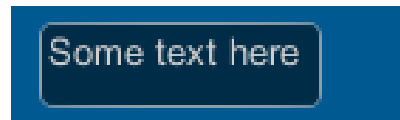
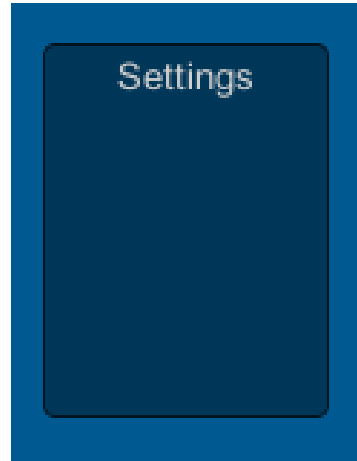
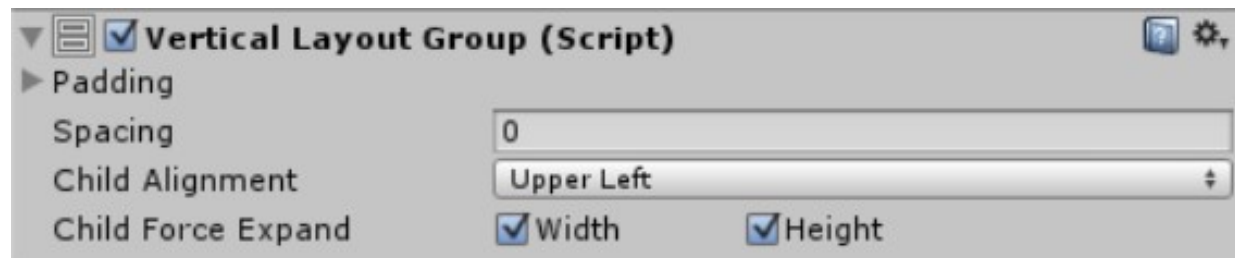
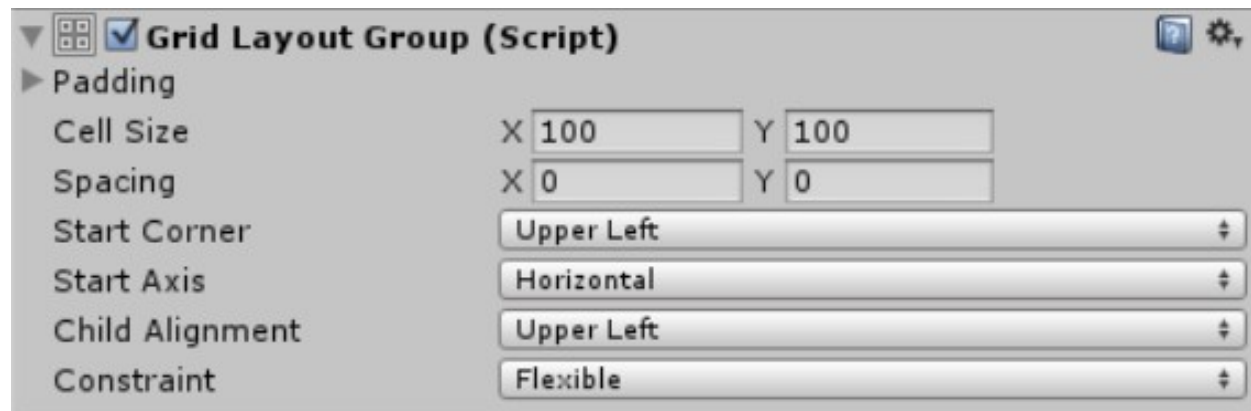
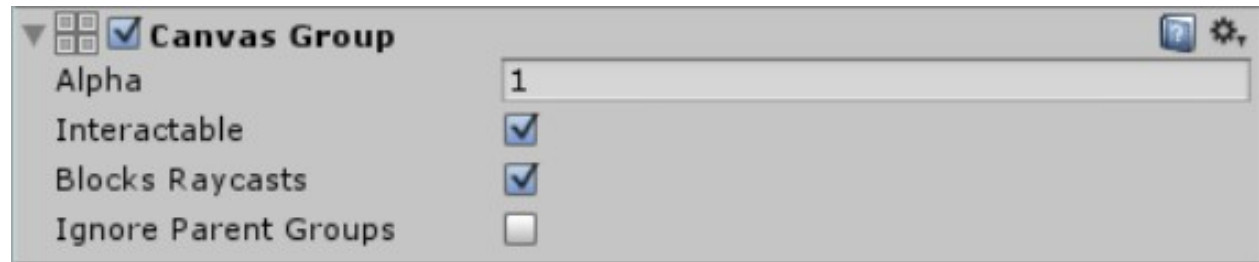


Chapter 1: Looking Forward Looking Backward





Horizontal Layout Group (Script)

Padding

Spacing: 0

Child Alignment: Upper Left

Child Force Expand: Width Height

Canvas

Render Mode: Screen Space - Overlay

Pixel Perfect

Receives Events

- Screen Space - Overlay
- Screen Space - Camera
- World Space



Rect Transform

stretch

Left: 0, Top: 0, Pos Z: 0

Right: 0, Bottom: 0

anchors

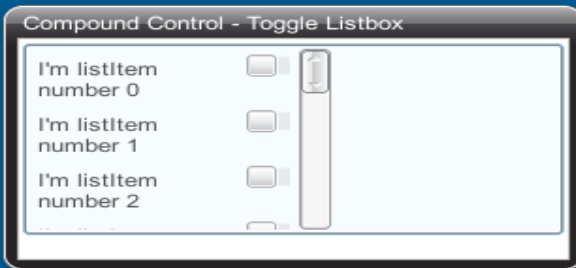
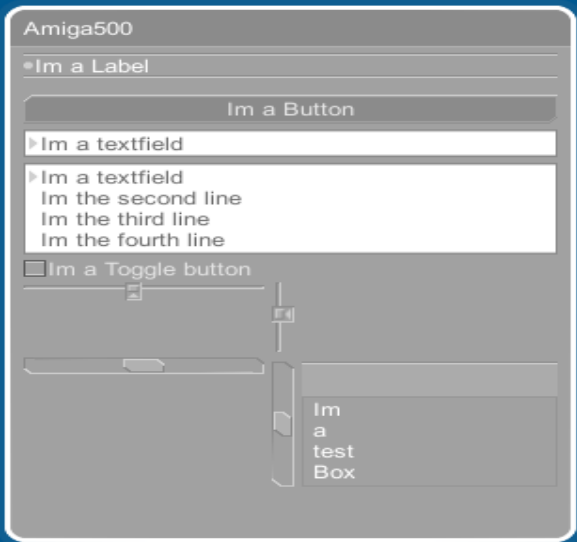
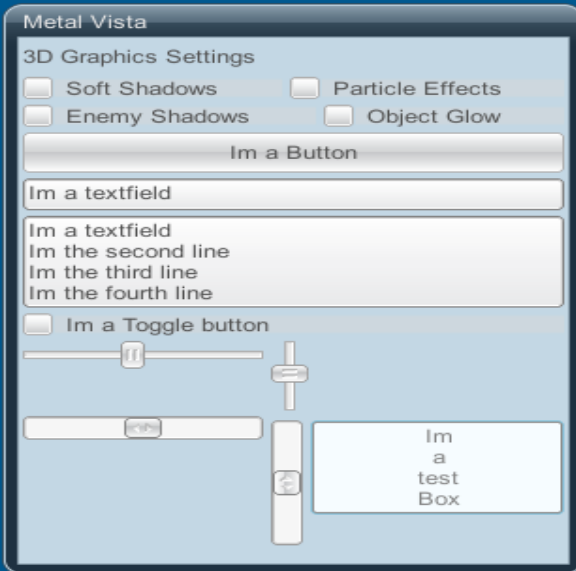
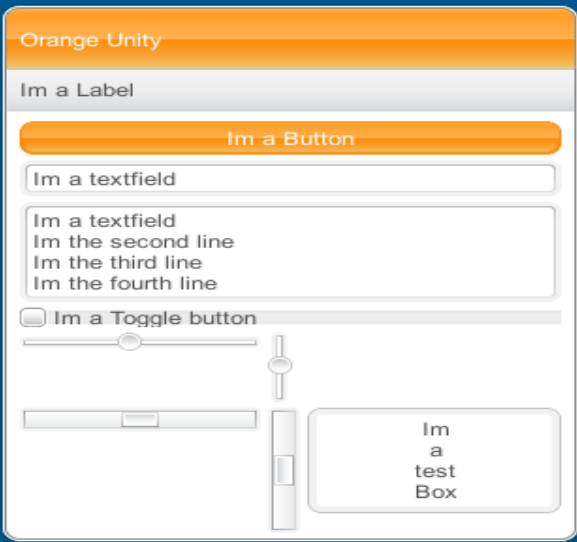
Min: X 0, Y 0

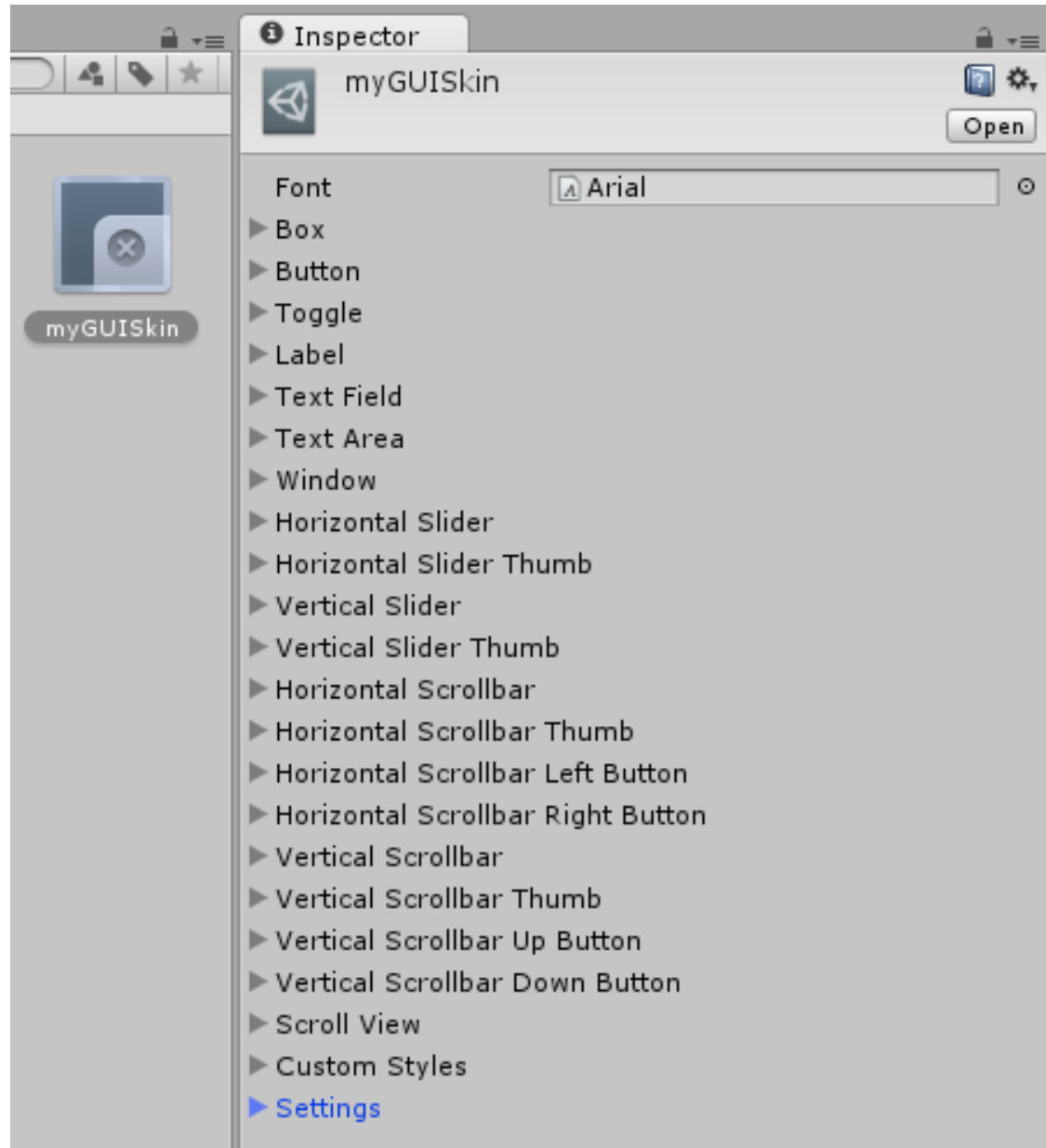
Max: X 1, Y 1

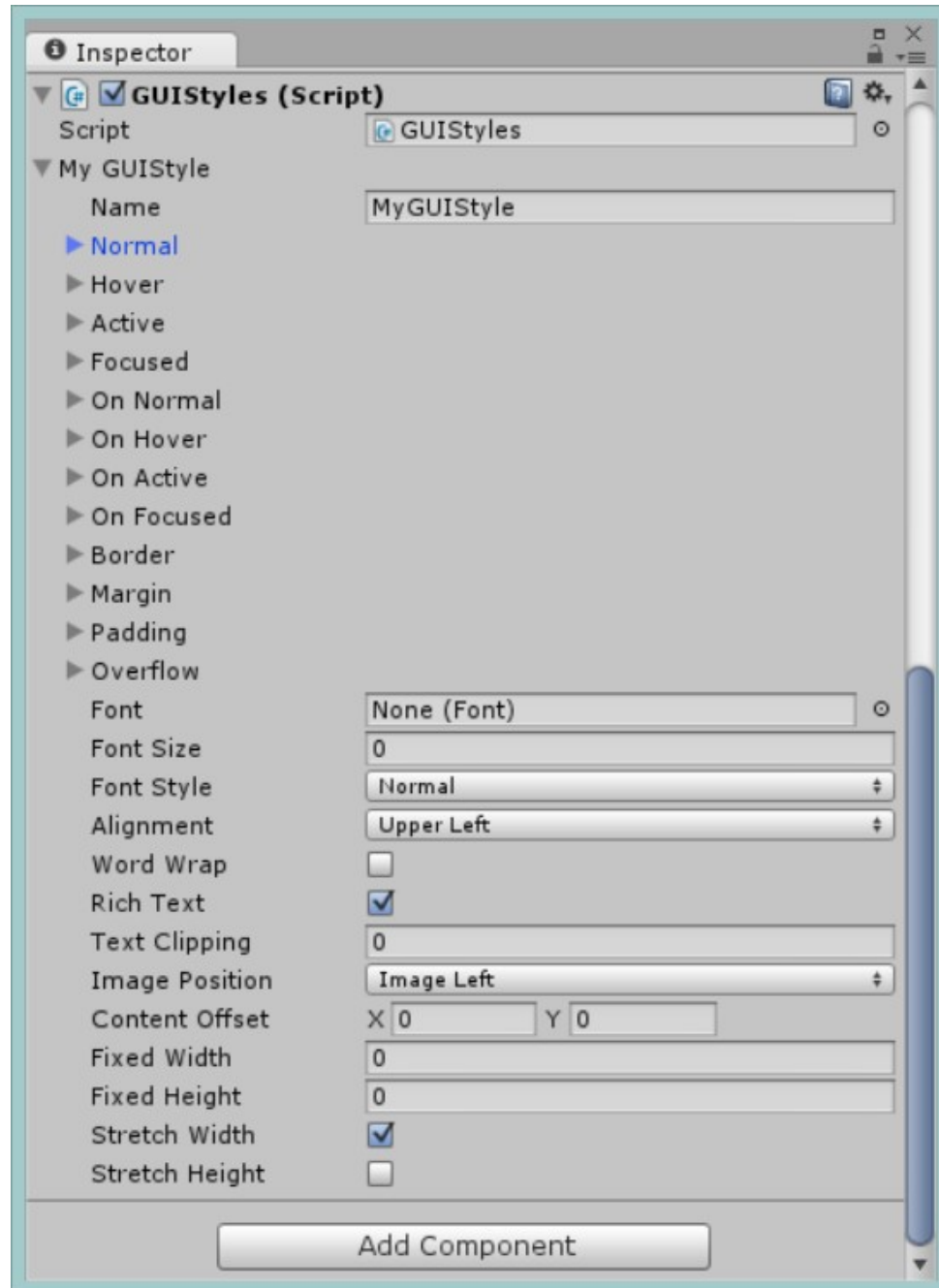
Pivot: X 0.5, Y 0.5

Rotation: X 0, Y 0, Z 0

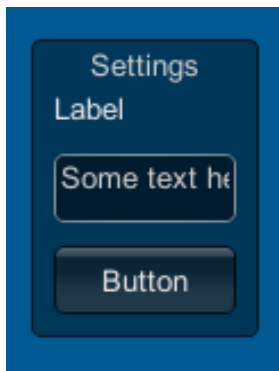
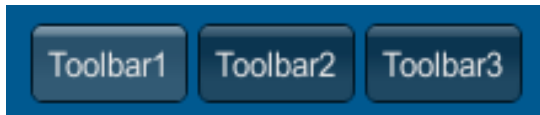
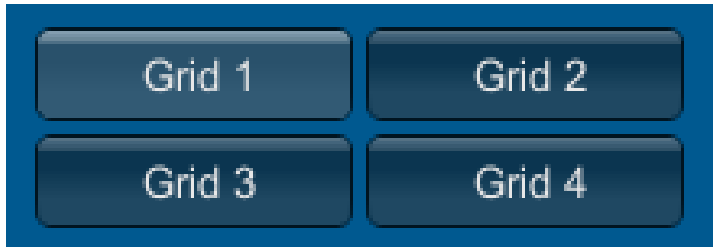
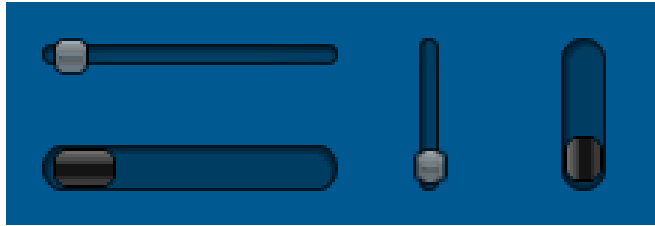
Scale: X 1, Y 1, Z 1









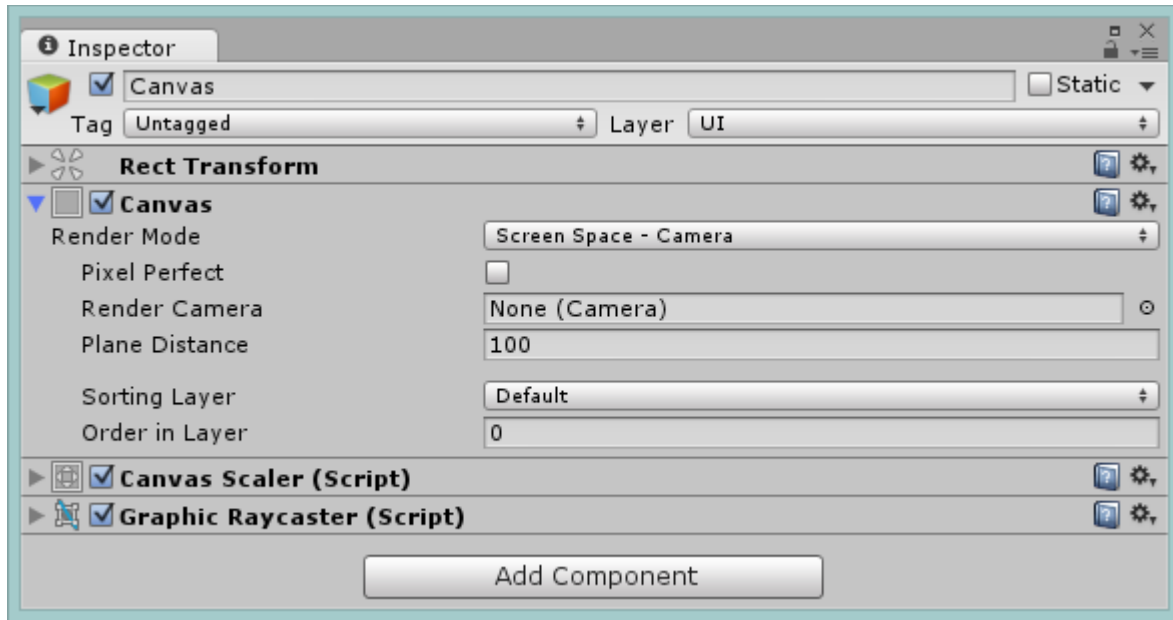


brown **Fox**

brown Fox

FOX

[Chapter 2: Building Layouts](#)




Inspector

Canvas Static

Tag: Untagged Layer: UI

Rect Transform

Some values driven by Canvas.

	Pos X	Pos Y	Pos Z
	448	187	0
	Width	Height	
	896	374	

▼ 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

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

Rect Transform

stretch

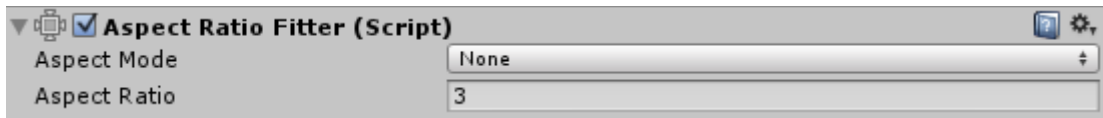
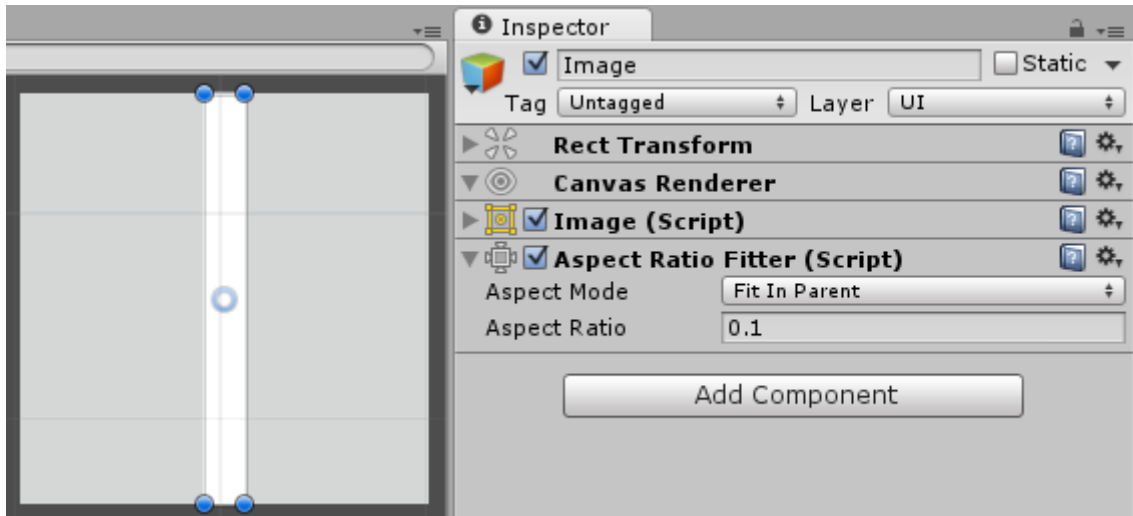
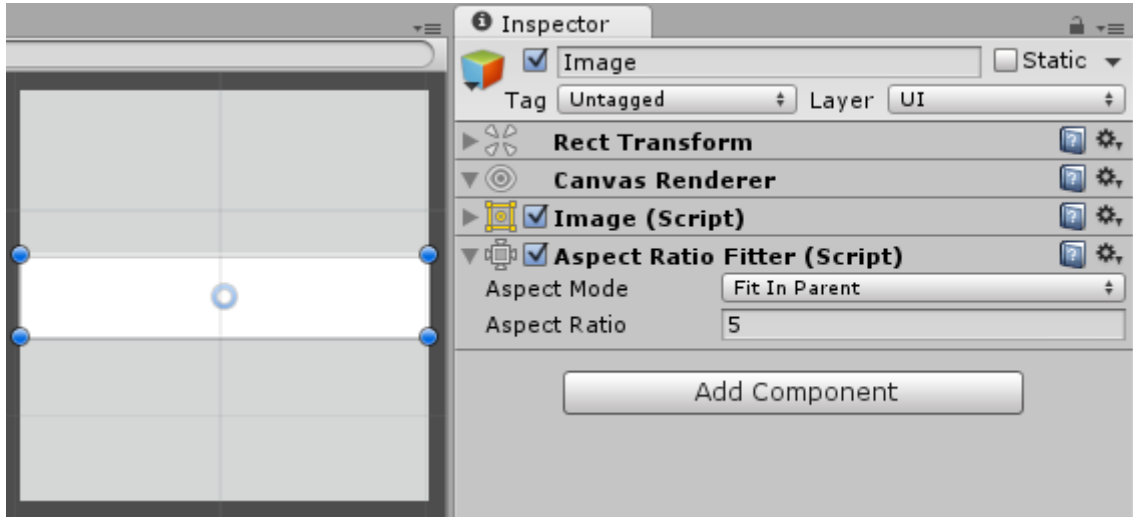
Left	Top	Pos Z
0	0	0
Right	Bottom	
0	0	

▼ 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 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: Scale With Screen Size

