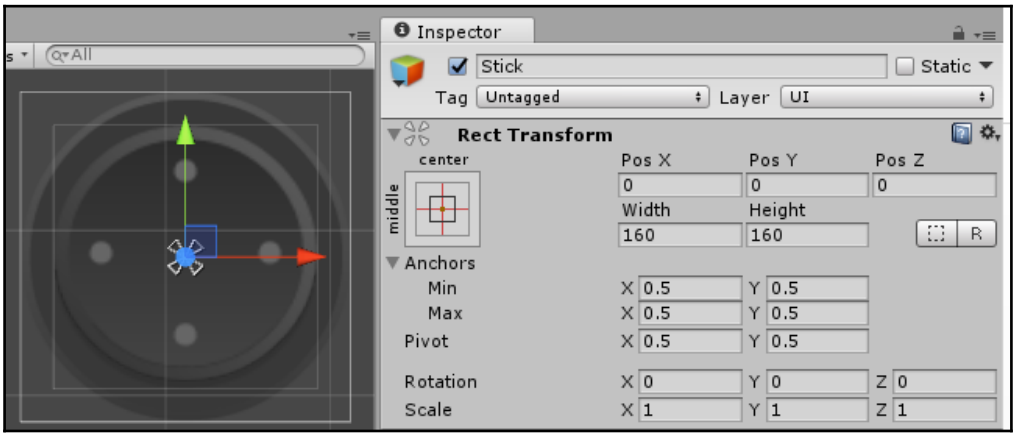


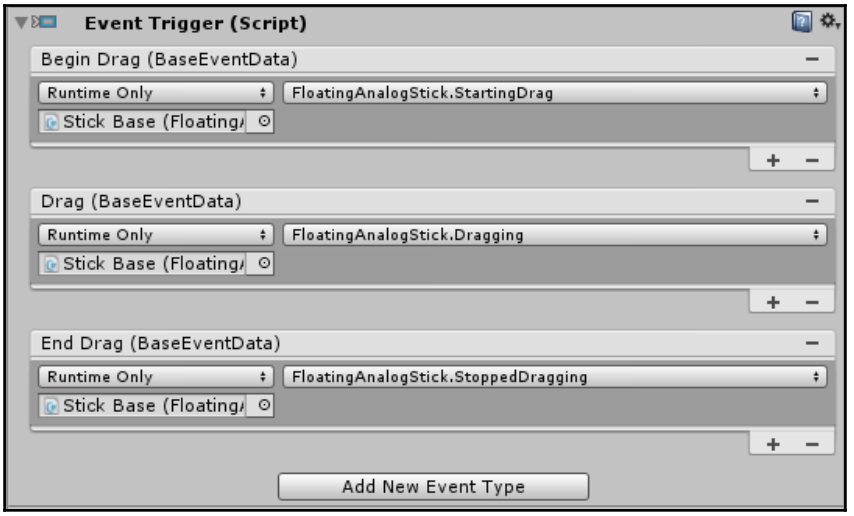


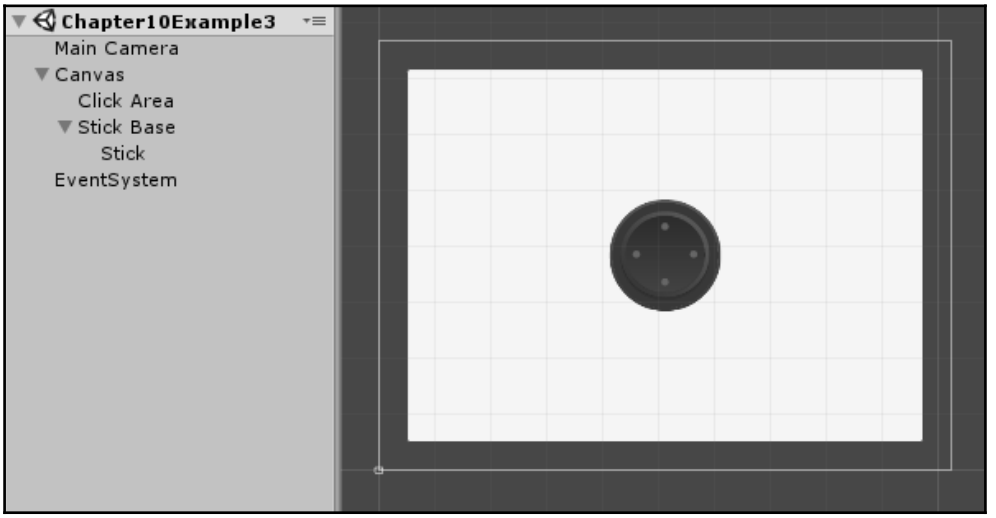


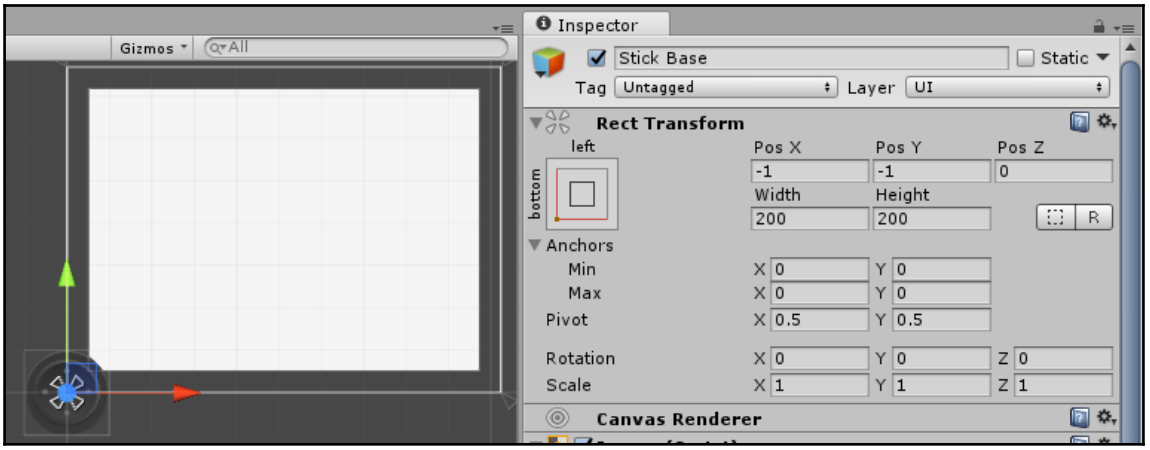

Main Camera
D-Pad Canvas
d-pad background
Up
Arrow
Right
Arrow
Left
Arrow
Down
Arrow
EventSystem

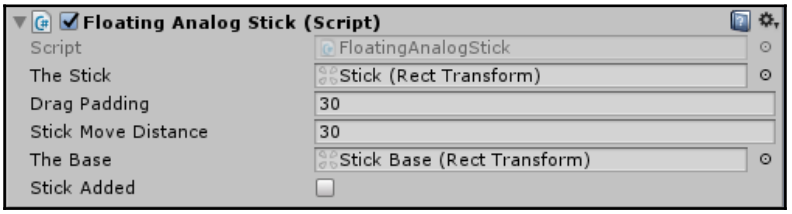


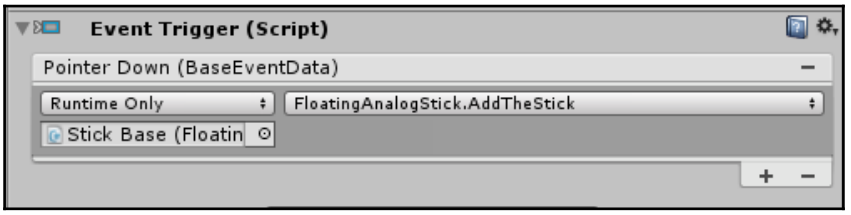

Inspector
All
Stick
Static
Tag
Untagged
Layer
UI
Rect Transform
center
middle
Pos X
Pos Y
Pos Z
0
0
0
Width
Height
160
160
R
Anchors
Min
X 0.5
Y 0.5
Max
X 0.5
Y 0.5
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1


Event Trigger (Script)
Begin Drag (BaseEventData)
Runtime Only
FloatingAnalogStick.StartingDrag
Stick Base (Floating
Drag (BaseEventData)
Runtime Only
FloatingAnalogStick.Dragging
Stick Base (Floating
End Drag (BaseEventData)
Runtime Only
FloatingAnalogStick.StoppedDragging
Stick Base (Floating
Add New Event Type


Chapter10Example3
Main Camera
Canvas
Click Area
Stick Base
Stick
EventSystem


Gizmos
All
Inspector
Stick Base
Static
Tag
Untagged
Layer
UI
Rect Transform
left
bottom
Pos X
Pos Y
Pos Z
-1
-1
0
Width
Height
200
200
R
Anchors
Min
X 0
Y 0
Max
X 0
Y 0
Pivot
X 0.5
Y 0.5
Rotation
X 0
Y 0
Z 0
Scale
X 1
Y 1
Z 1
Canvas Renderer


Floating Analog Stick (Script)
Script
FloatingAnalogStick
The Stick
Stick (Rect Transform)
Drag Padding
30
Stick Move Distance
30
The Base
Stick Base (Rect Transform)
Stick Added


Event Trigger (Script)
Pointer Down (BaseEventData)
Runtime Only
FloatingAnalogStick.AddTheStick
Stick Base (Floatin