Reference Resolution: X 800 Y 600

Screen Match Mode: Match Width Or Height

Match: Width Height

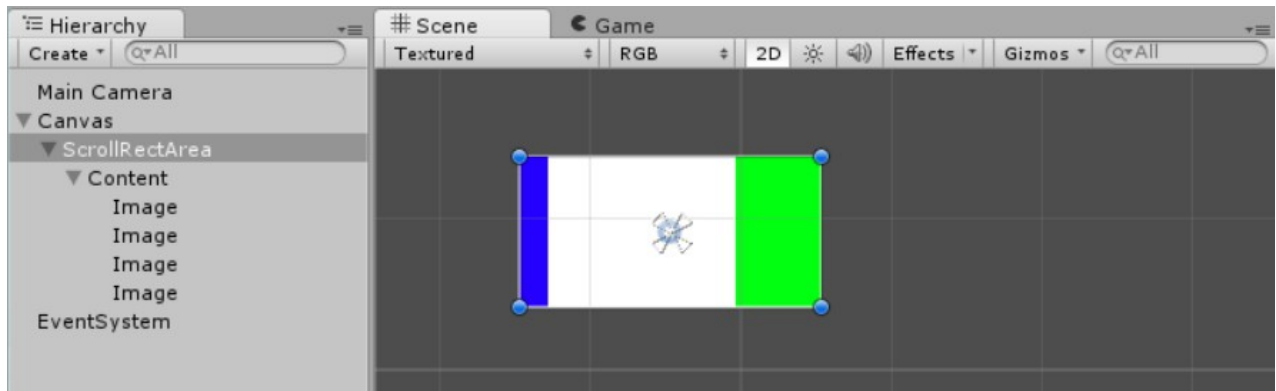
Reference Pixels Per Unit: 100

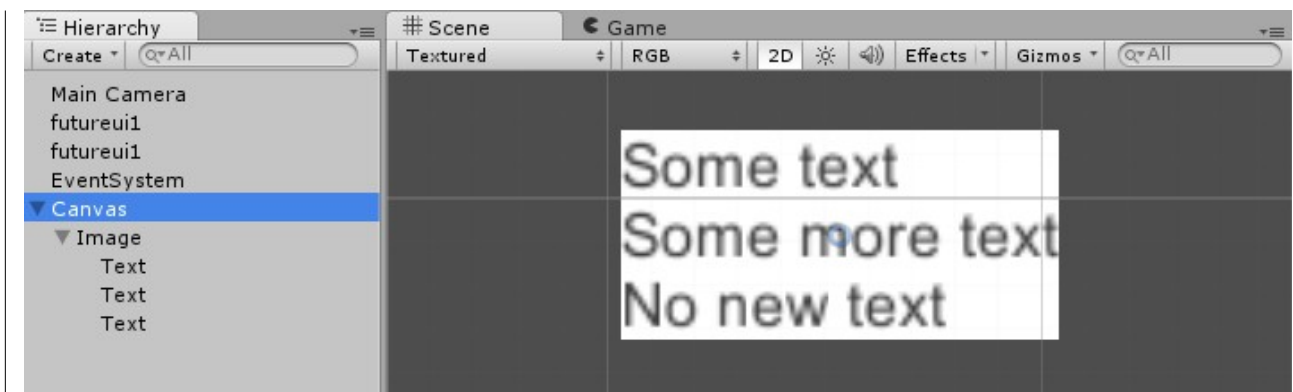
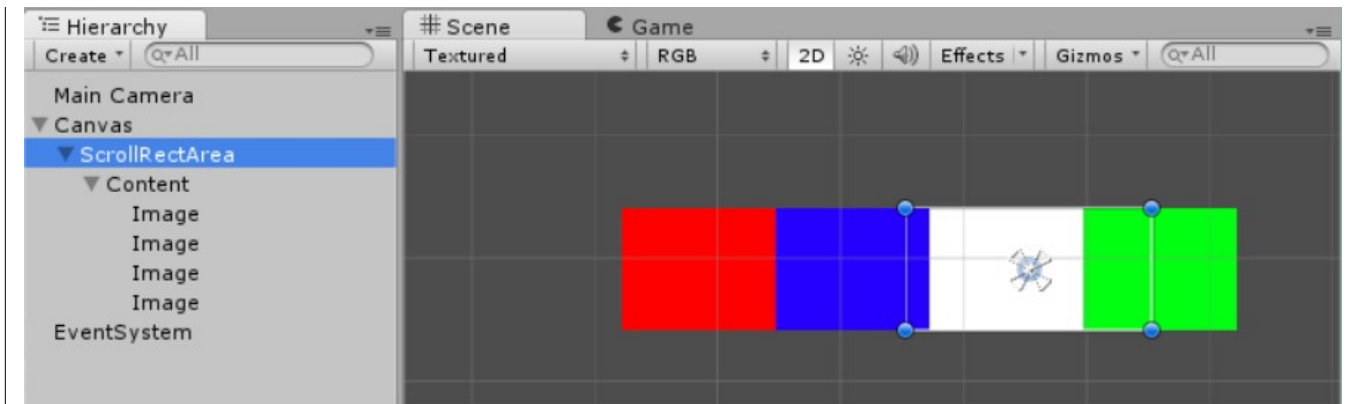
Canvas Scaler (Script)

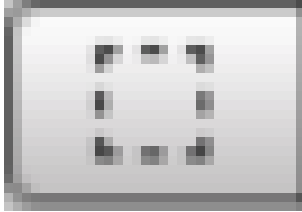
Ui Scale Mode: Constant Pixel Size

Scale Factor: 1

Reference Pixels Per Unit: 100







Event Trigger (Script)

PointerClick (BaseEventData) -

Image (Rect Transform) RectTransform.BroadcastMessage I've been clicked + -

PointerExit (BaseEventData) -

Image (Image) Image.sprite + Big Checkmark + -

Add New

Event System (Script)

Script EventSystem

First Selected None (Game Object)

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

Allow Activation On Mobile Device

Touch Input Module (Script)

Script TouchInputModule

Allow Activation On Standalone

Graphic Raycaster (Script)

Script: GraphicRaycaster

Ignore Reversed Graphics:

Blocking Objects: None

Blocking Mask: Everything

Canvas Group

Alpha: 1

Interactable:

Blocks Raycasts:

Ignore Parent Groups:

Hierarchy: # Scene Game

Free Aspect Maximize on Play Stats

Main Camera

Canvas

ScrollRect

Horizontal Layout Group

Panel

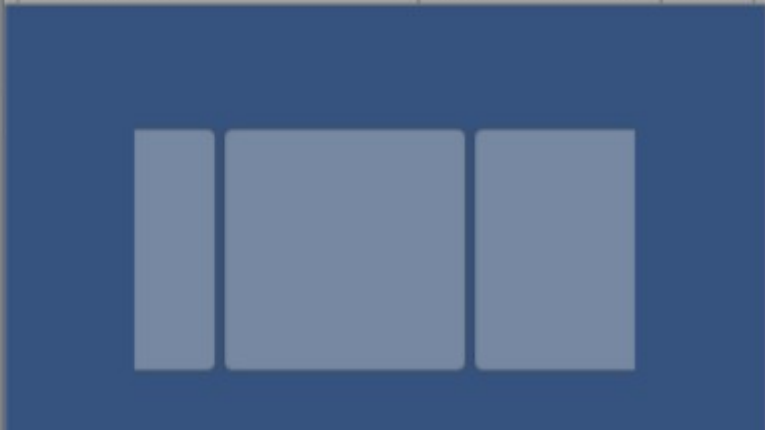
Panel

Panel

Panel

Panel

EventSystem



Hierarchy: # Scene Game

Free Aspect Maximize on Play Stats Gizmos

Main Camera

Canvas

Scroll Rect

Horizontal Layout Group

Panel

Panel

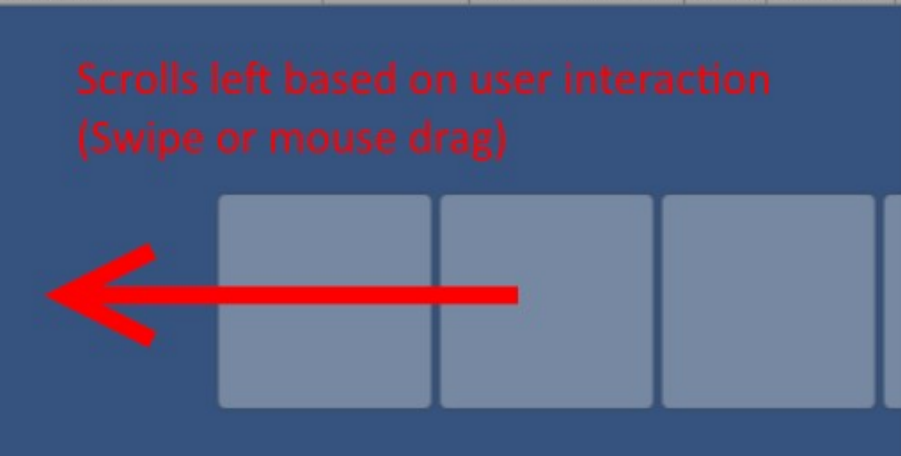
Panel

Panel

Panel

EventSystem

Scrolls left based on user interaction (Swipe or mouse drag)



Scroll Rect (Script)

Content	Content (Rect Transform)
Horizontal	<input checked="" type="checkbox"/>
Vertical	<input checked="" type="checkbox"/>
Movement Type	Elastic
Elasticity	0.1
Inertia	<input checked="" type="checkbox"/>
Deceleration Rate	0.135
Scroll Sensitivity	1
Horizontal Scrollbar	None (Scrollbar)
Vertical Scrollbar	None (Scrollbar)

On Value Changed (Vector2)

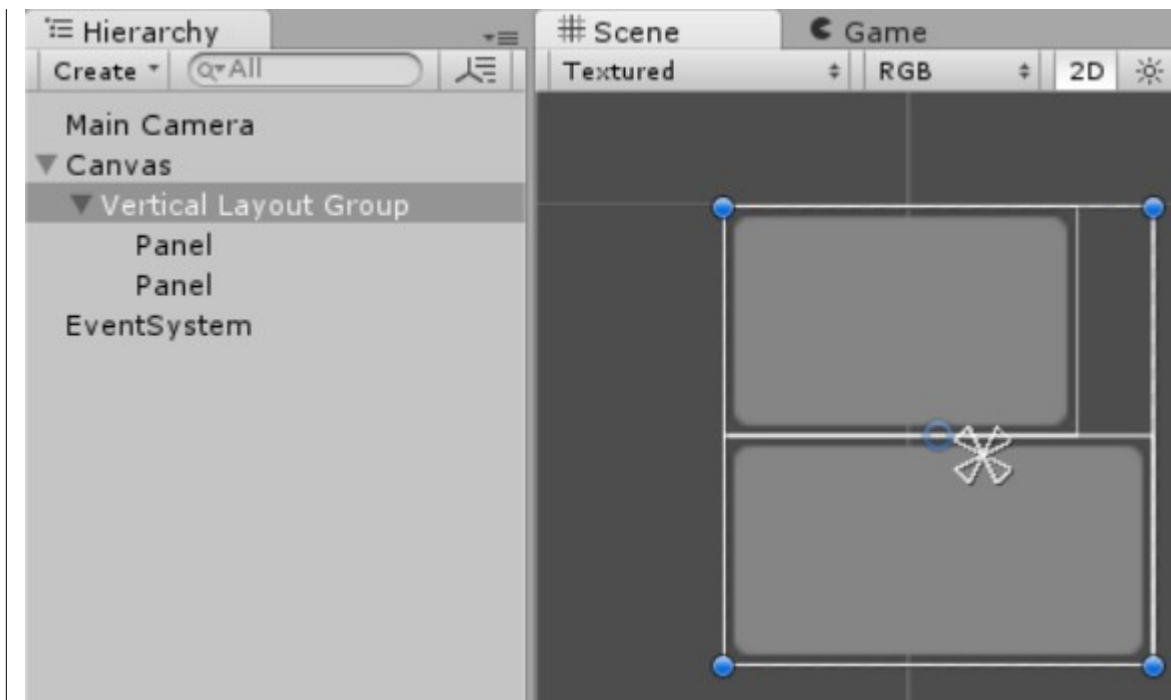
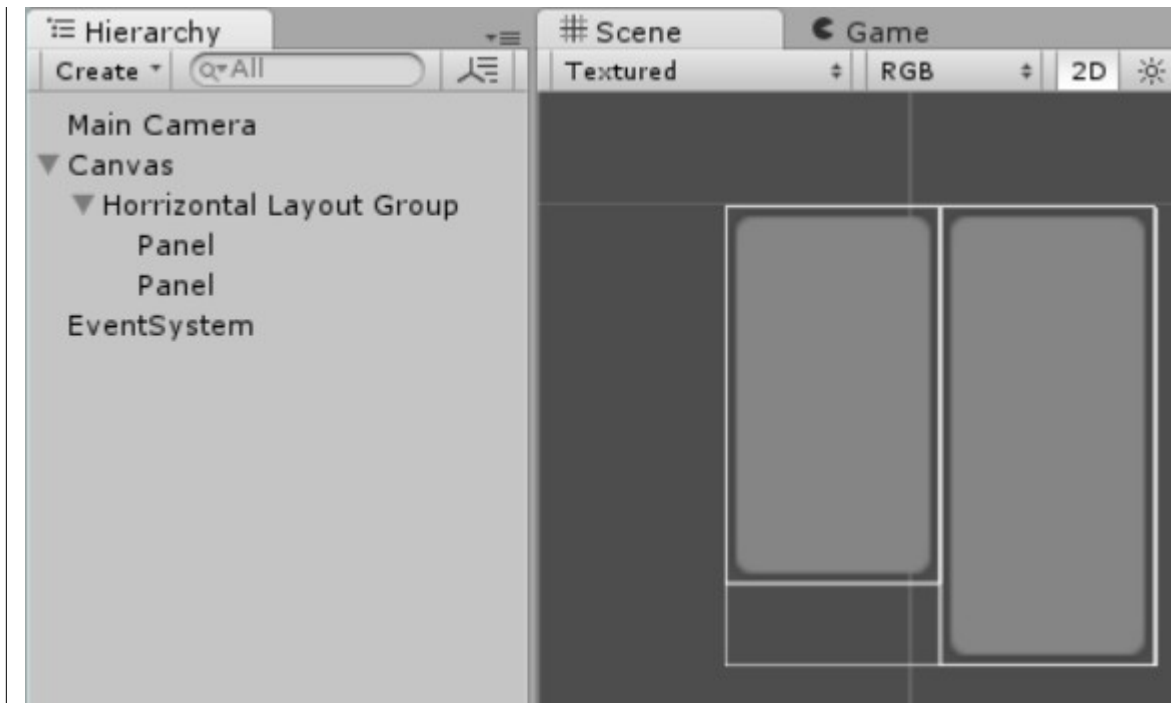
List is Empty

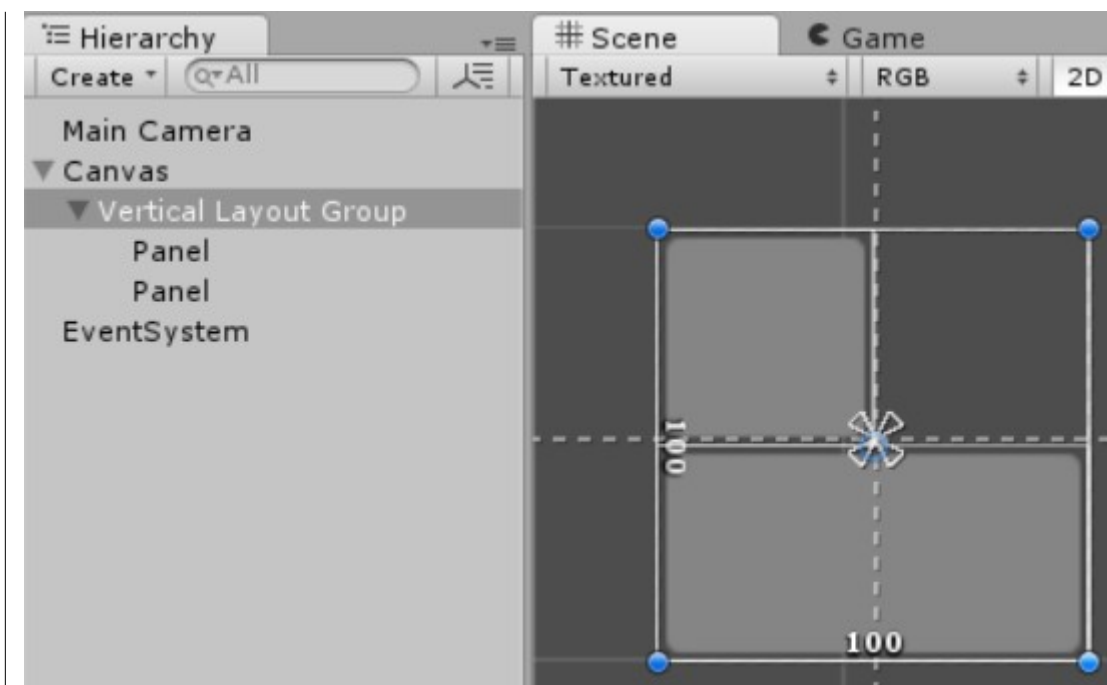
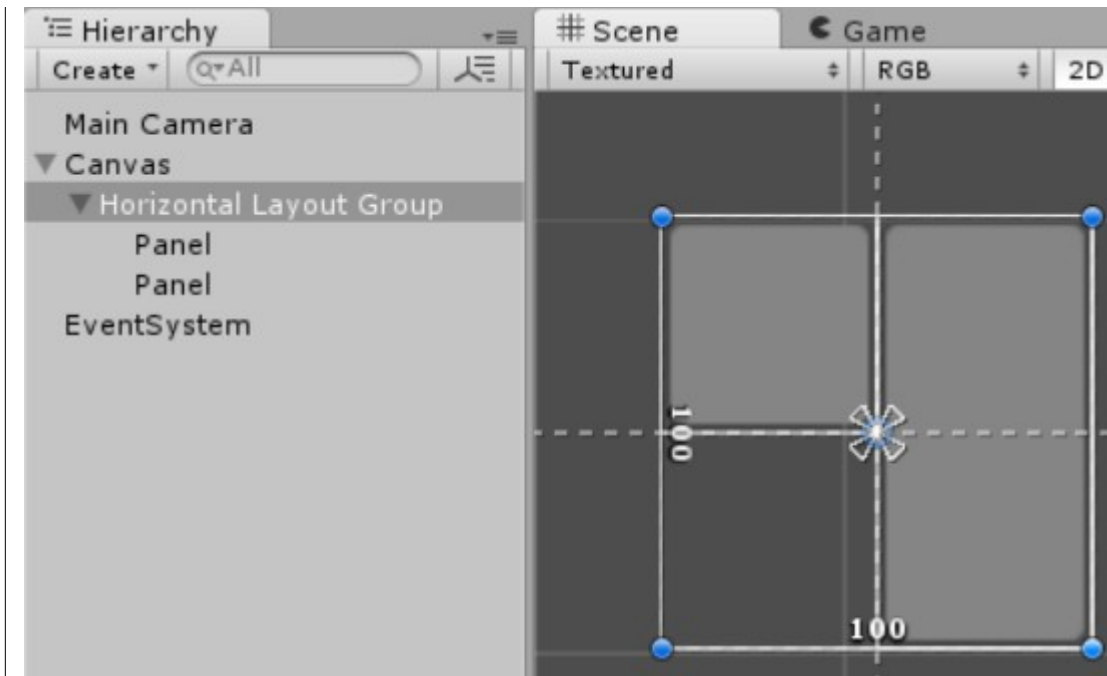
Content Size Fitter (Script)

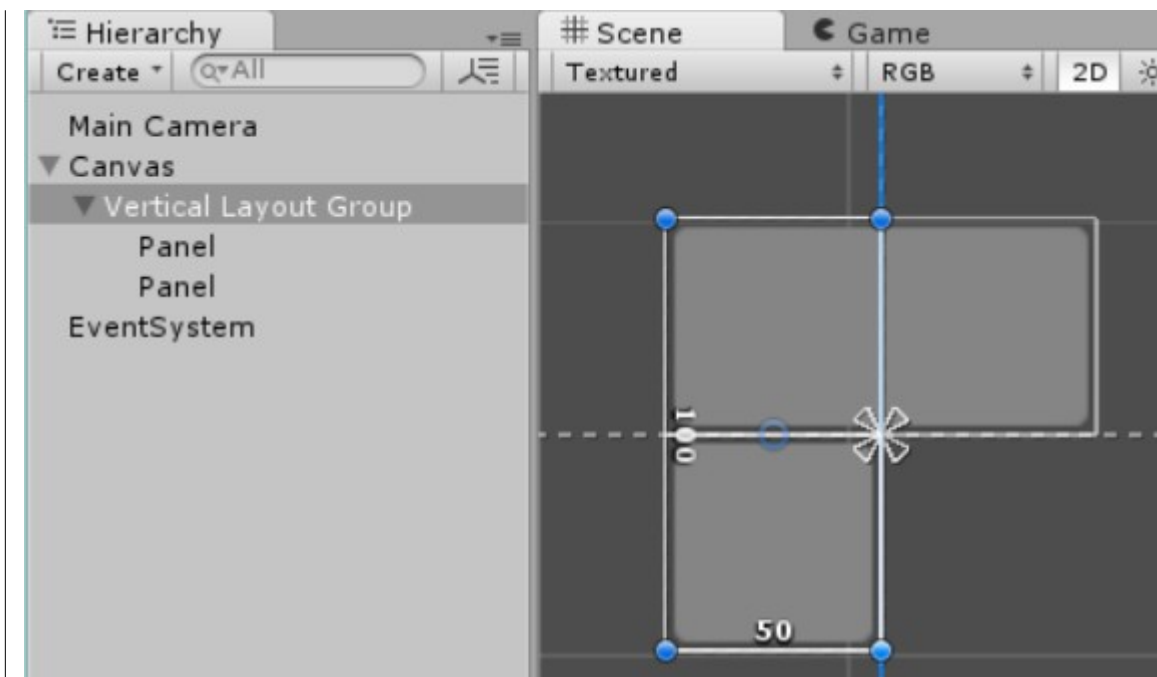
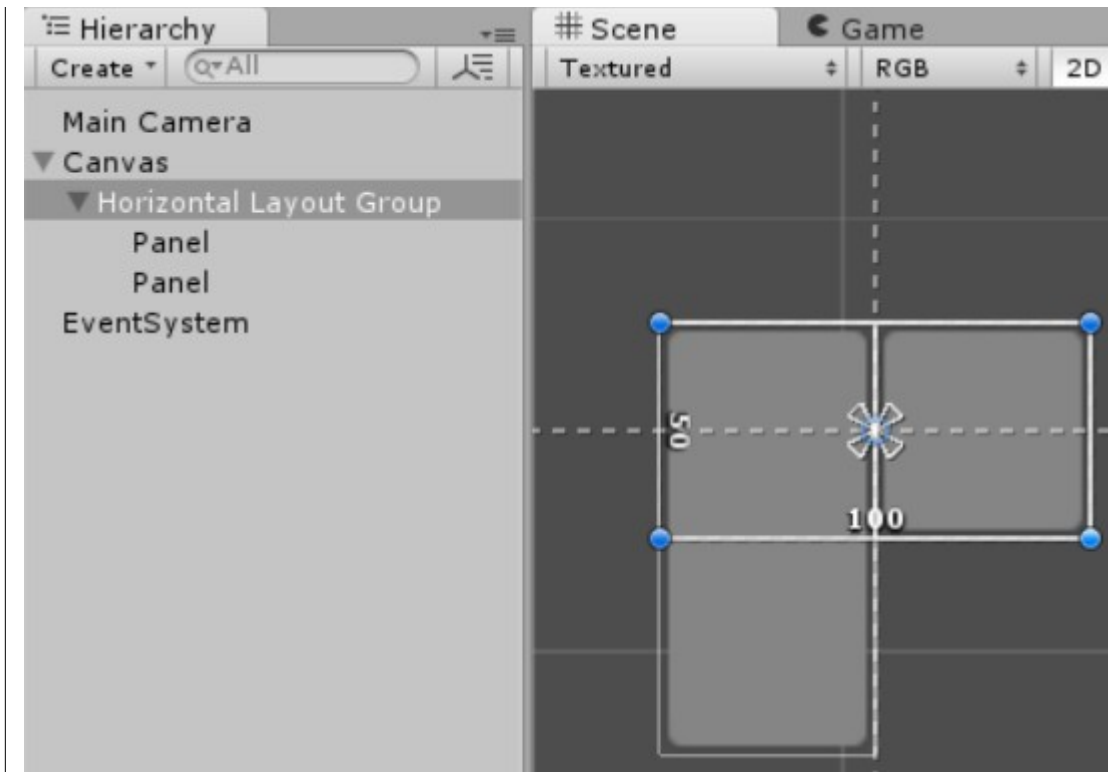
Horizontal Fit	Unconstrained
Vertical Fit	Unconstrained

A

- Unconstrained
- MinSize
- PreferredSize







Layout Element (Script)
? ⚙️

Ignore Layout

Min Width 0

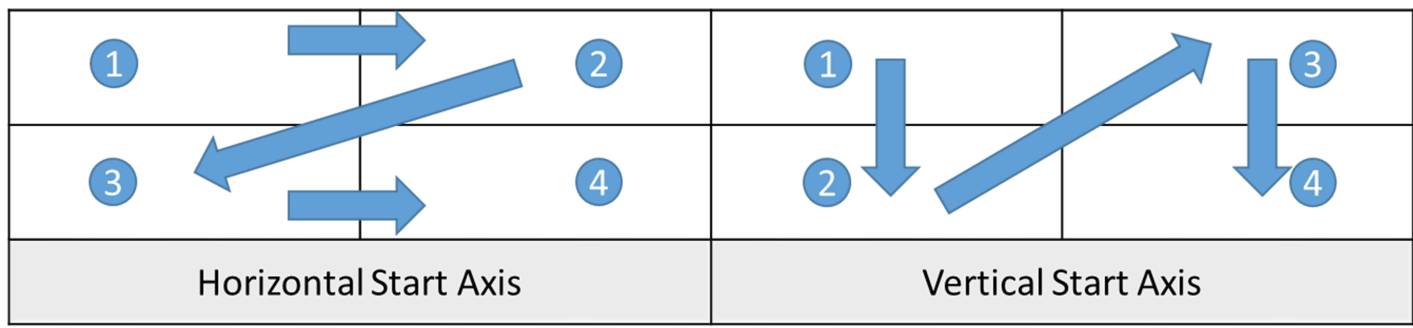
Min Height 0

Preferred Width 100

Preferred Height 100

Flexible Width 1

Flexible Height 1



Inspector

GridLayoutGroup Static

Tag Untagged Layer UI

Rect Transform

center
middle

Pos X: 0, Pos Y: 0, Pos Z: 0

Width: 200, Height: 200

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

Grid Layout Group (Script)

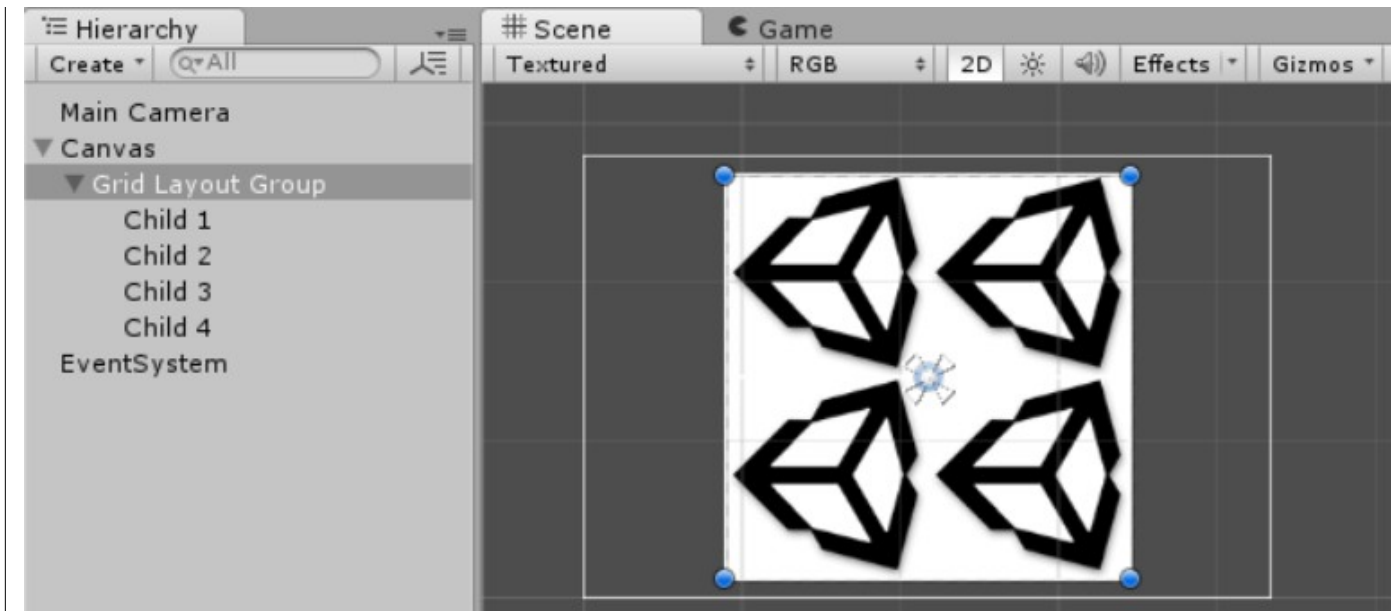
Padding

Cell Size: X 100, Y 100
Spacing: X 0, Y 0

Start Corner: Upper Left
Start Axis: Horizontal
Child Alignment: Upper Left
Constraint: Flexible

Add Component

Layout Properties



Inspector

VerticalLayoutGroup Static

Tag Untagged Layer UI

Rect Transform

center
middle

Pos X	0	Pos Y	0	Pos Z	0
Width	100	Height	300		

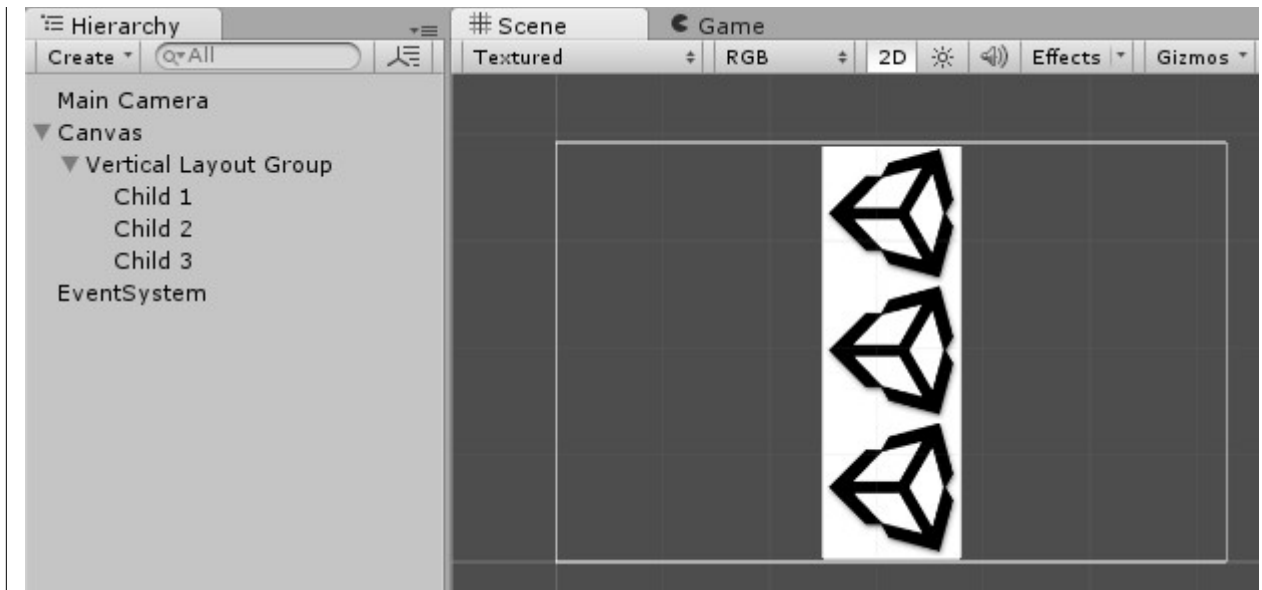
Min X 0.5 Y 0.5
Max X 0.5 Y 0.5
Pivot X 0.5 Y 0.5
Rotation X 0 Y 0 Z 0
Scale X 1 Y 1 Z 1

Vertical Layout Group (Script)

Padding
Left 0
Right 0
Top 0
Bottom 0
Spacing 0
Child Alignment Upper Left
Child Force Expand Width Height

Add Component

Layout Properties



Inspector

HorizontalLayoutGroup Static

Tag Untagged Layer UI

Rect Transform

center
middle

Pos X	0	Pos Y	0	Pos Z	0
Width	300	Height	100		

▼ 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
---	---	---	---	---	---

Horizontal Layout Group (Script)

▼ Padding

Left	0
Right	0
Top	0
Bottom	0

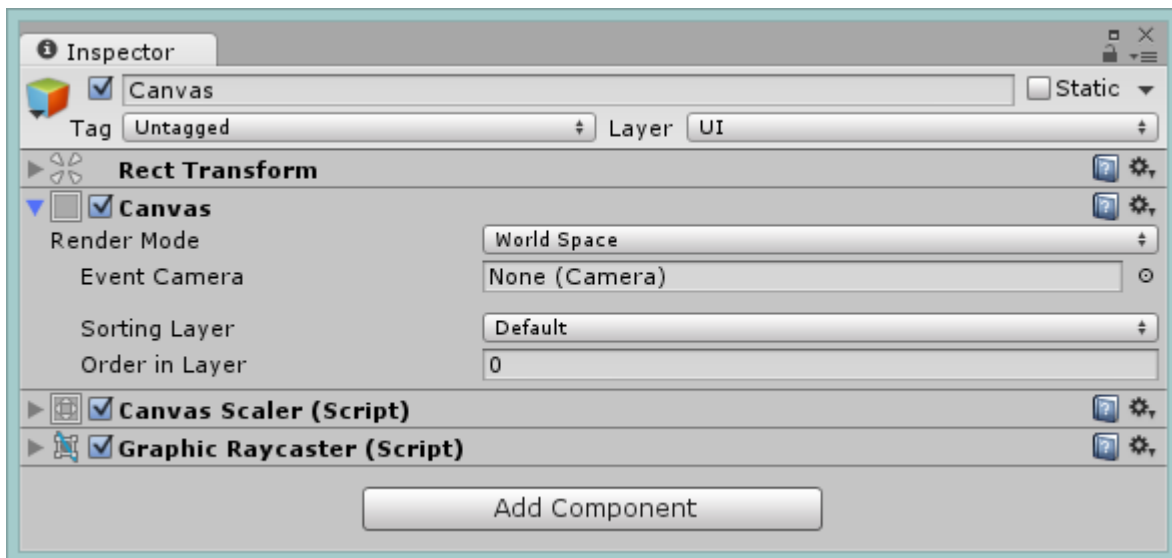
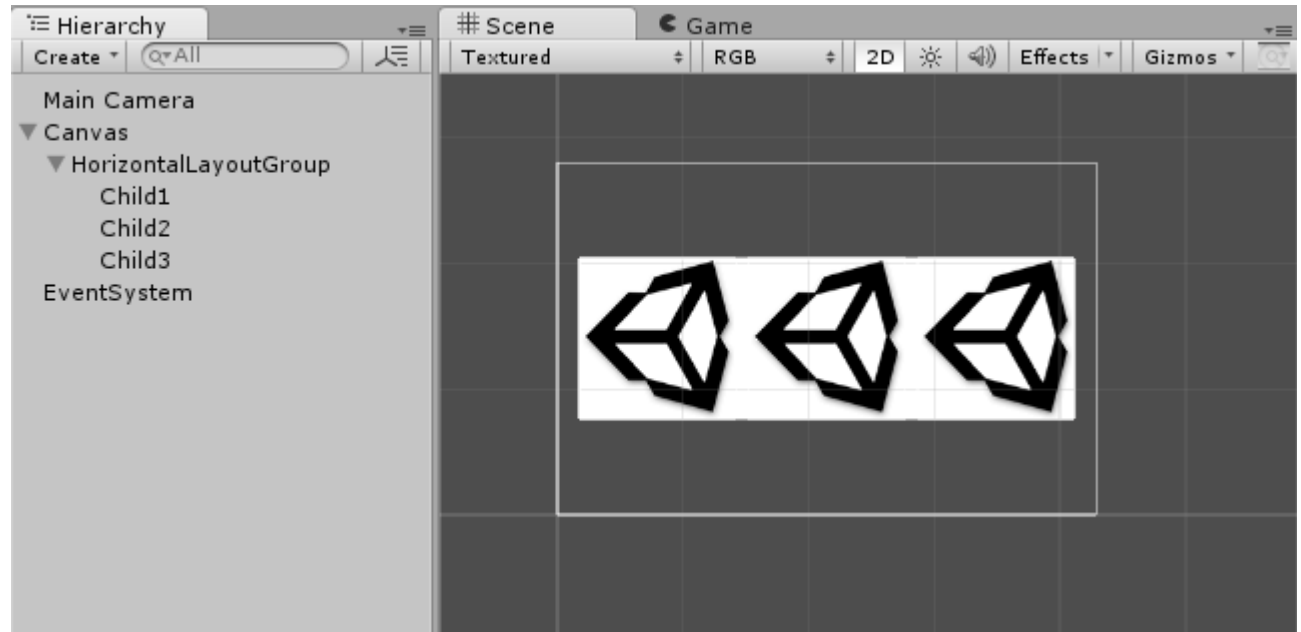
Spacing 0

Child Alignment Upper Left

Child Force Expand Width Height

Add Component

Layout Properties





Chapter 3: Control, Control You must Learn Control


Shadow me impressed


Without shadow effect

Shadow me impressed

With shadow effect

Shadow (Script)  

Script 

Effect Color 

Effect Distance X Y

Use Graphic Alpha

Image (Script)

Input Field (Script)

Interactable

Transition: Color Tint

Target Graphic: InputField (Image)

Normal Color: [Color Picker]

Highlighted Color: [Color Picker]

Pressed Color: [Color Picker]

Disabled Color: [Color Picker]

Color Multiplier: 1

Fade Duration: 0.1

Navigation: Automatic

Visualize

Text Component: Text (Text)

Text: [Text Field]

Character Limit: 0

Content Type: Standard

Line Type: Single Line

Placeholder: Placeholder (Text)

Caret Blink Rate: 1.7

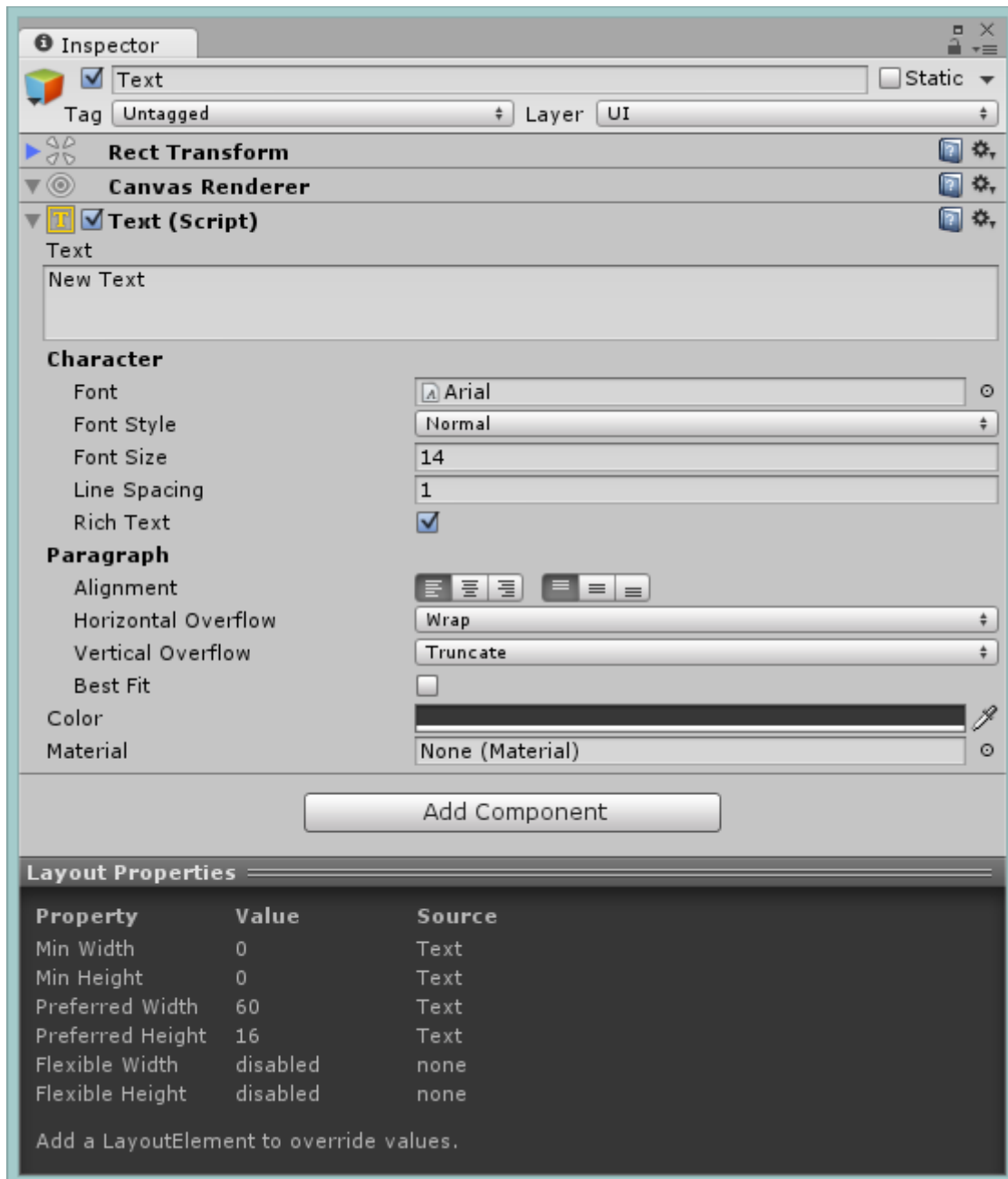
Selection Color: [Color Picker]

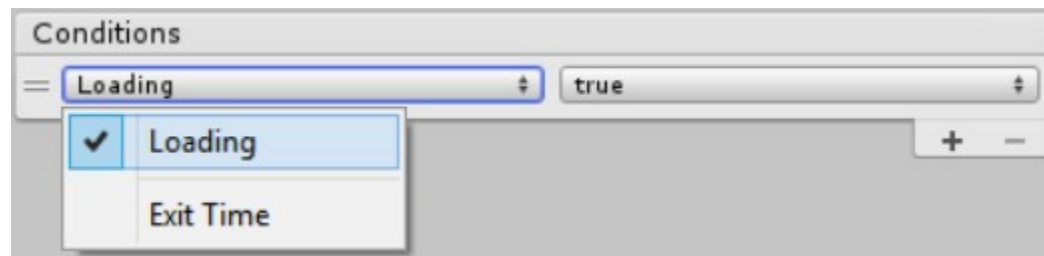
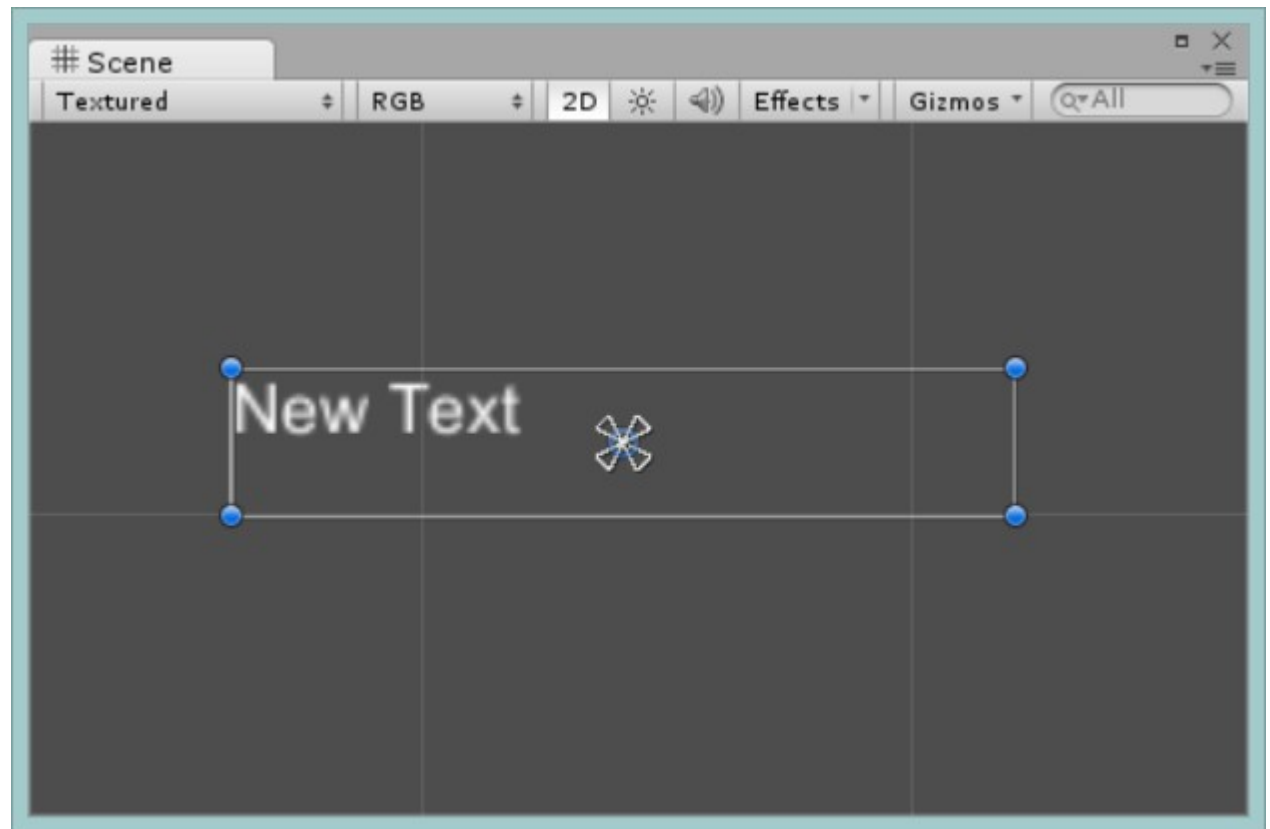
Hide Mobile Input:

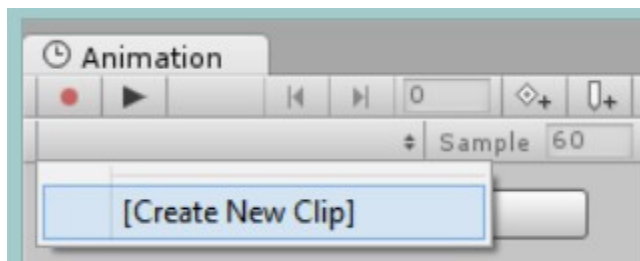
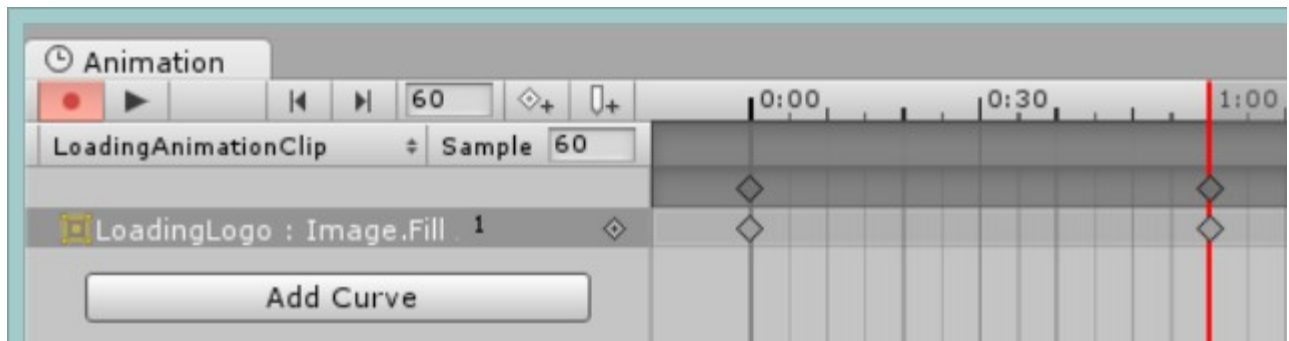
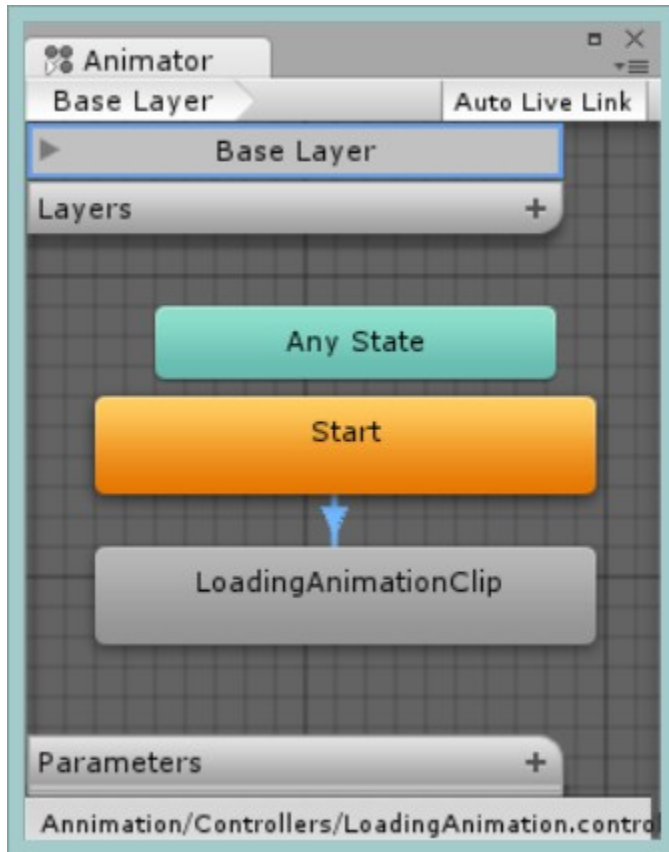
On Value Change (String): List is Empty

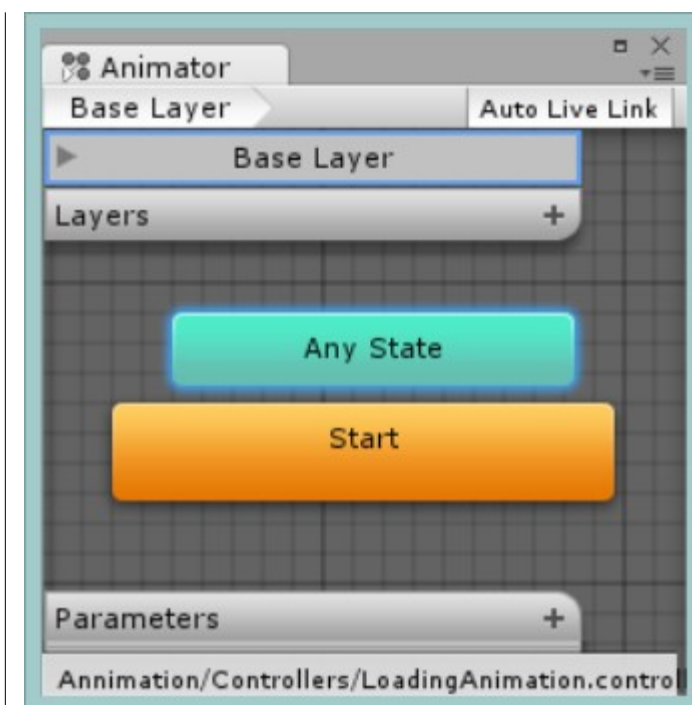
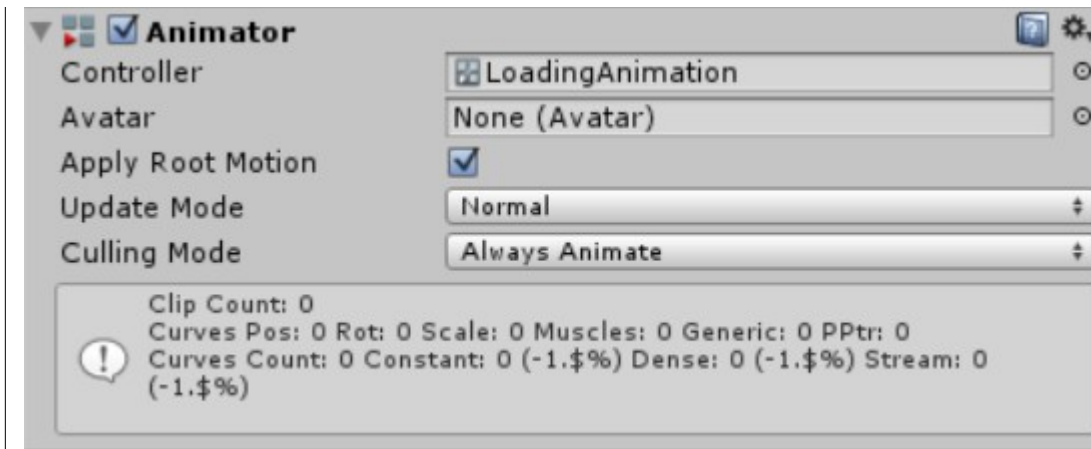
End Edit (String): List is Empty

60.42235: FPS









Main Camera

▼ Canvas

▼ Scroll Border

▼ Header

Text

▼ Vertical Scrollbar

▶ Sliding Area

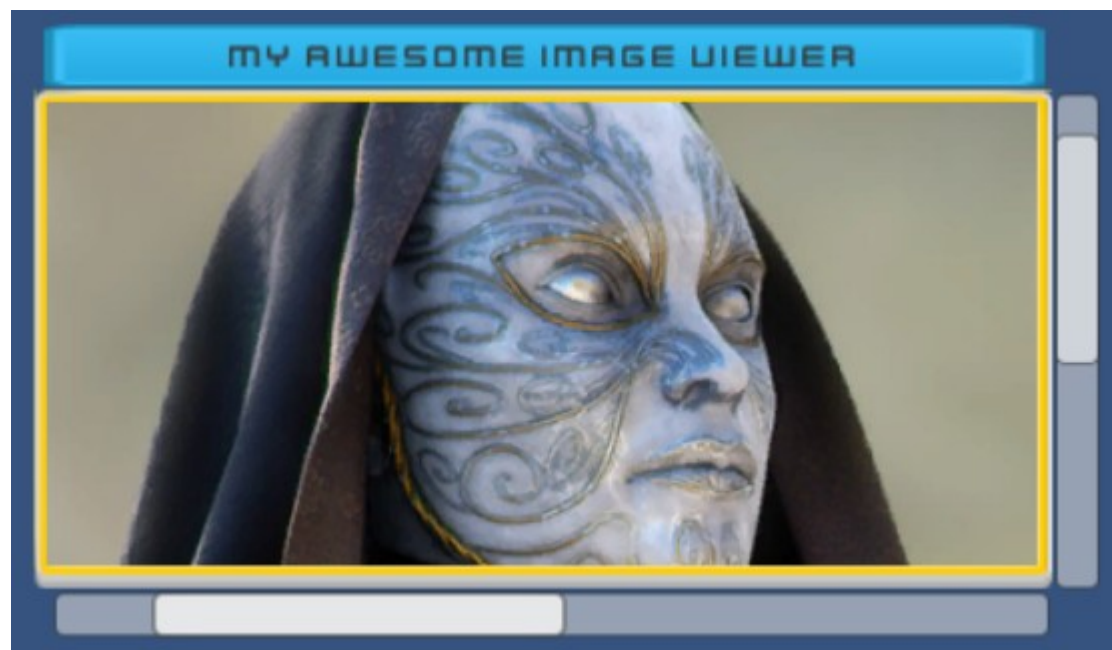
▼ Horizontal ScrollBar

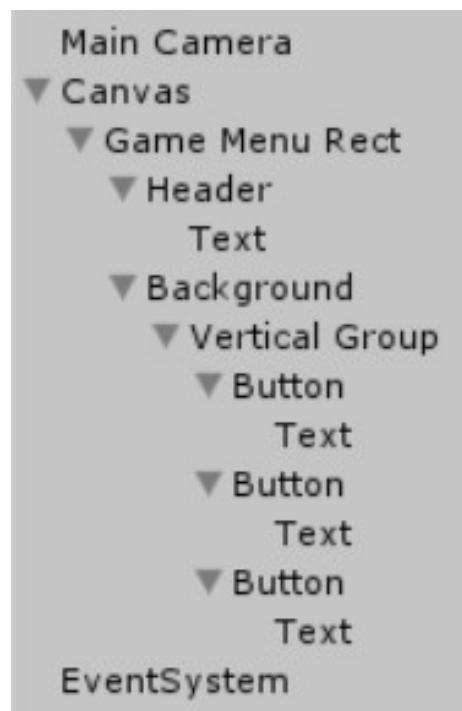
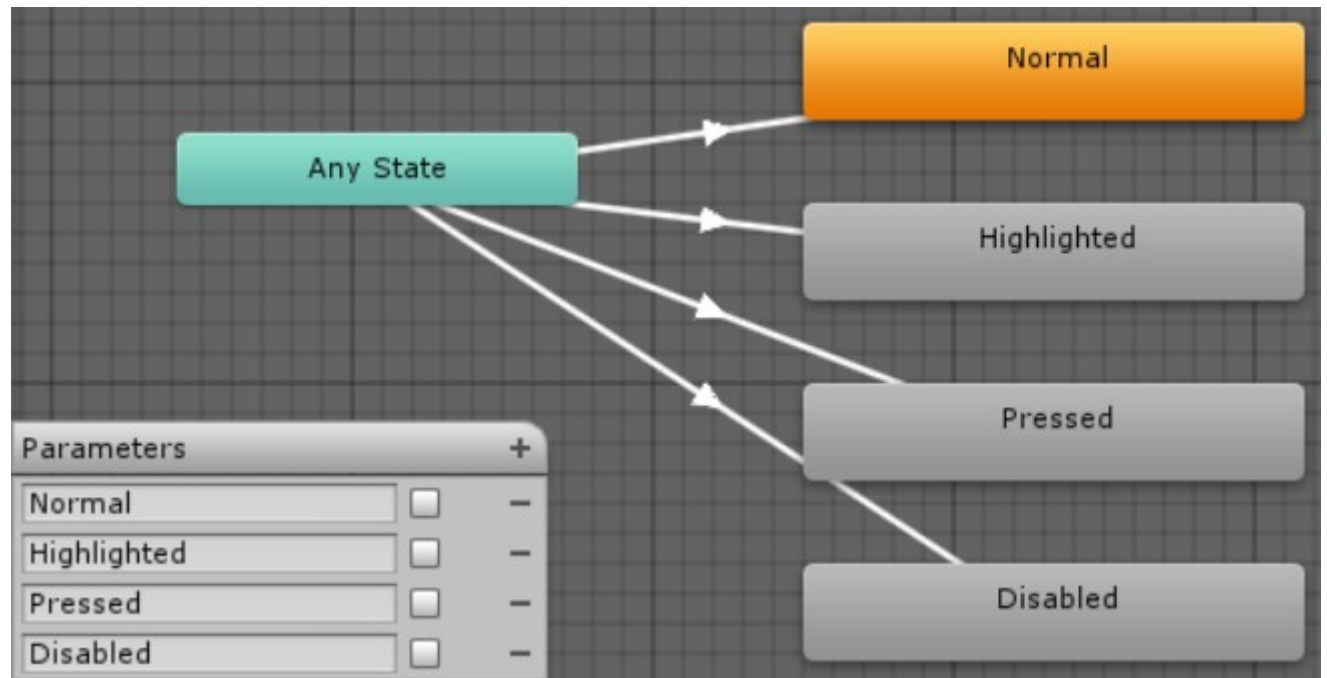
▶ Sliding Area

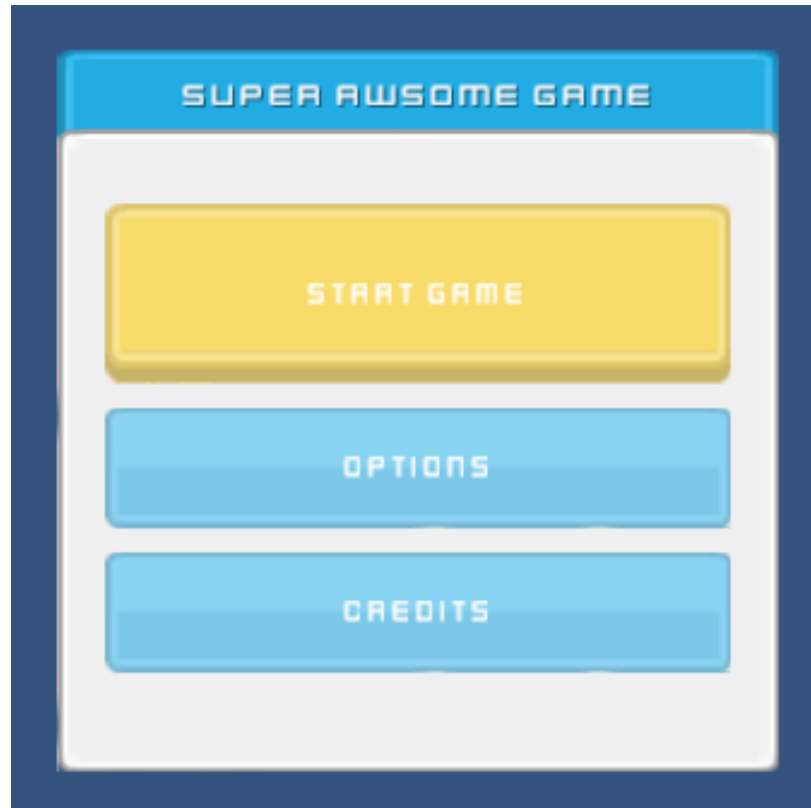
▼ Scroll Rect

Image

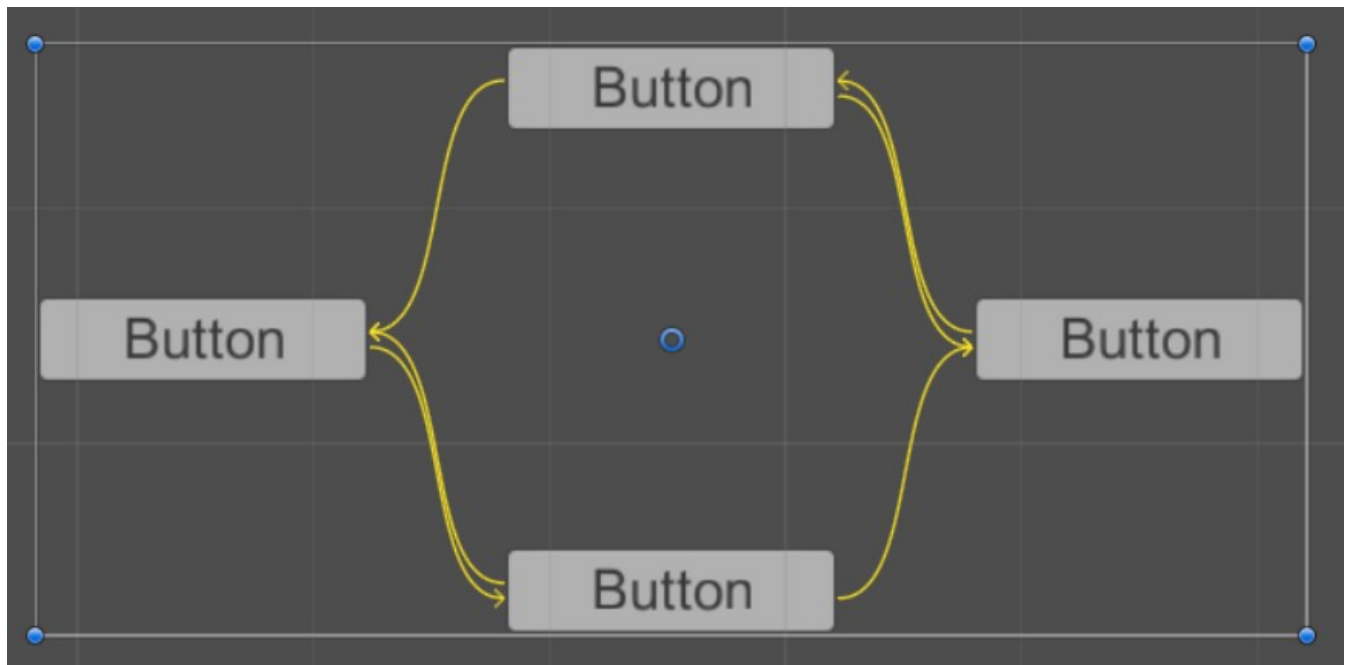
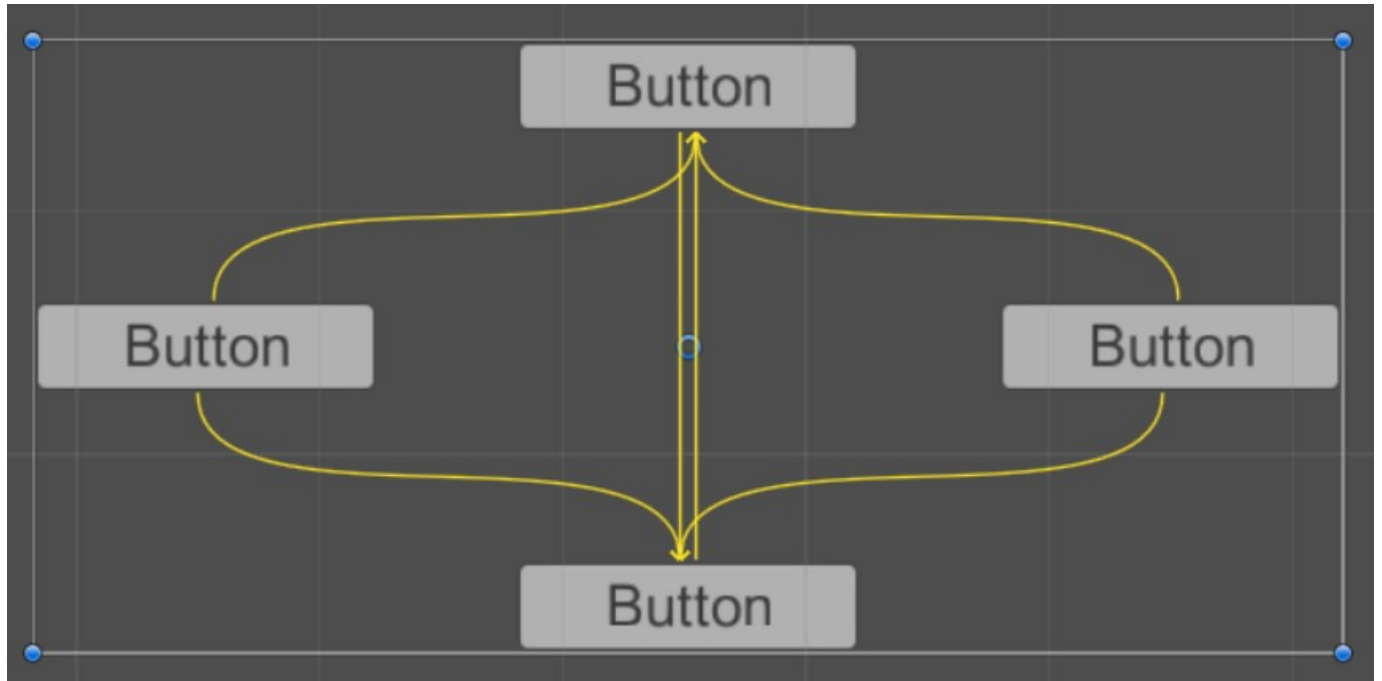
EventSystem

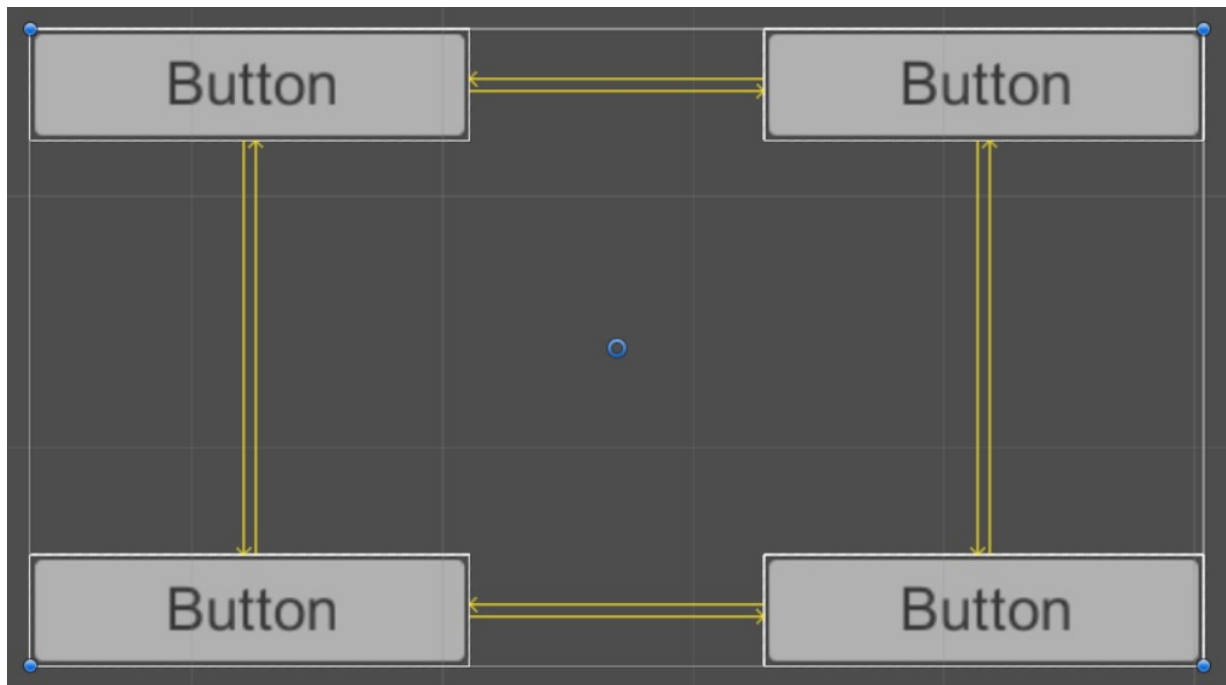
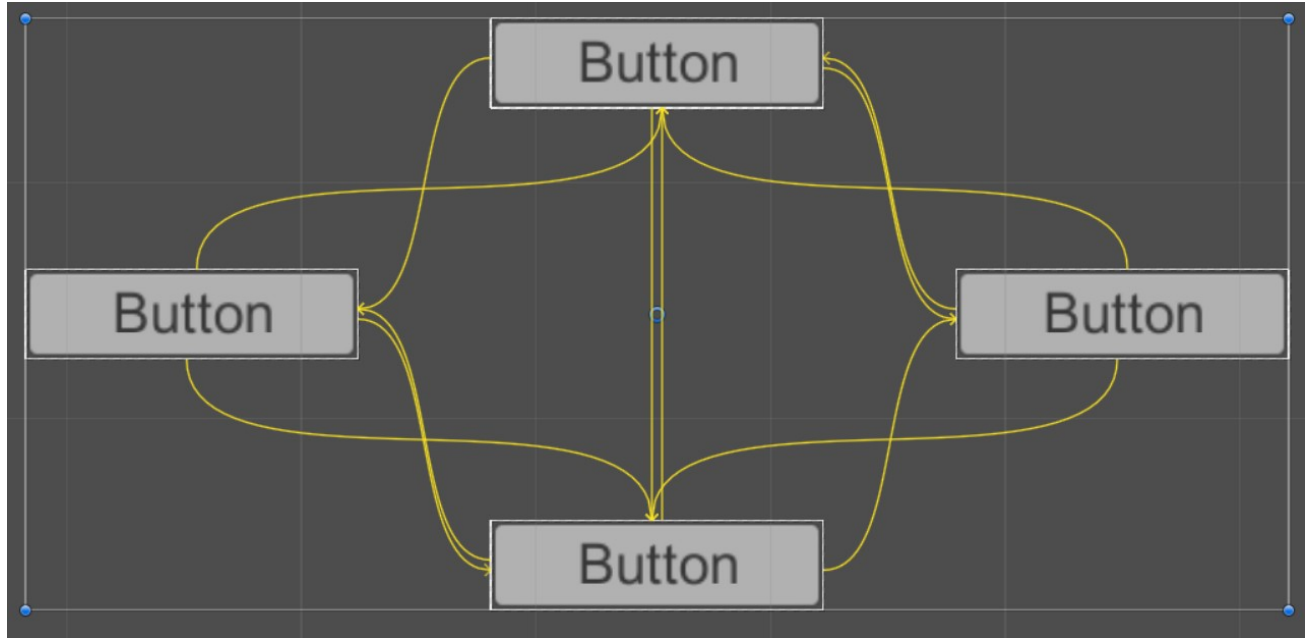




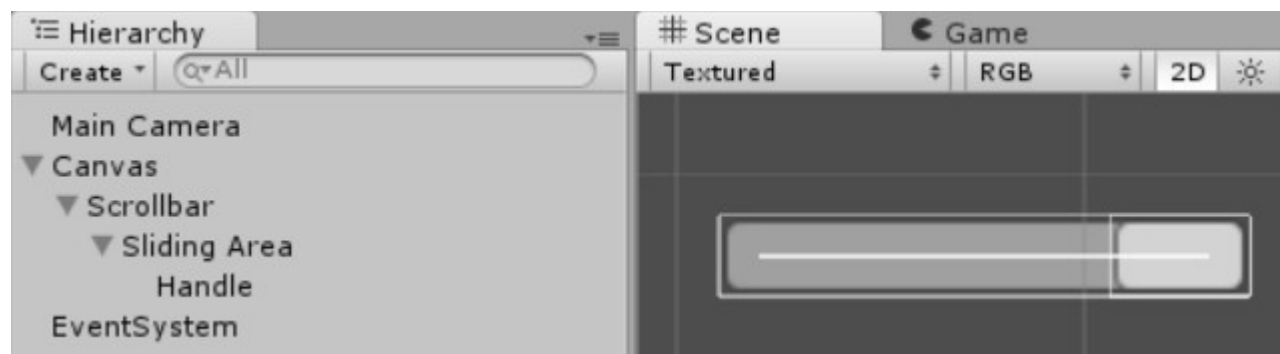
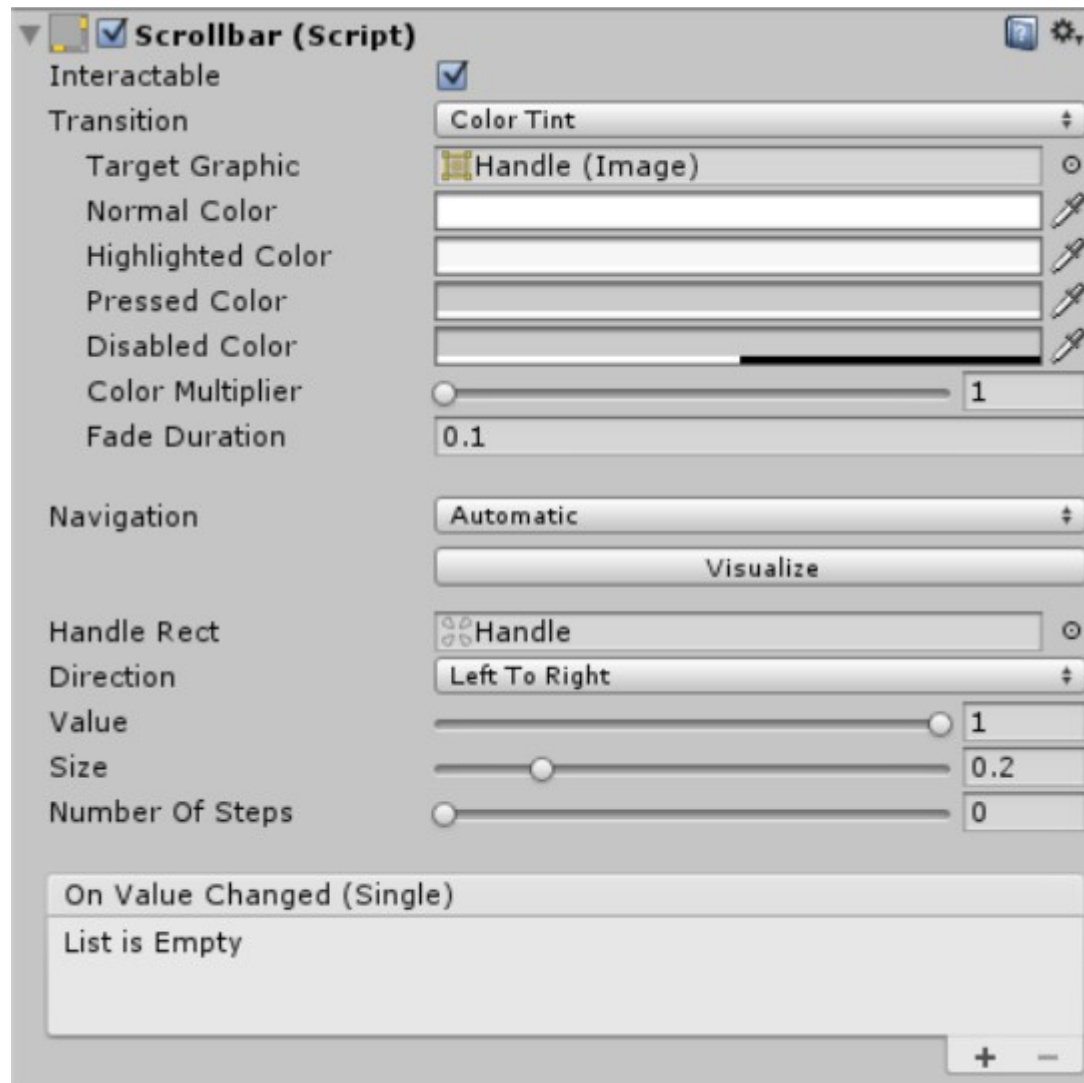


Navigation	Explicit	⌵
Select On Up	None (Selectable)	○
Select On Down	None (Selectable)	○
Select On Left	None (Selectable)	○
Select On Right	None (Selectable)	○





Navigation



Slider (Script)

Interactable

Transition: ColorTint

Target Graphic: Handle (Image)

Normal Color: [Color Picker]

Highlighted Color: [Color Picker]

Pressed Color: [Color Picker]

Disabled Color: [Color Picker]

Color Multiplier: 2

Fade Duration: 0.1

Navigation: Automatic

Visualize

Fill Rect: Fill (Rect Transform)

Handle Rect: Handle (Rect Transform)

Direction: LeftToRight

Min Value: 0

Max Value: 1

Whole Numbers:

Value: 1

On Value Changed (Single)

List is Empty

+ -

Hierarchy | Scene | Game

Create | Search: All

- Main Camera
- Canvas
 - Slider
 - Background
 - Fill Area
 - Fill
 - Handle Slide Area
 - Handle
 - EventSystem

Textured | RGB | 2D | Effects

Dynamic bool
isStatic
 SetActive

Static Parameters
bool isStatic
int layer
string name
string tag
BroadcastMessage (string)
SendMessage (string)
SendMessageUpwards (string)
SetActive (bool)

GameObject.†

No Function
GameObject ▶
RectTransform ▶
Toggle ▶

Toggle (Script)

Interactable

Transition: ColorTint

Target Graphic: Background (Image)

Normal Color: [Color bar]

Highlighted Color: [Color bar]

Pressed Color: [Color bar]

Disabled Color: [Color bar]

Color Multiplier: 2

Fade Duration: 0.1

Navigation: Automatic

Visualize

Is On:

Toggle Transition: Fade

Graphic: Checkmark (Image)

Group: None (Toggle Group)

On Value Changed (Boolean)

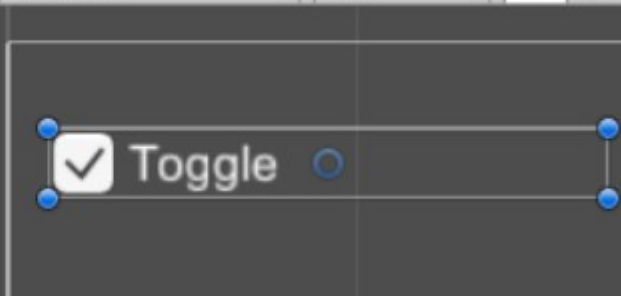
List is Empty

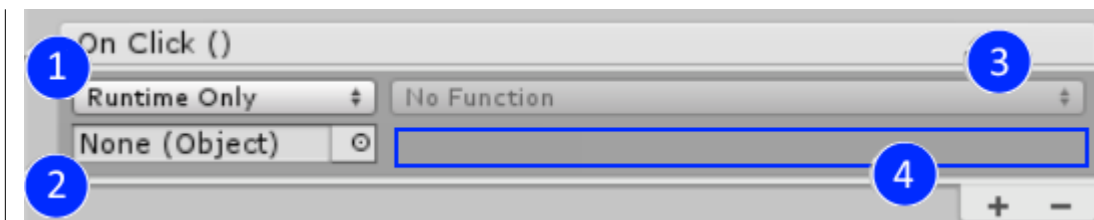
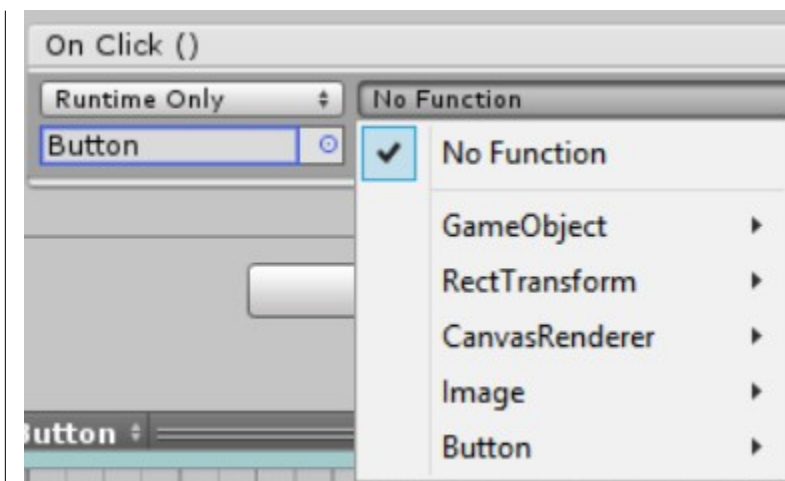
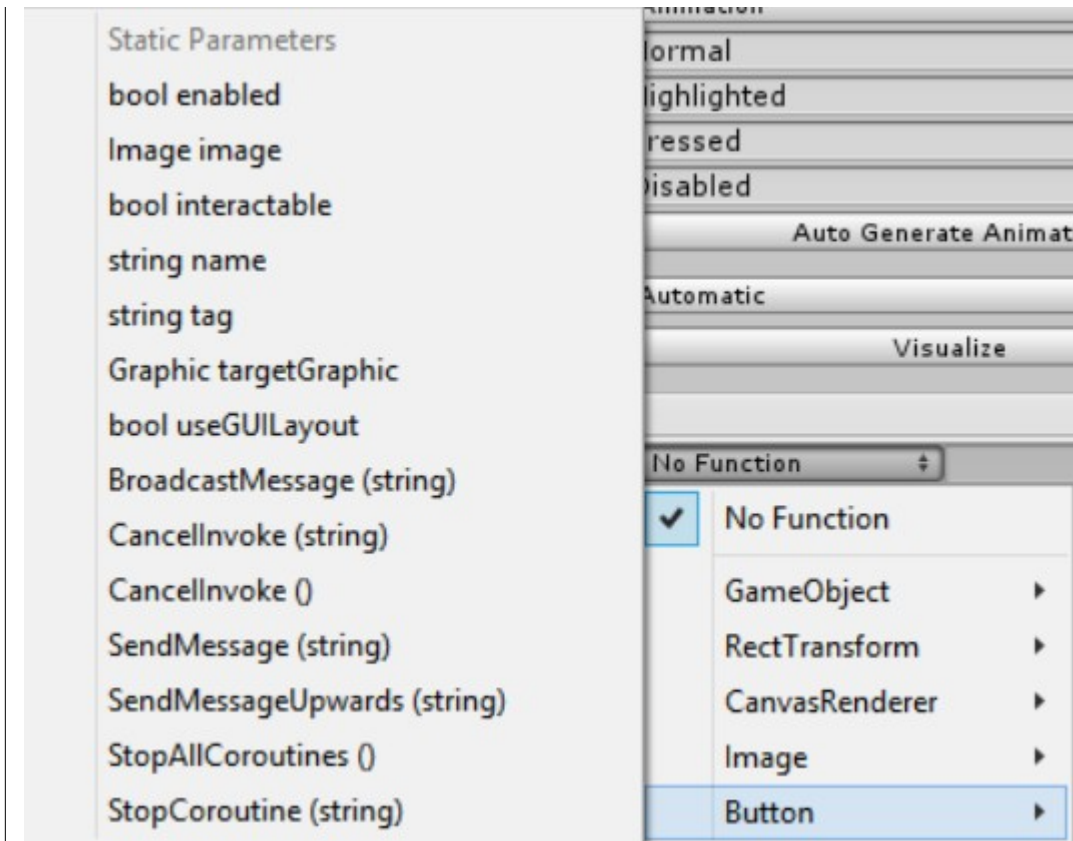
Hierarchy | Scene | Game

Create | Search: All

- Main Camera
- Canvas
 - Toggle
 - Background
 - Checkmark
 - Label
 - EventSystem

Textured | RGB | 2D





On Click ()

List is Empty

+ -

Transition

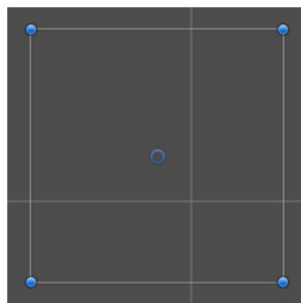
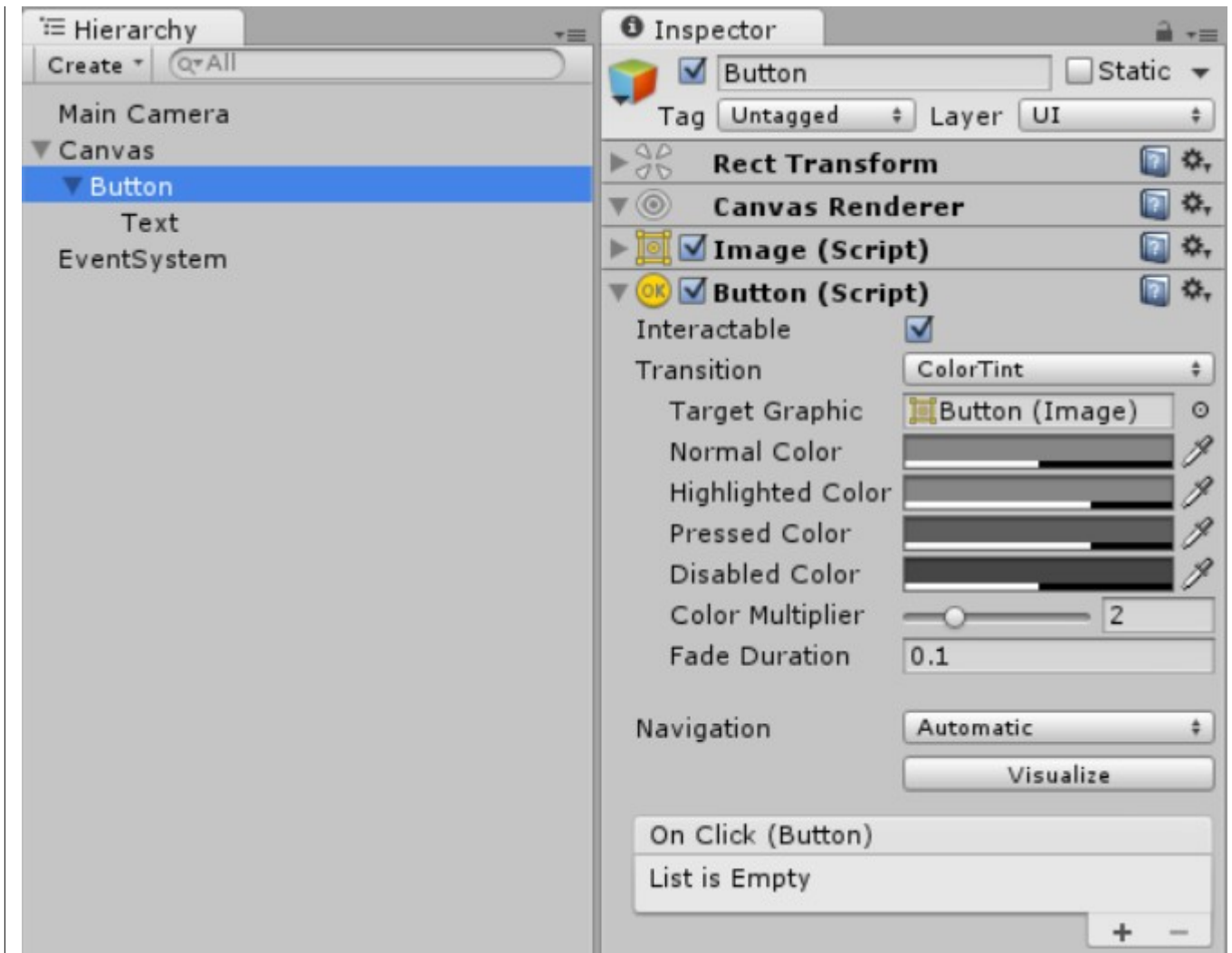
	Animation
Normal Trigger	Normal
Highlighted Trigger	Highlighted
Pressed Trigger	Pressed
Disabled Trigger	Disabled
Auto Generate Animation	

Transition

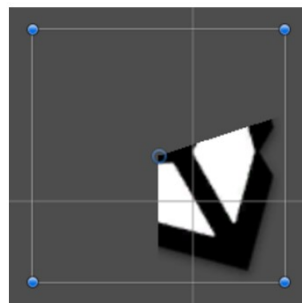
	Sprite Swap	
Target Graphic	Button (Image)	○
Highlighted Sprite	None (Sprite)	○
Pressed Sprite	None (Sprite)	○
Disabled Sprite	None (Sprite)	○

Transition

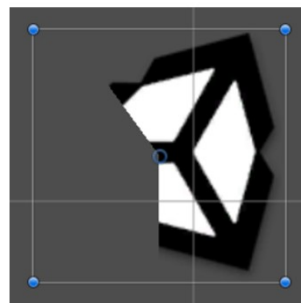
	Color Tint	
Target Graphic	Button (Image)	○
Normal Color	<input type="text"/>	
Highlighted Color	<input type="text"/>	
Pressed Color	<input type="text"/>	
Disabled Color	<input type="text"/>	
Color Multiplier	<input type="range"/>	1
Fade Duration	<input type="text"/>	0.1



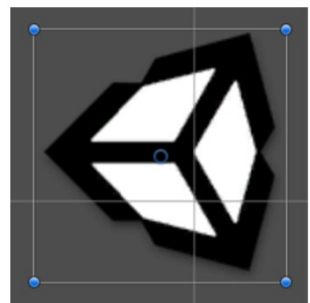
0% (0 fill)



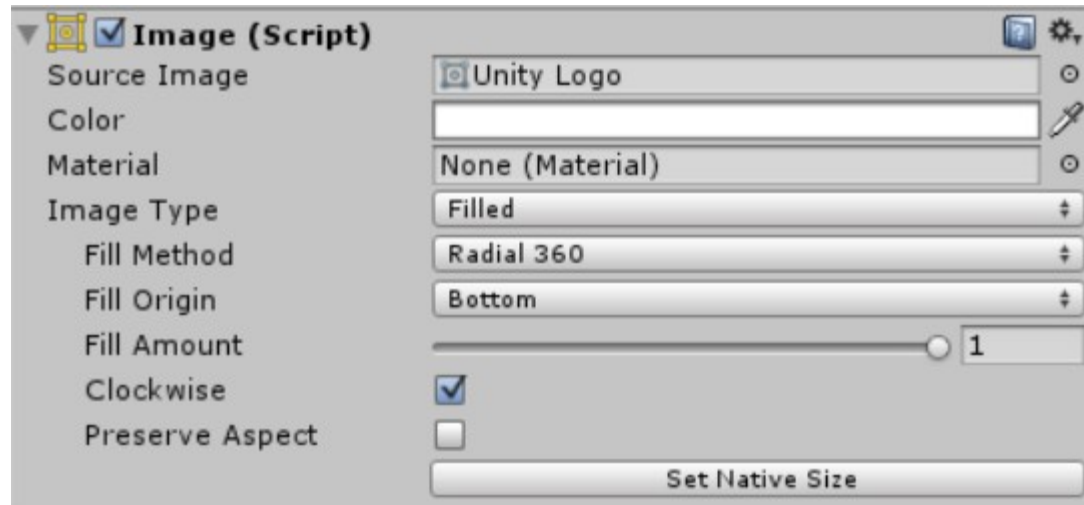
33% (0.3 fill)

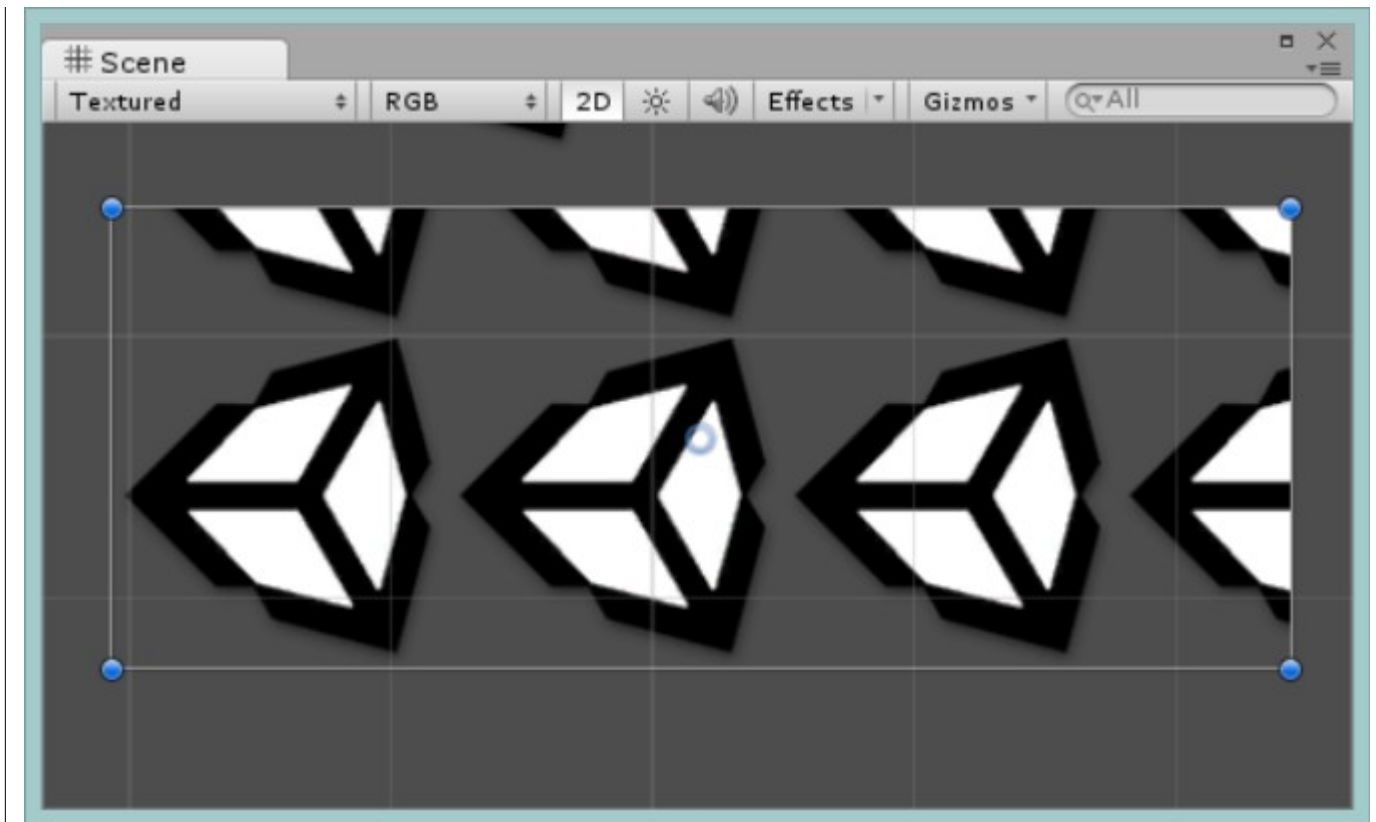


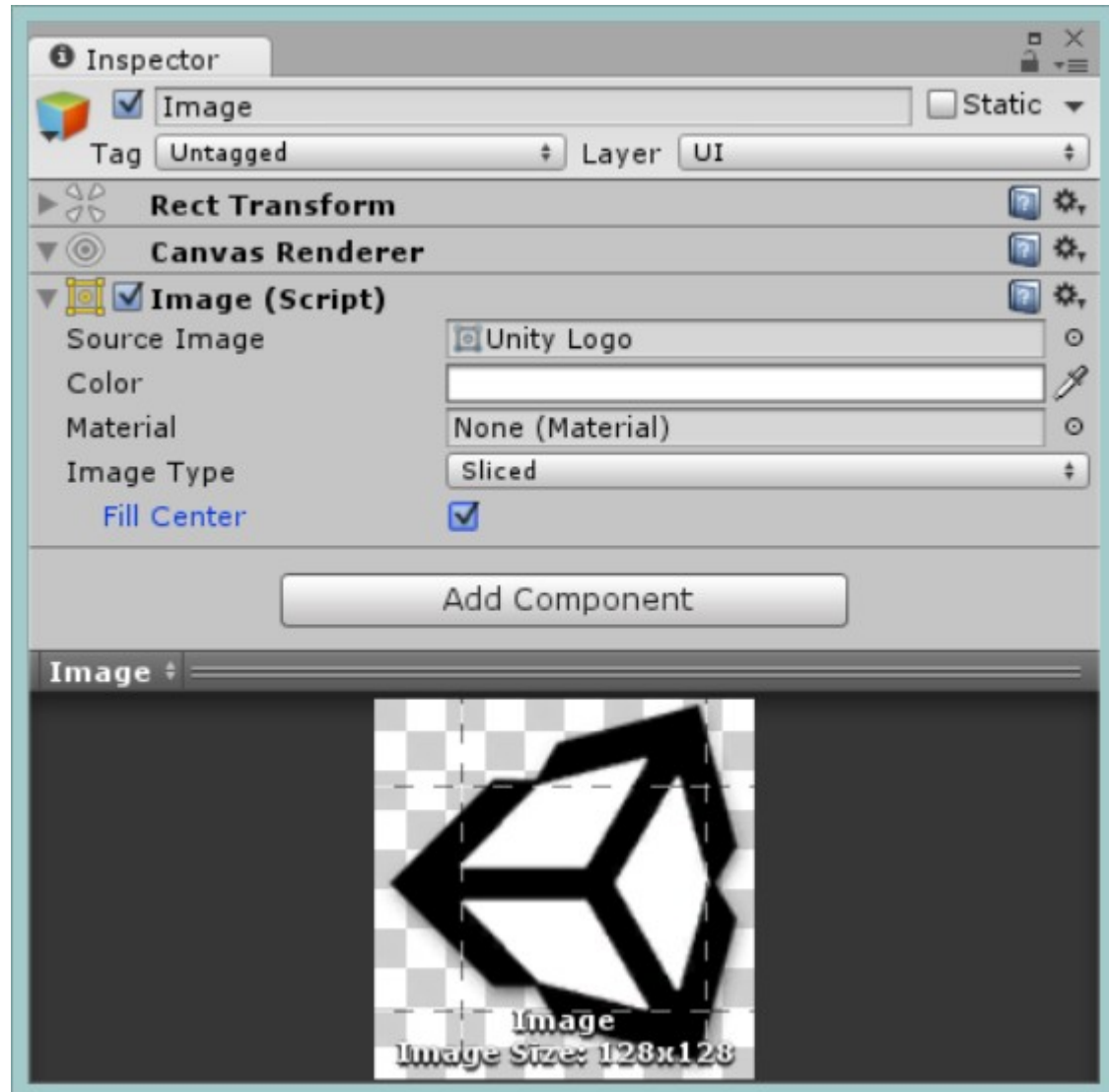
66% (0.6 fill)

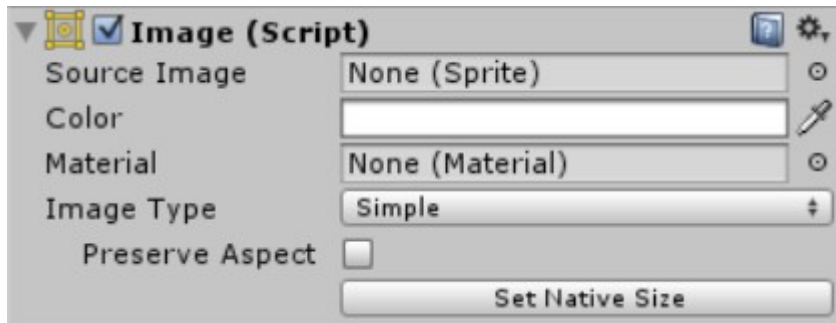
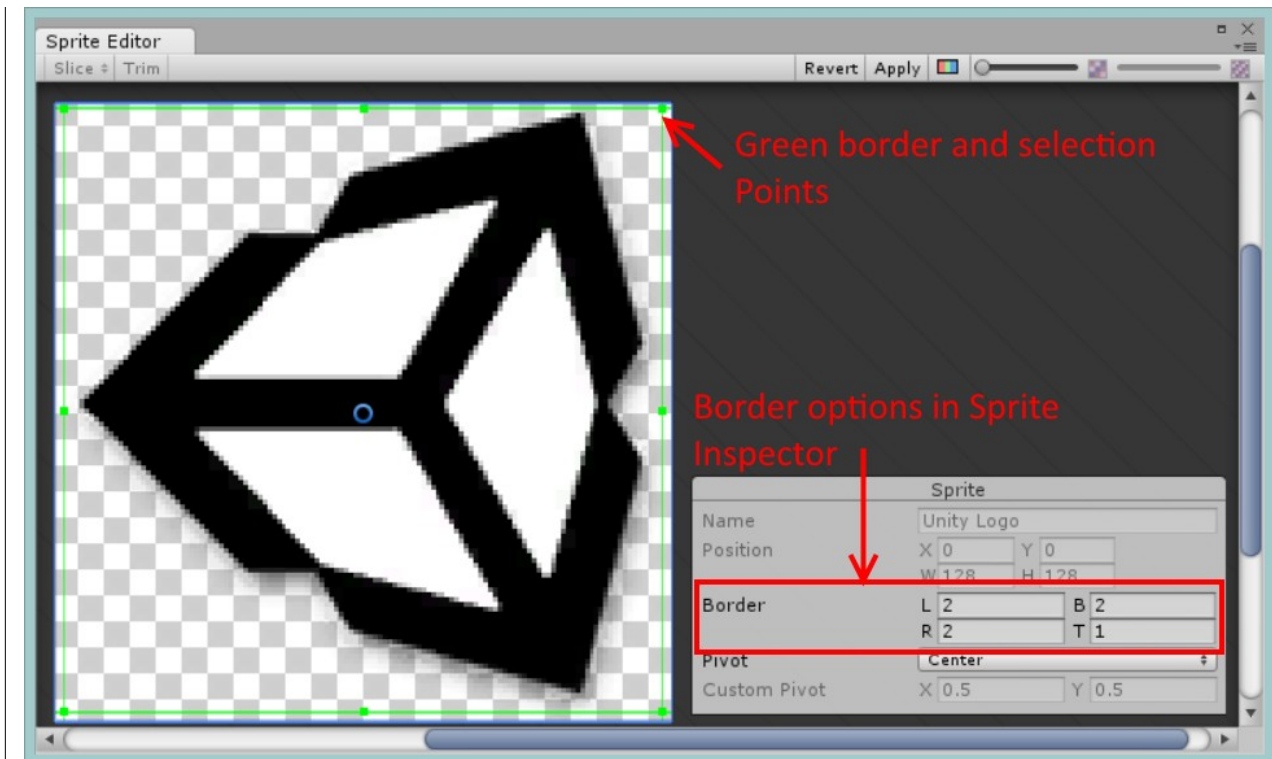


100% (1 fill)

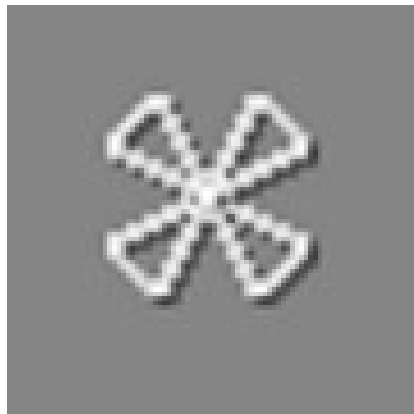
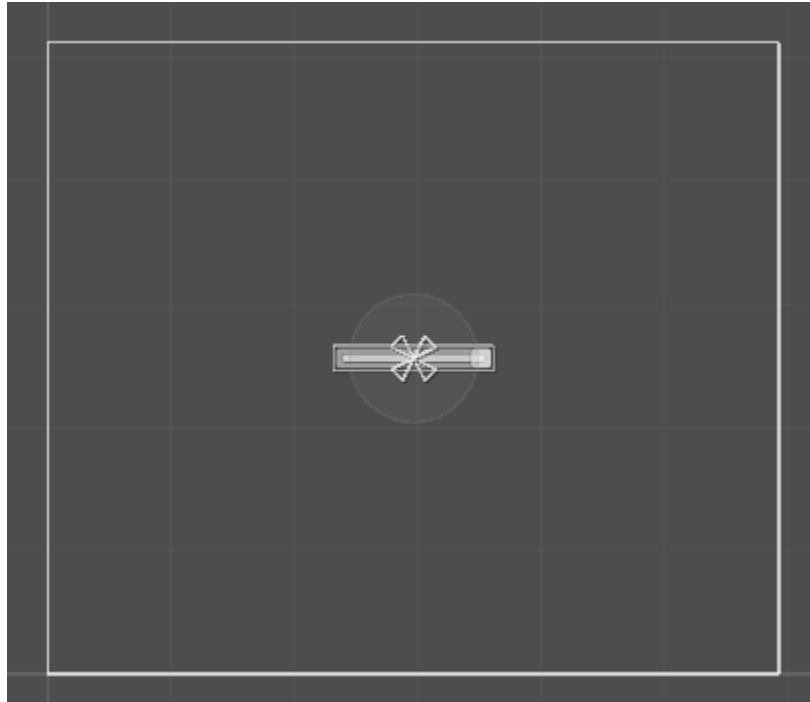








Chapter 4: Anchors Away



center

middle

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

	left	center	right	stretch
top				
middle				
bottom				
stretch				

Rect Transform

center

middle

Pos X: 0 Pos Y: 0 Pos Z: 0

Width: 1004 Height: 512

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

Rect Transform

stretch

top

Left	Pos Y	Pos Z
0	-12.5	0
Right	Height	
0	25	

Min X 0 Y 1

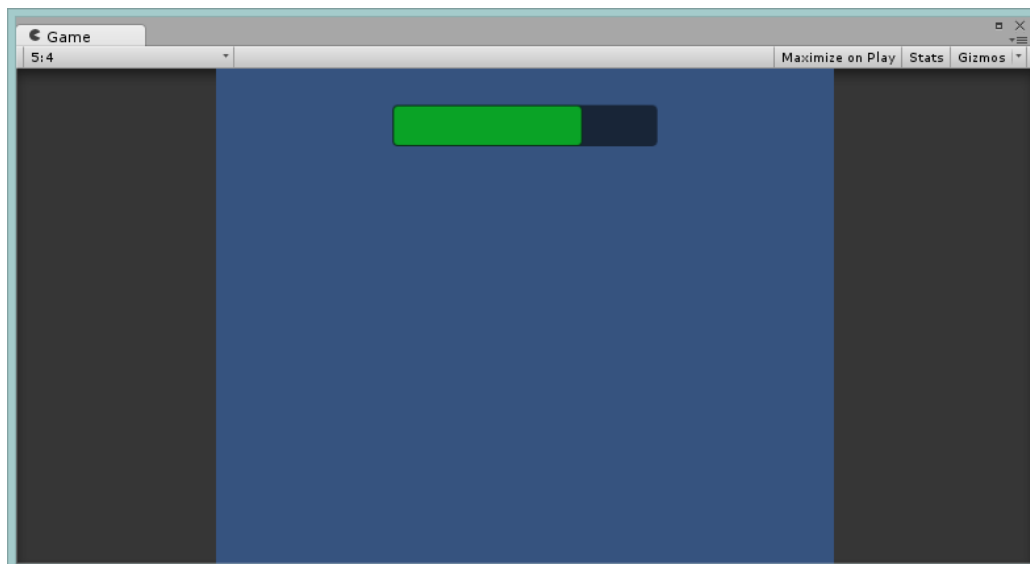
Max X 1 Y 1

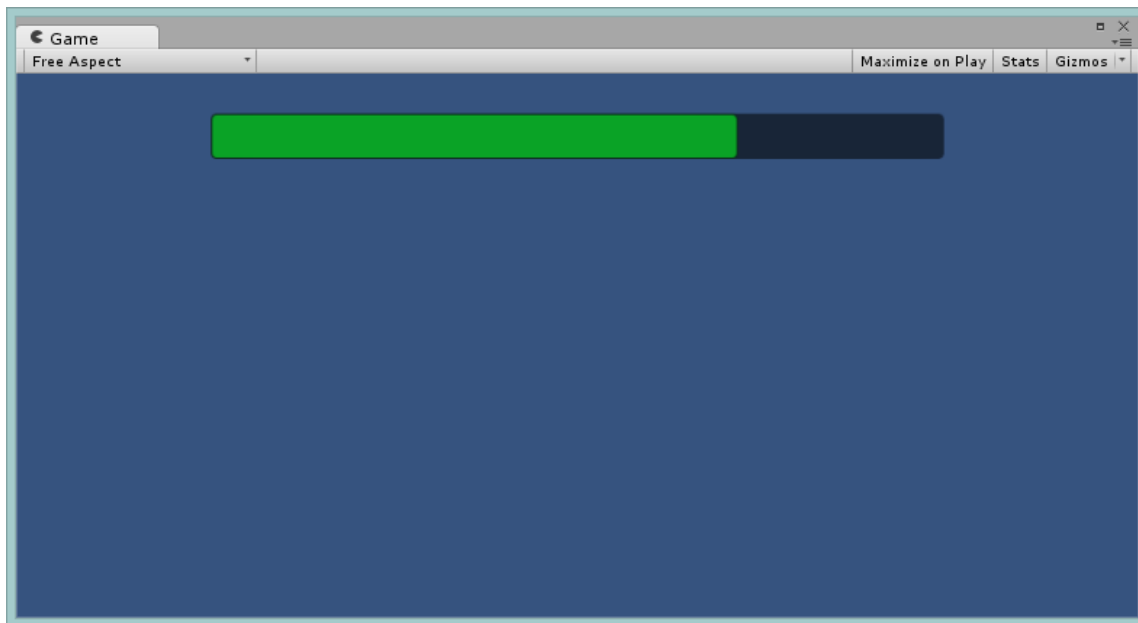
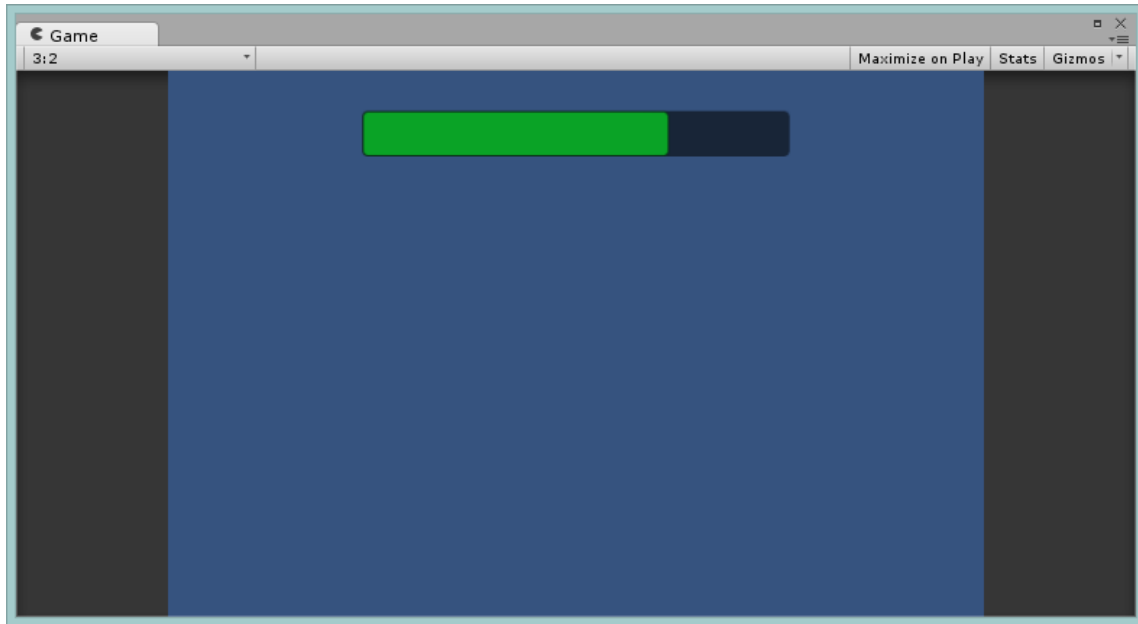
Pivot X 0.5 Y 0.5

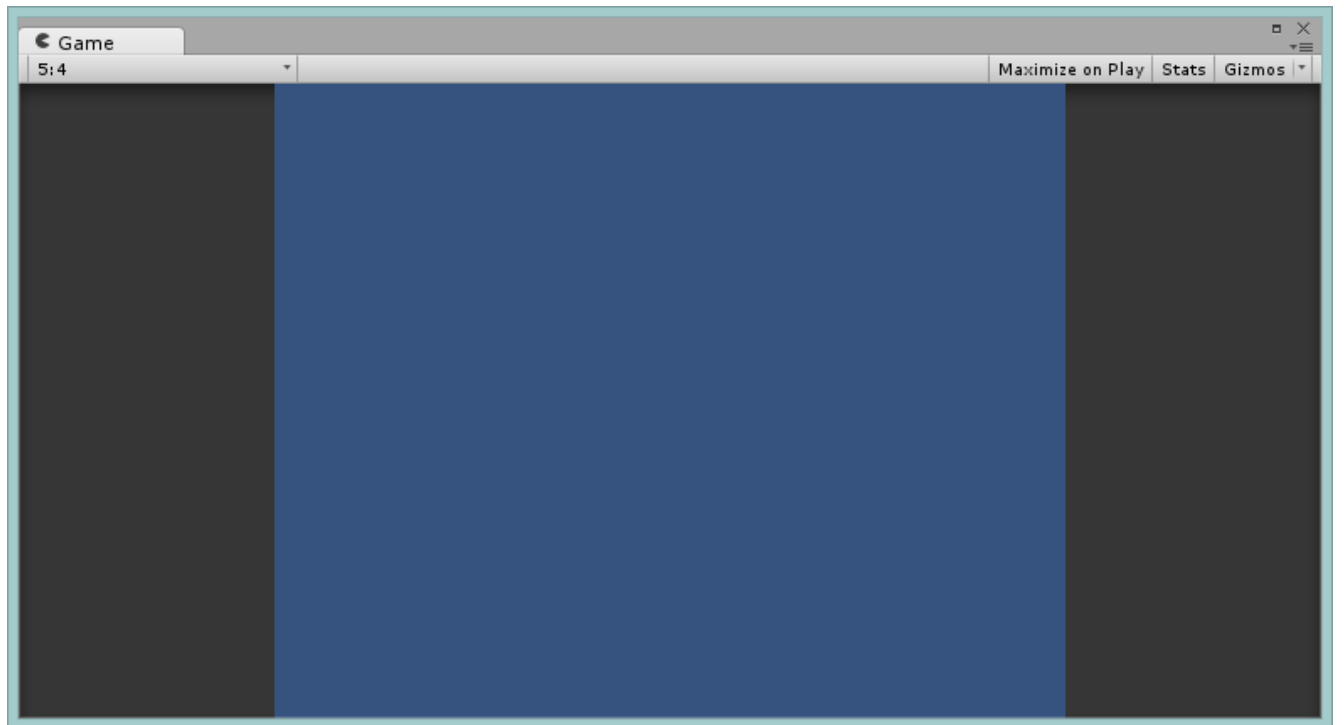
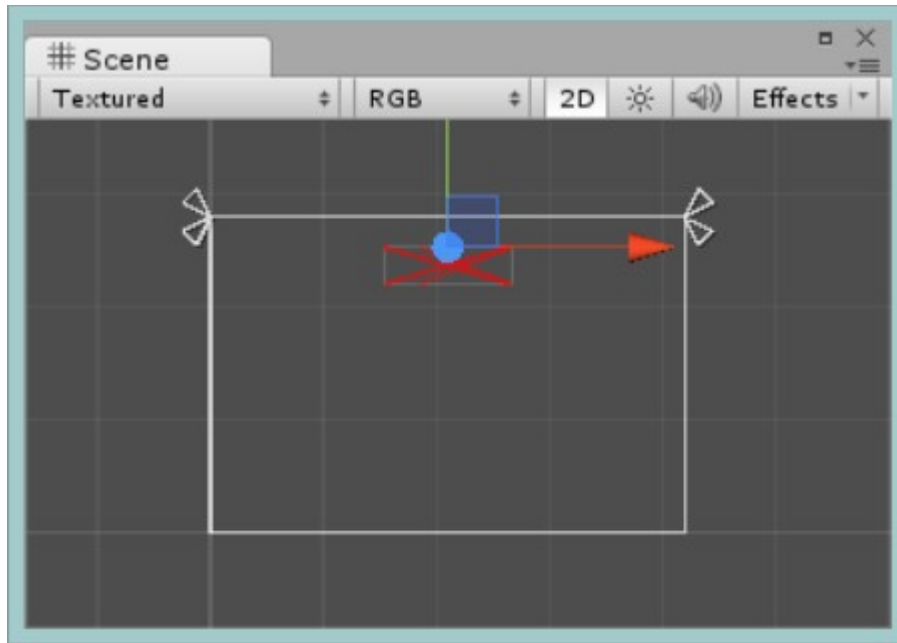
Rotation X 0 Y 0 Z 0

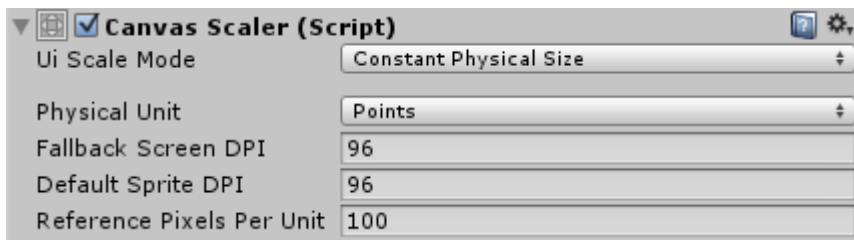
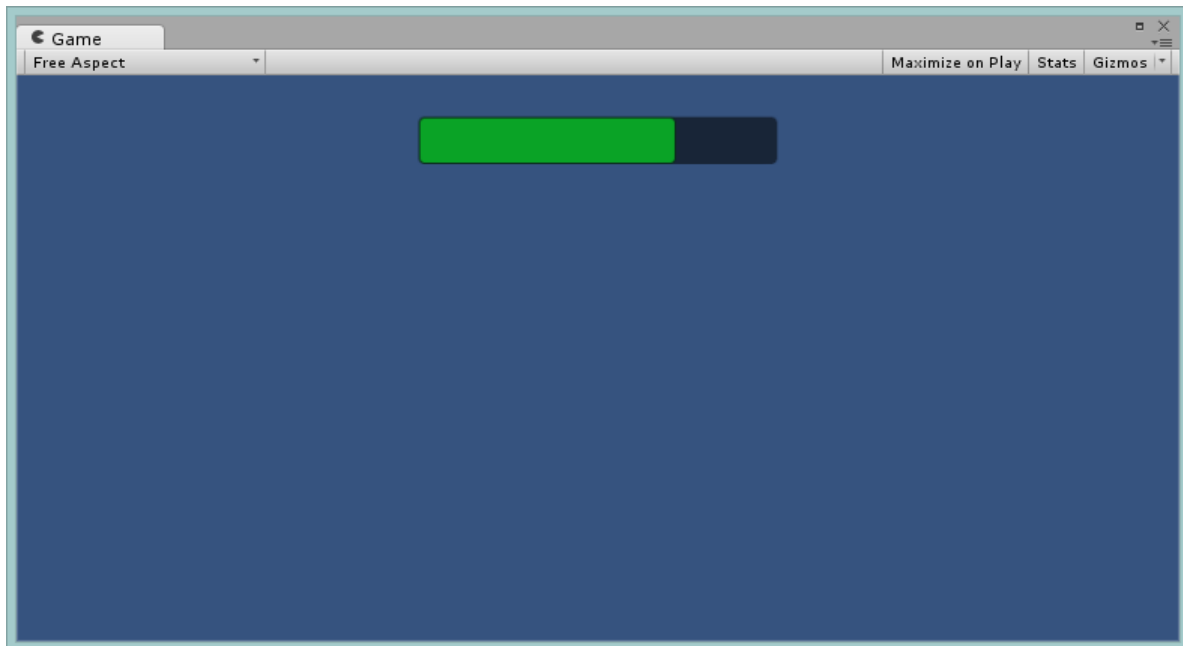
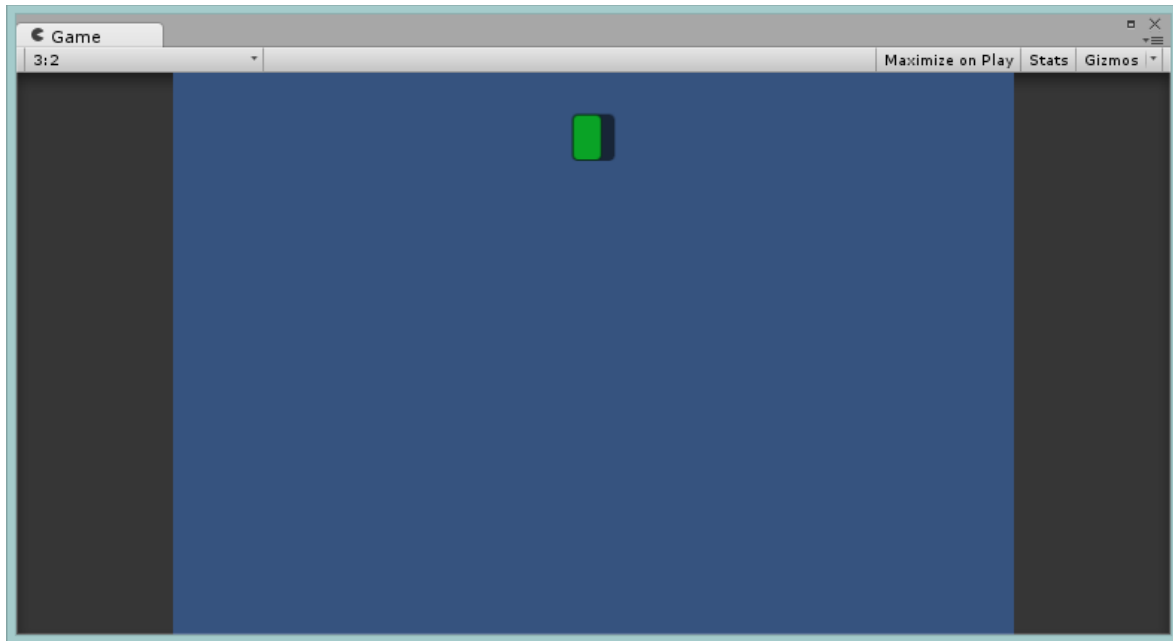
Scale X 1 Y 1 Z 1

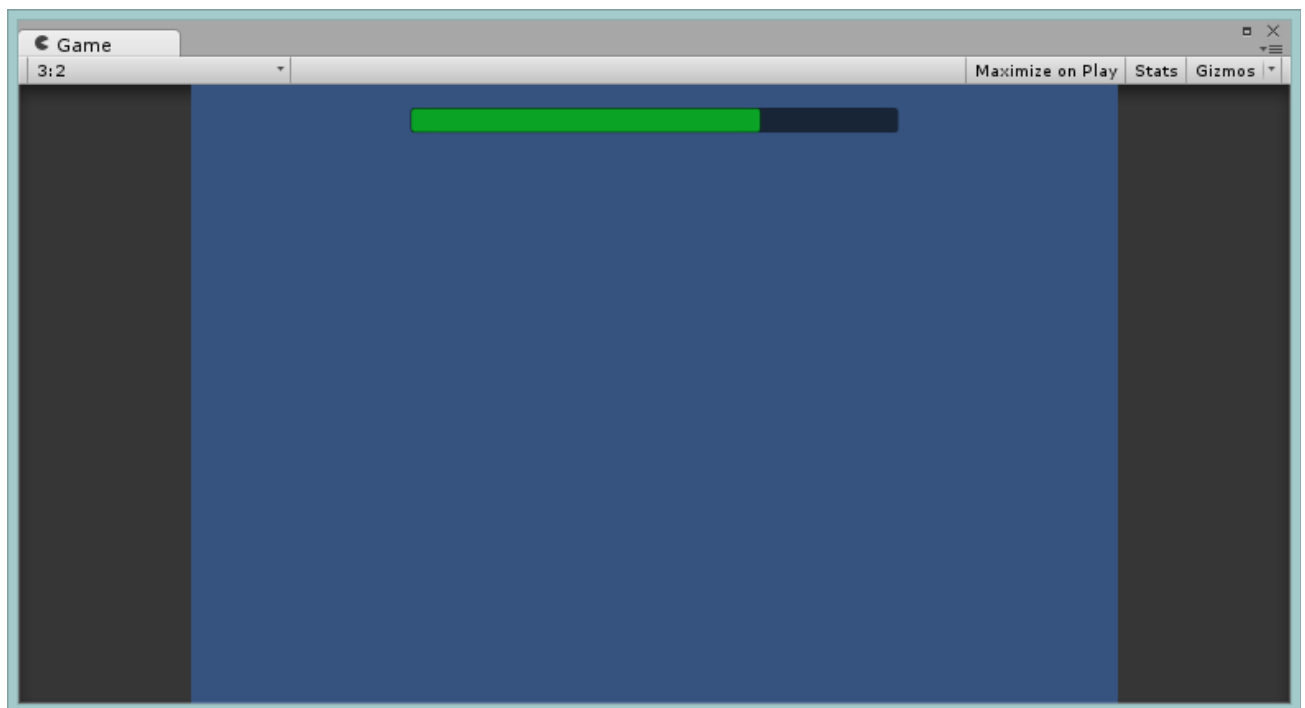
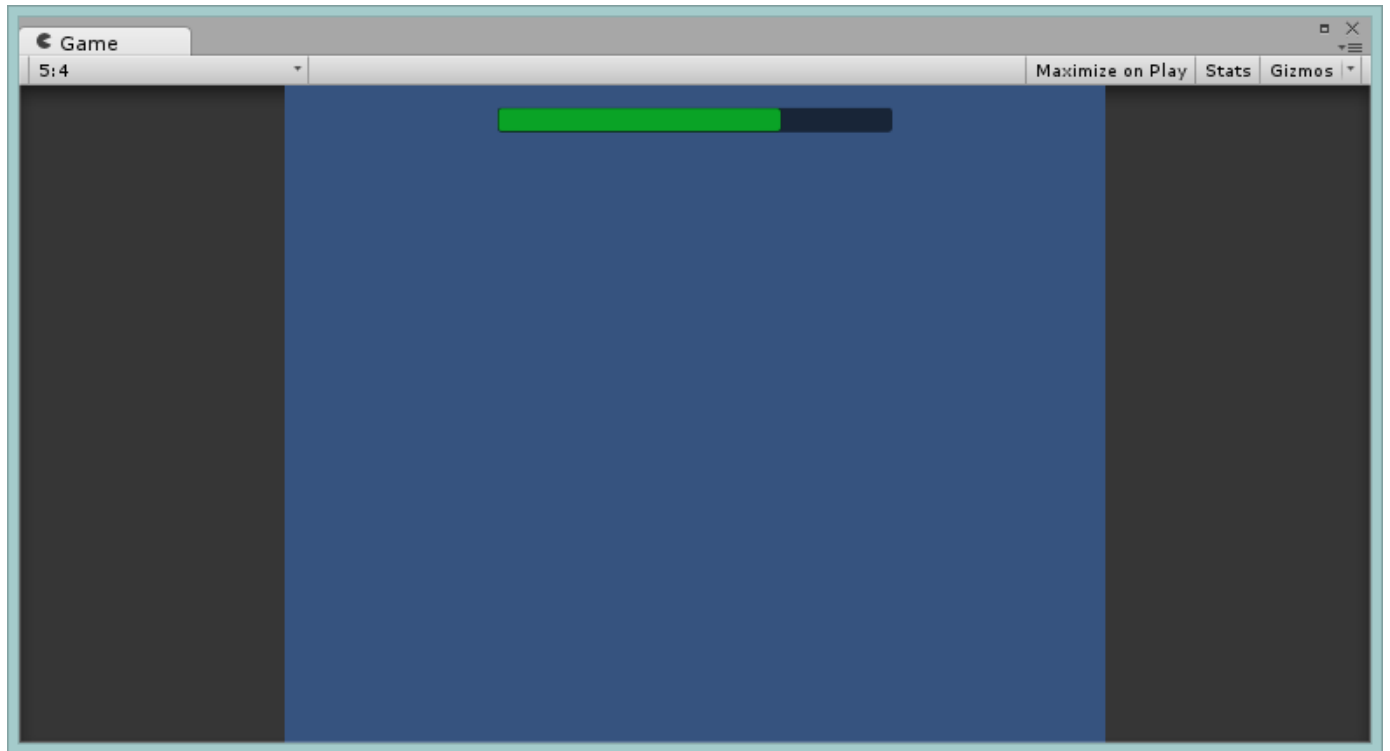
Buttons: [Grid] [R]

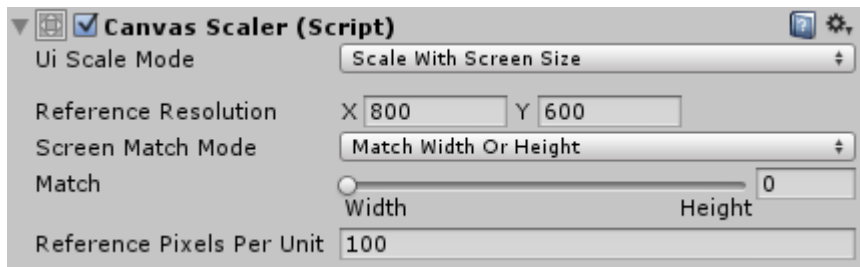
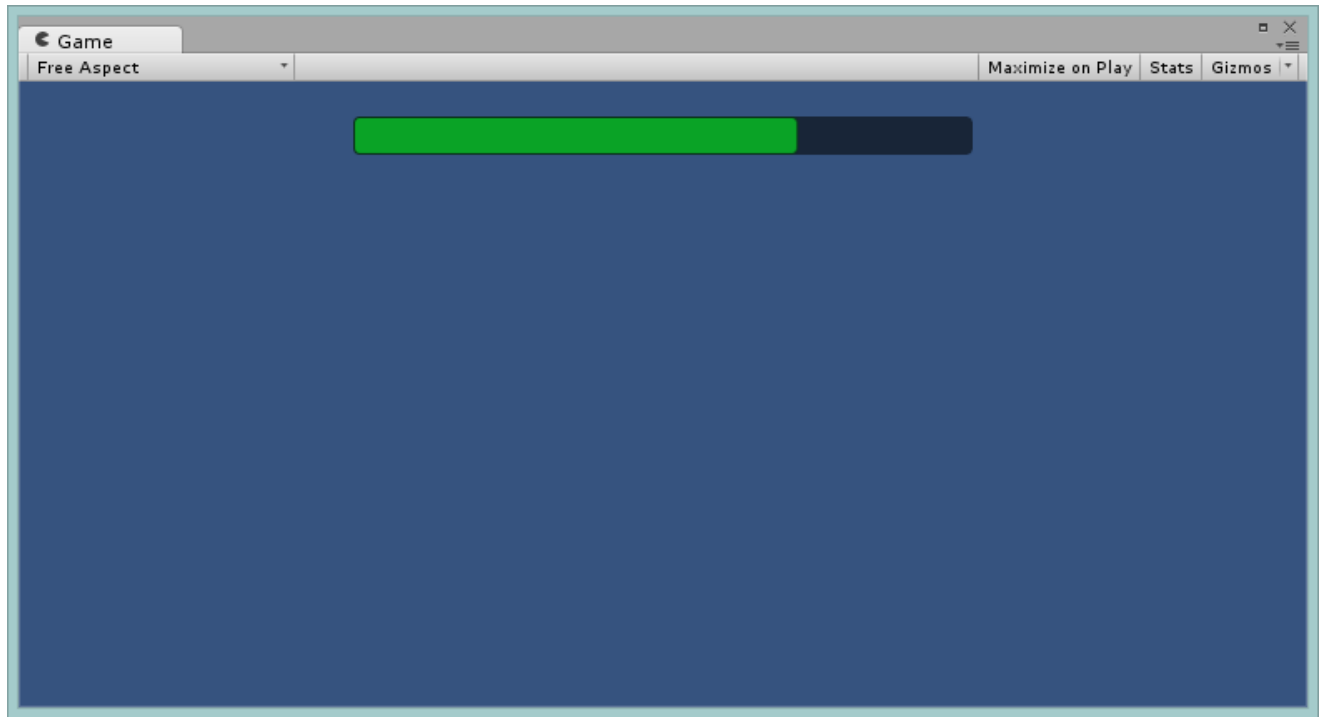


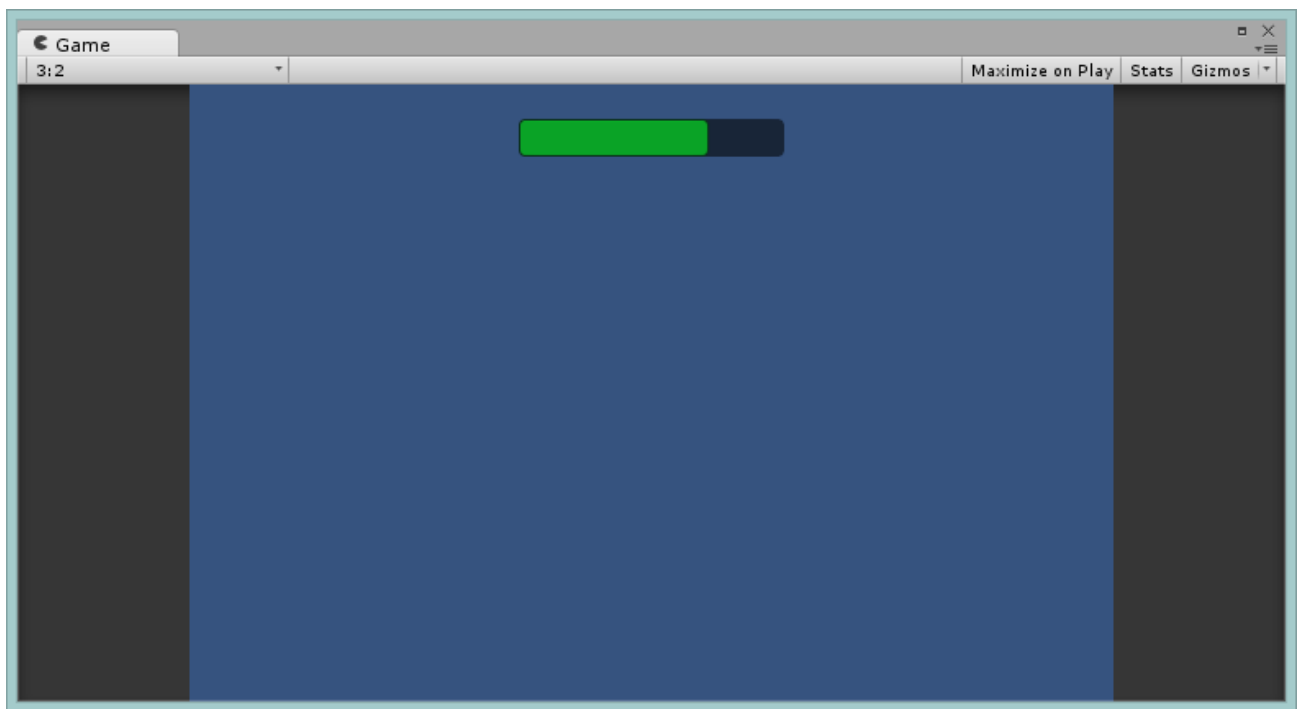
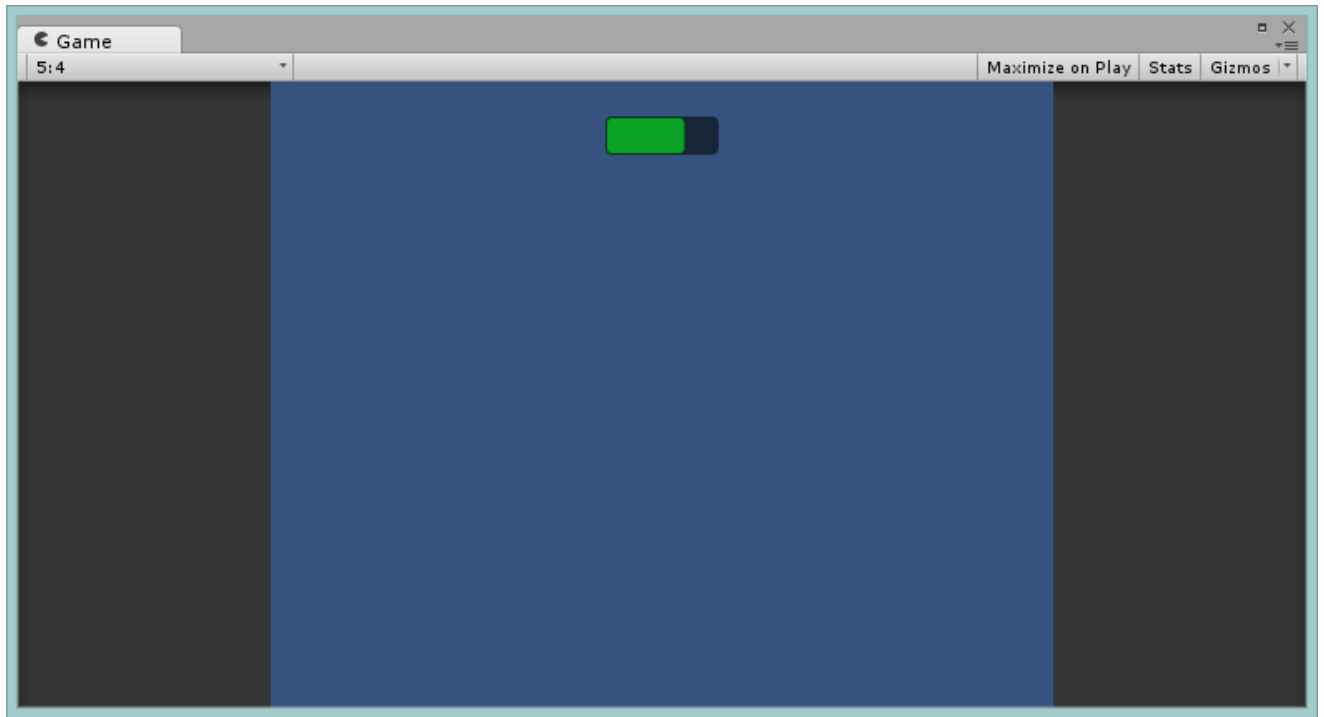


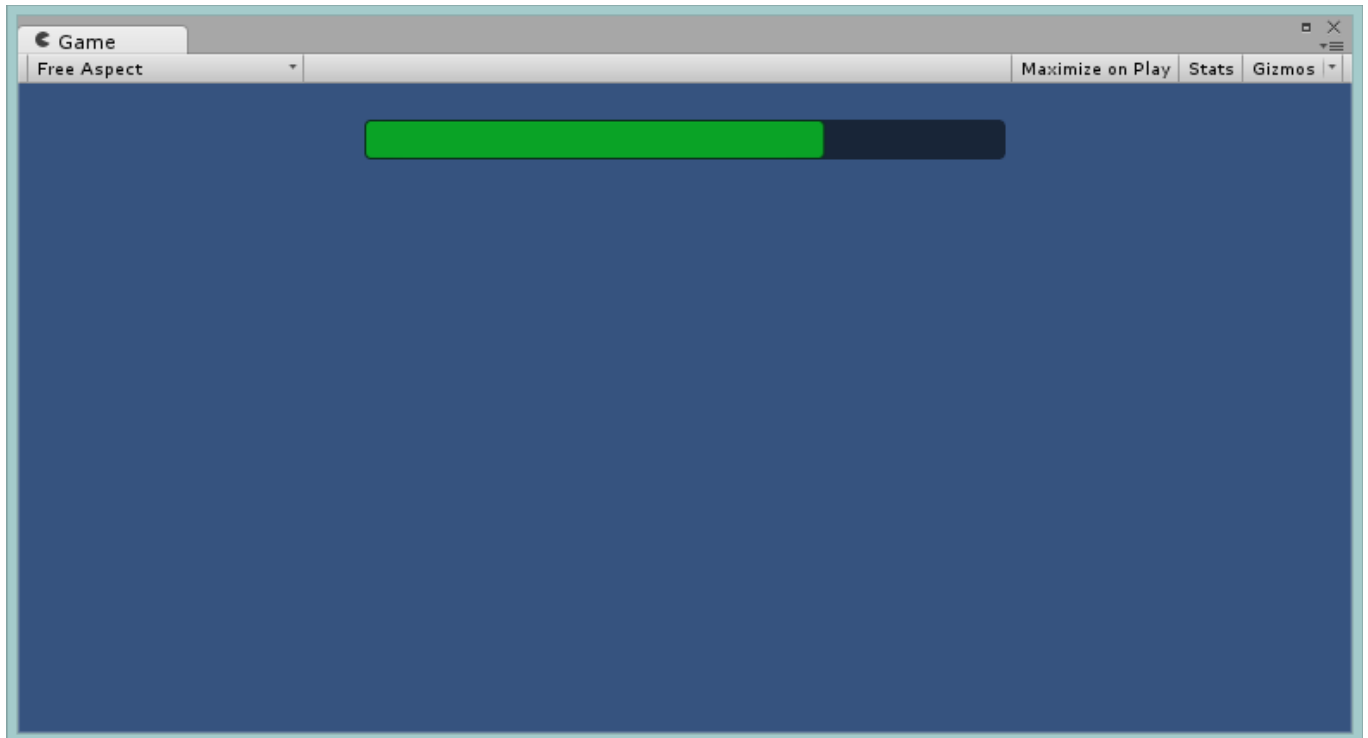












Canvas Scaler (Script)

Ui Scale Mode: Constant Pixel Size

Scale Factor: 1

Reference Pixels Per Unit: 100

Rect Transform

stretch

top

Left	Pos Y	Pos Z
200	-20	0
Right	Height	
200	25	

anchors

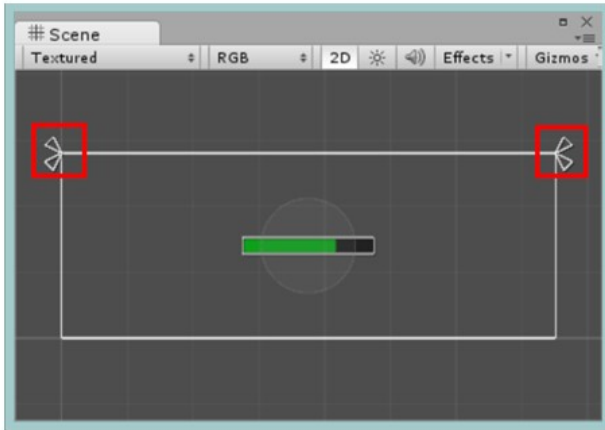
Min	X	Y
	0	1
Max	X	Y
	1	1
Pivot	X	Y
	0.5	0.5

Rotation

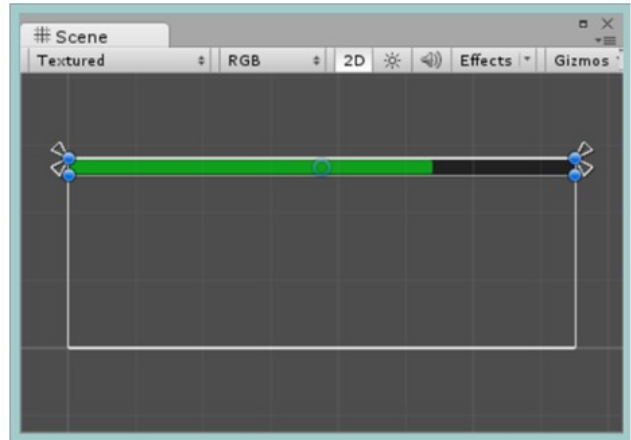
X	Y	Z
0	0	0

Scale

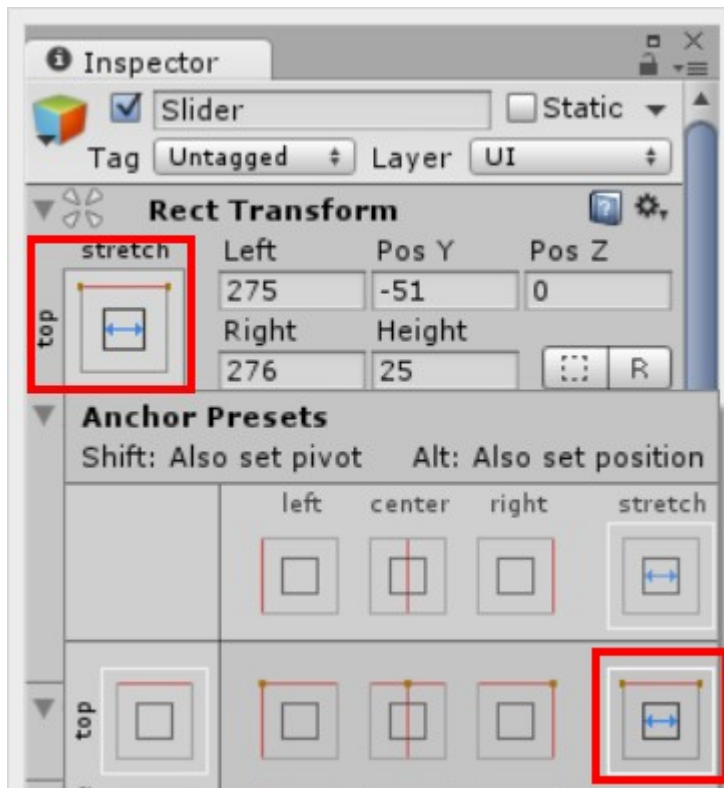
X	Y	Z
1	1	1

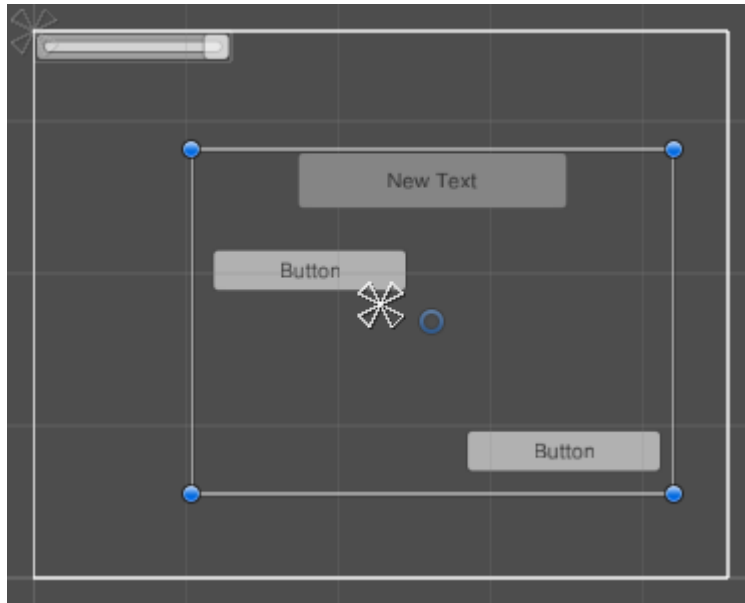
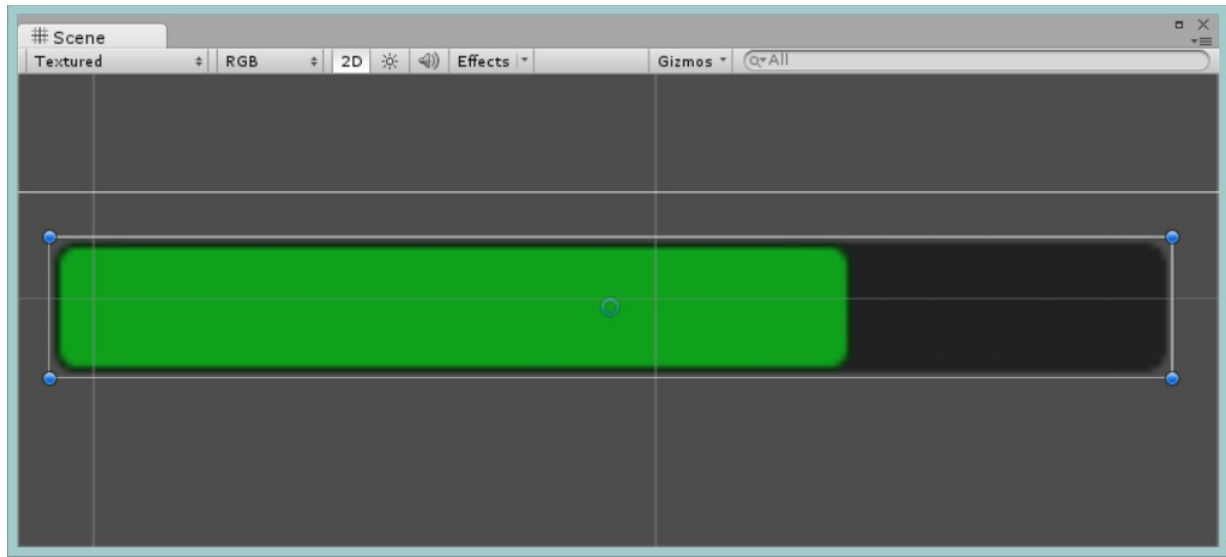


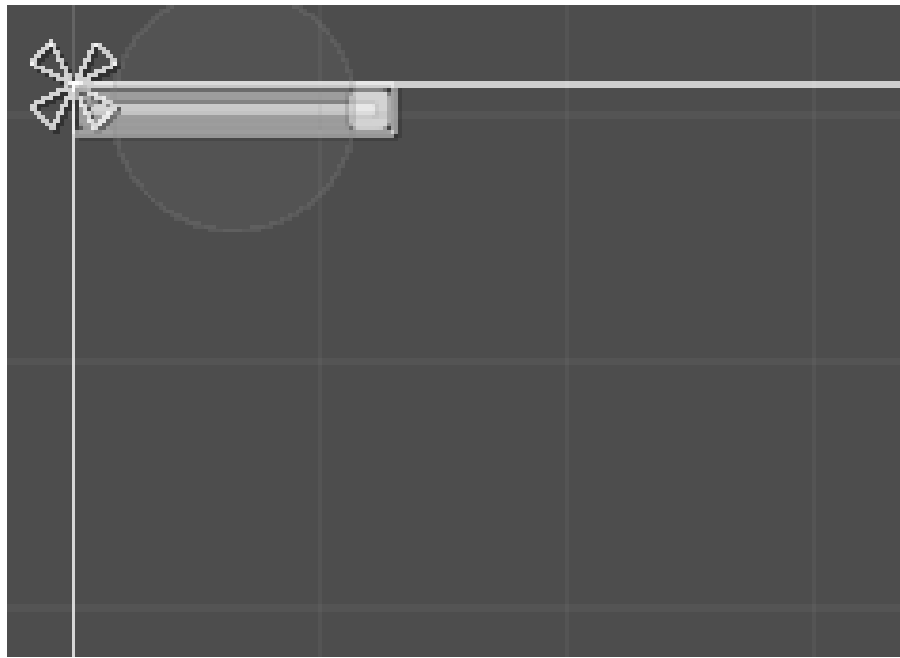
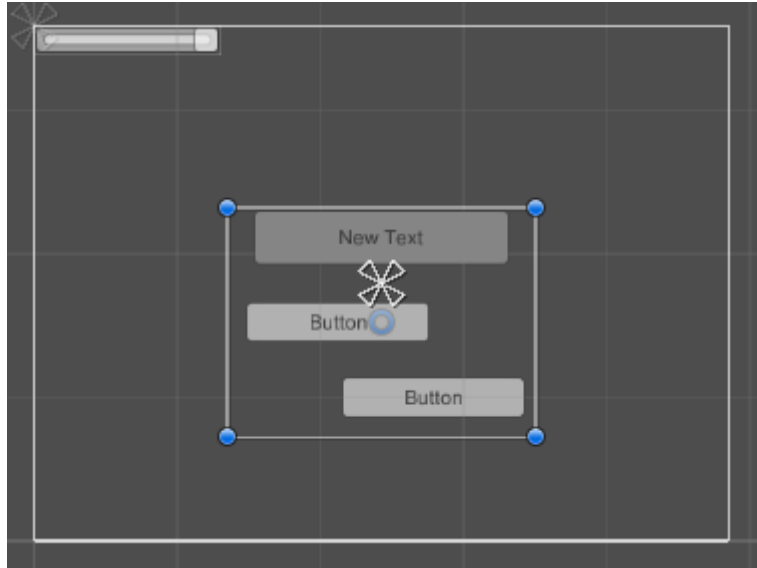
Without Alt – Only Anchors moved

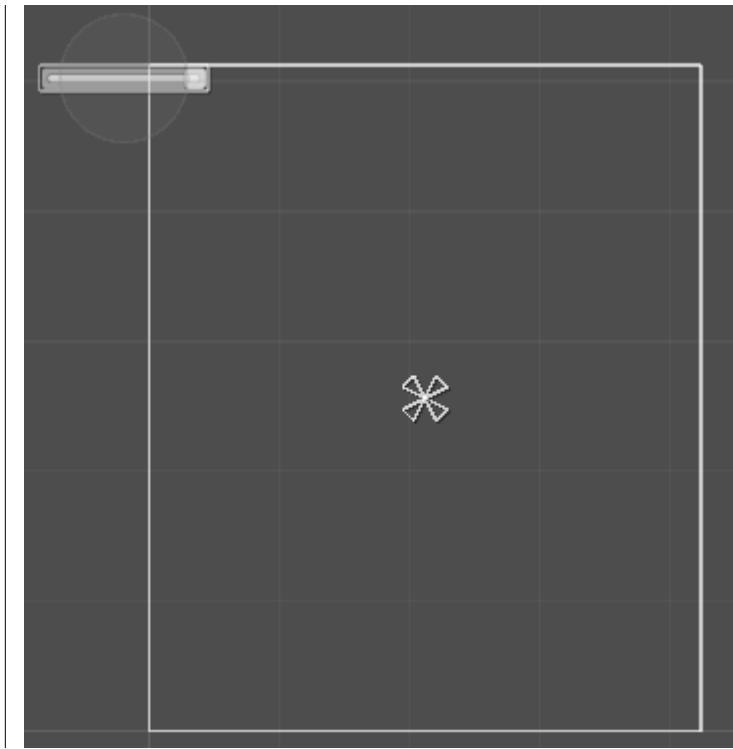


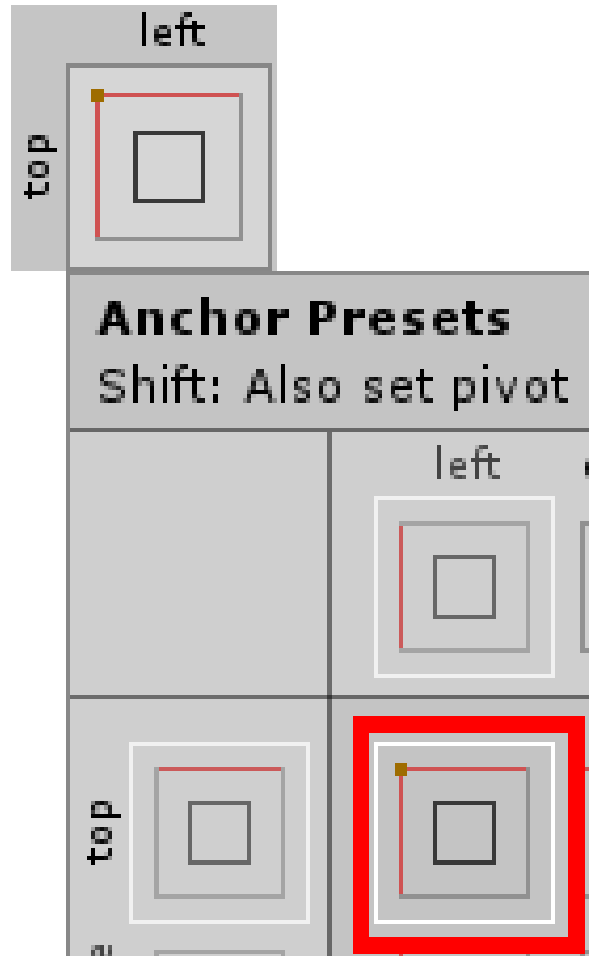
With Alt Pressed, Everything resized











[Chapter 5: Screen Space, World Space, and the Camera](#)



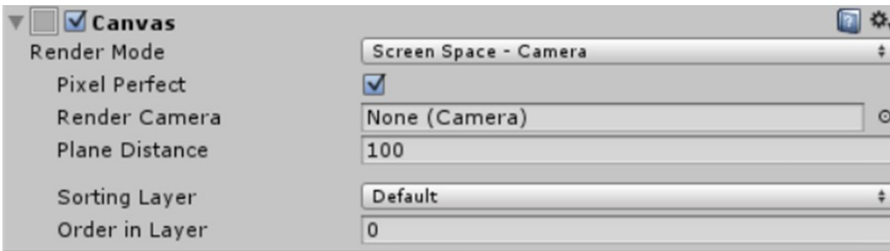
FOV = 1



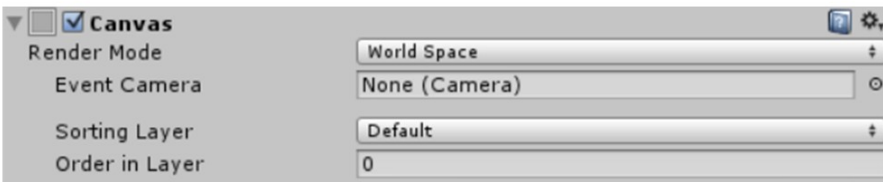
FOV = 130



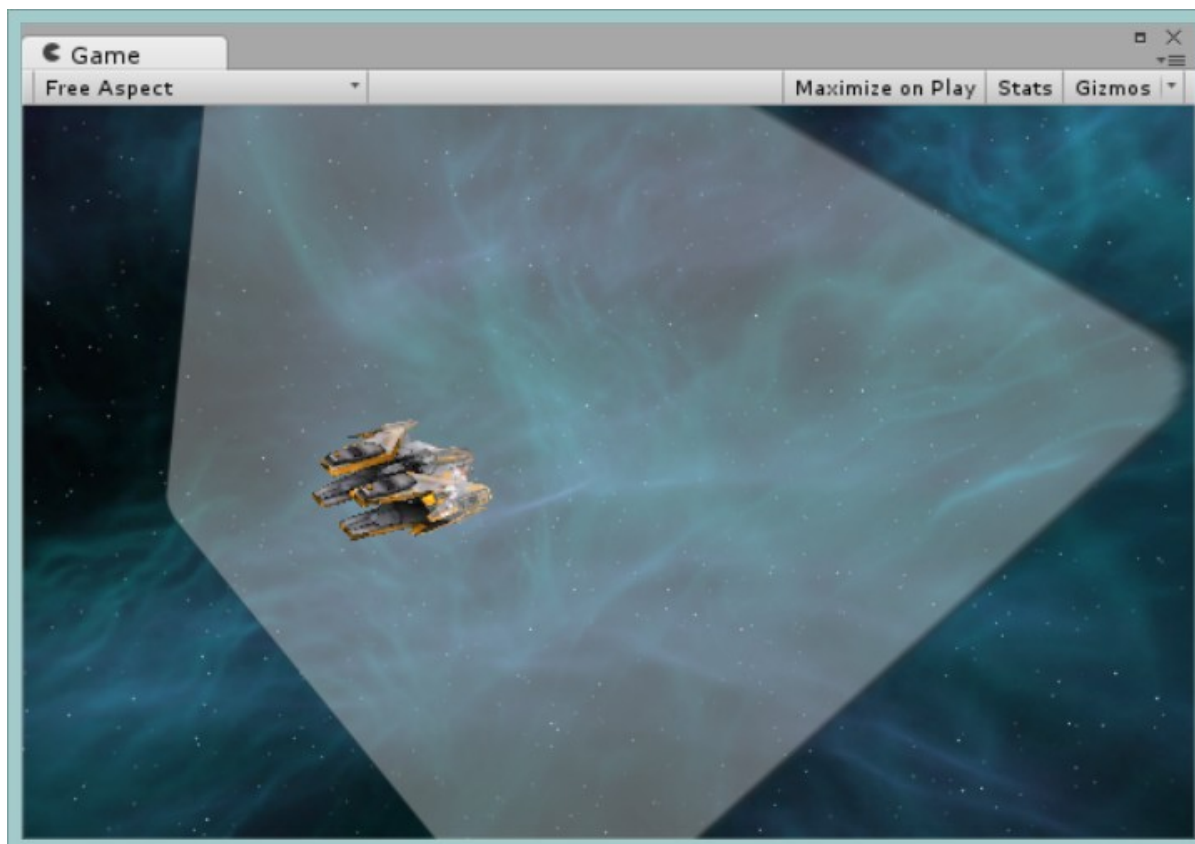
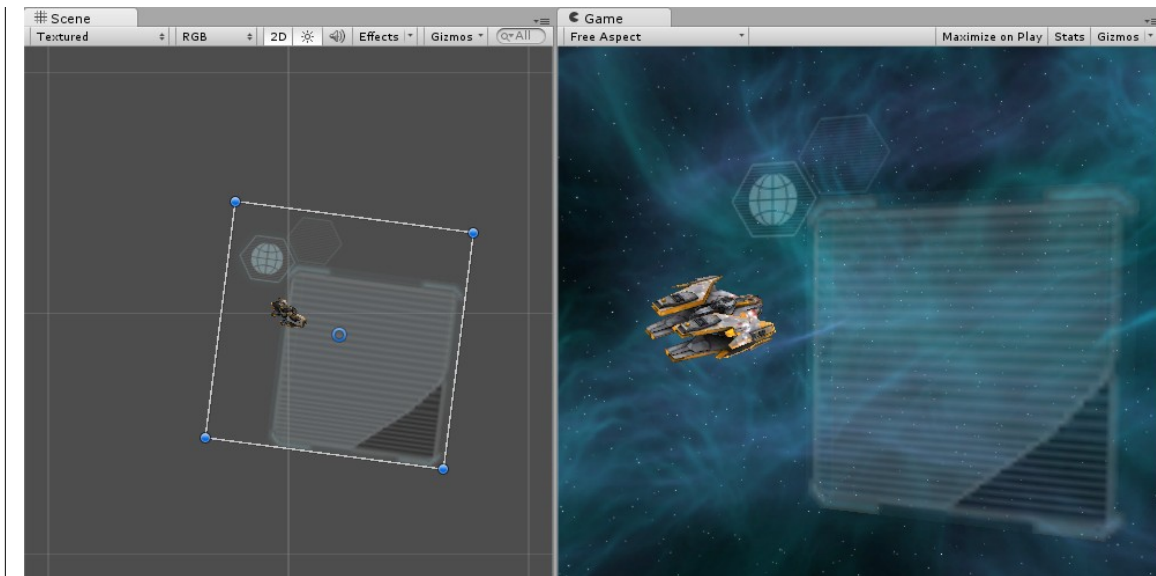
FOV = 160



**Canvas
ScreenSpace - Camera**



**Canvas
World Space**

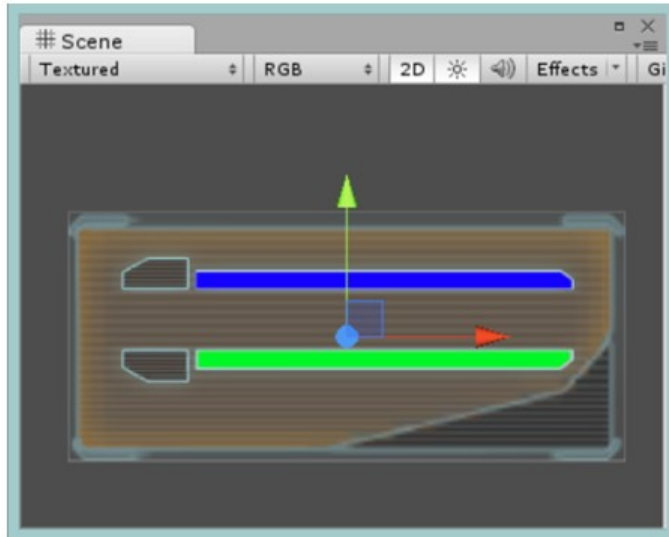




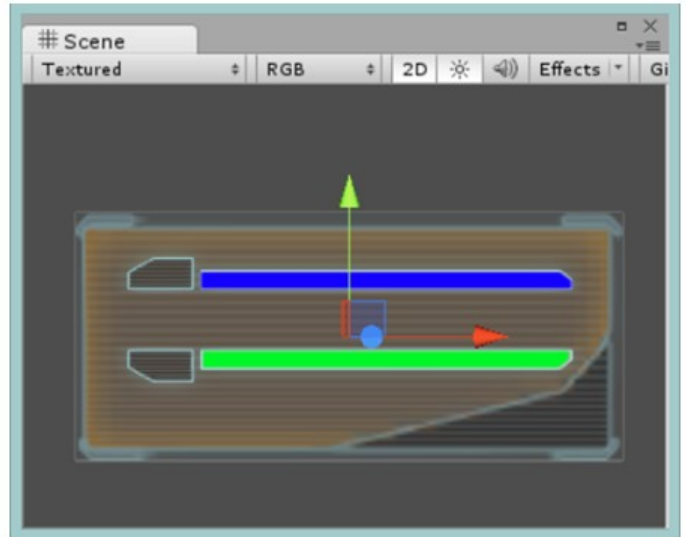
Welcome Commander

I hope you like your new ship because I don't think
you are going to keep it for much longer

Prepare to be destroyed

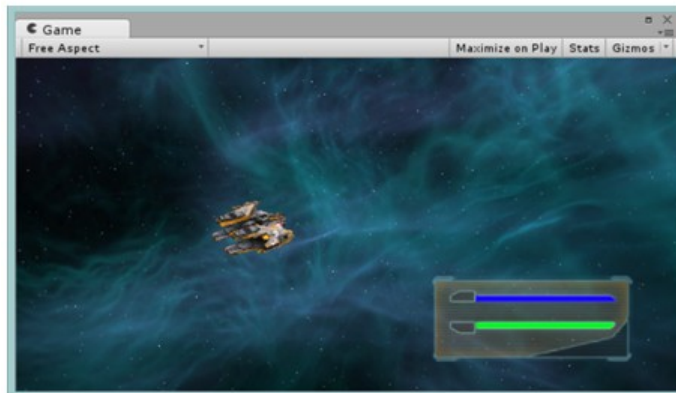


Scene view with no rotation



Scene view with rotation applied

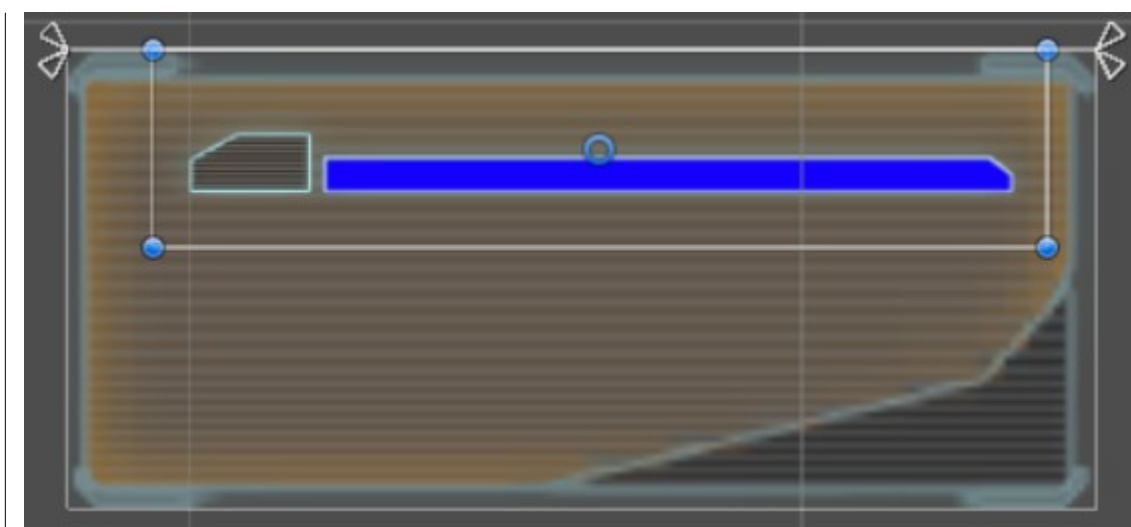
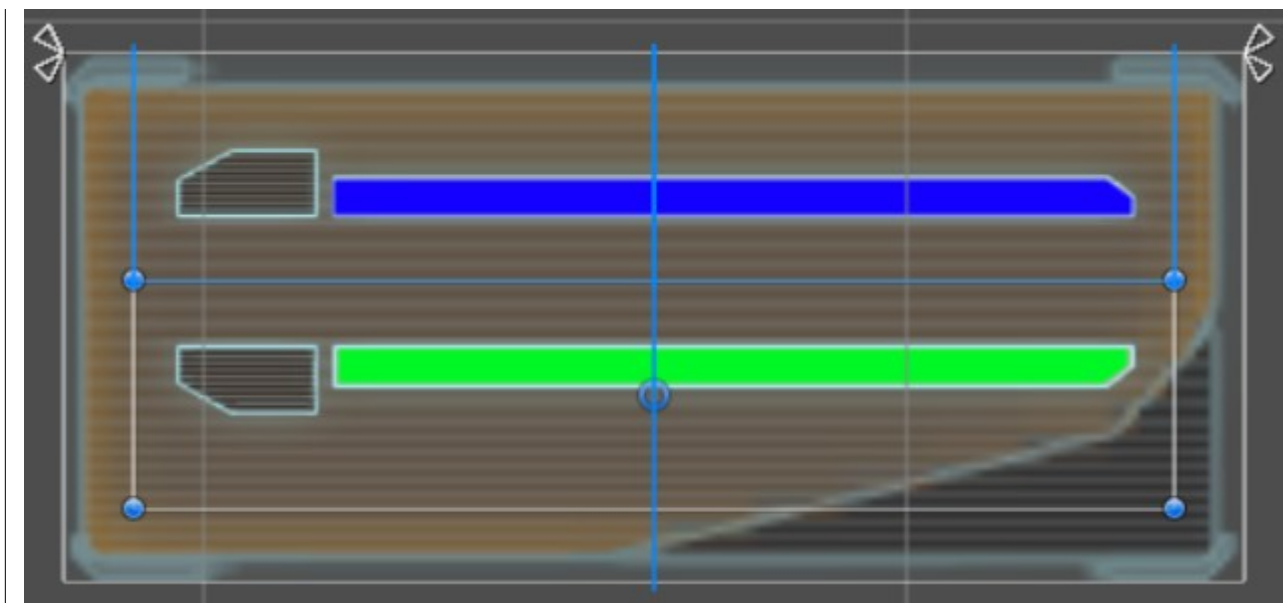
Not much to see here....

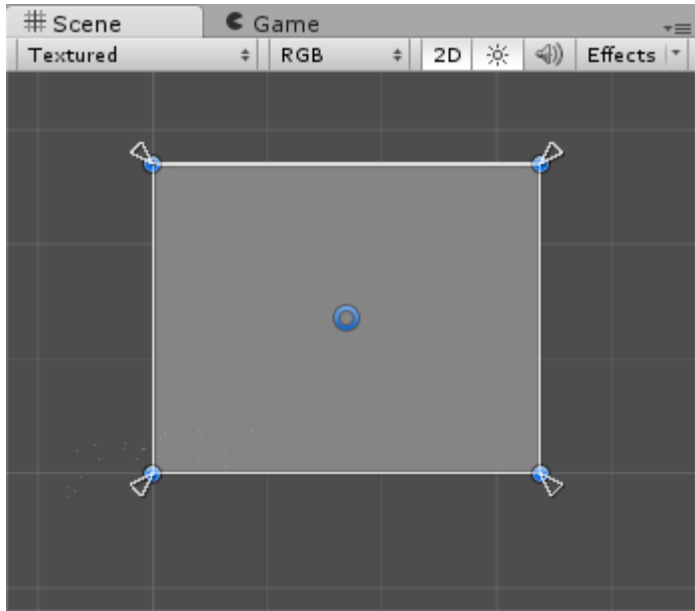
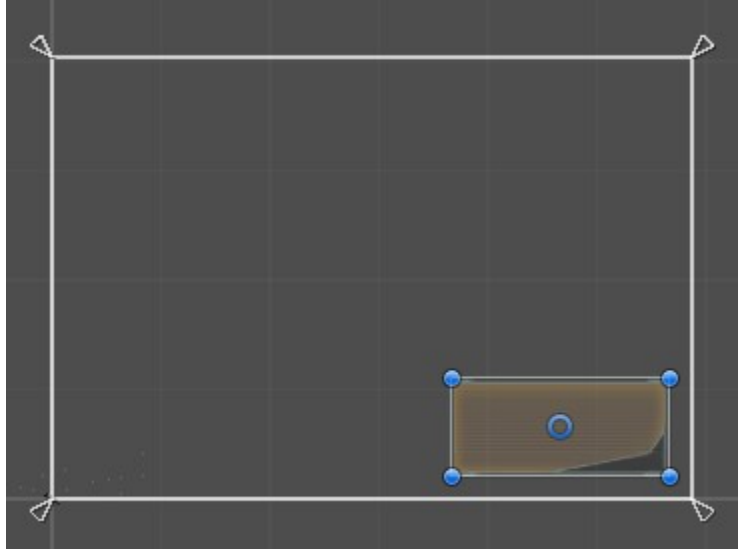


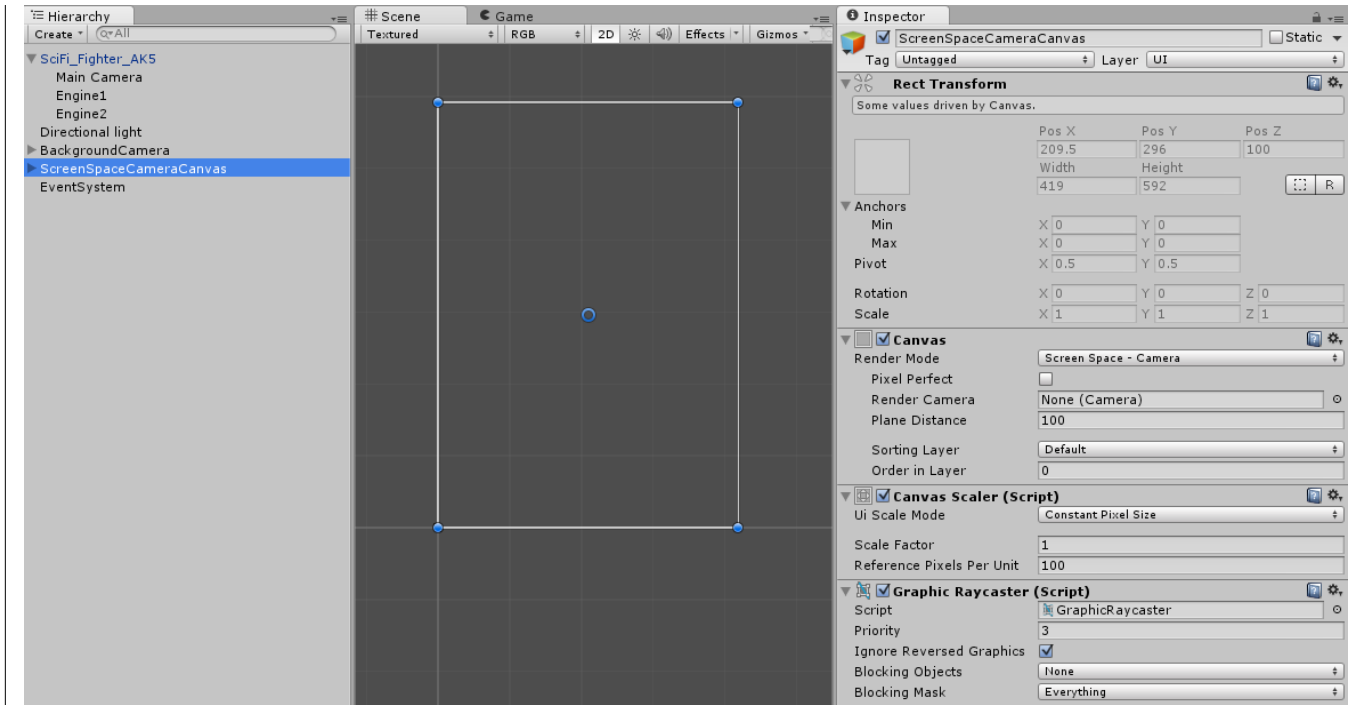
**Game view with no rotation on
the Health UI**

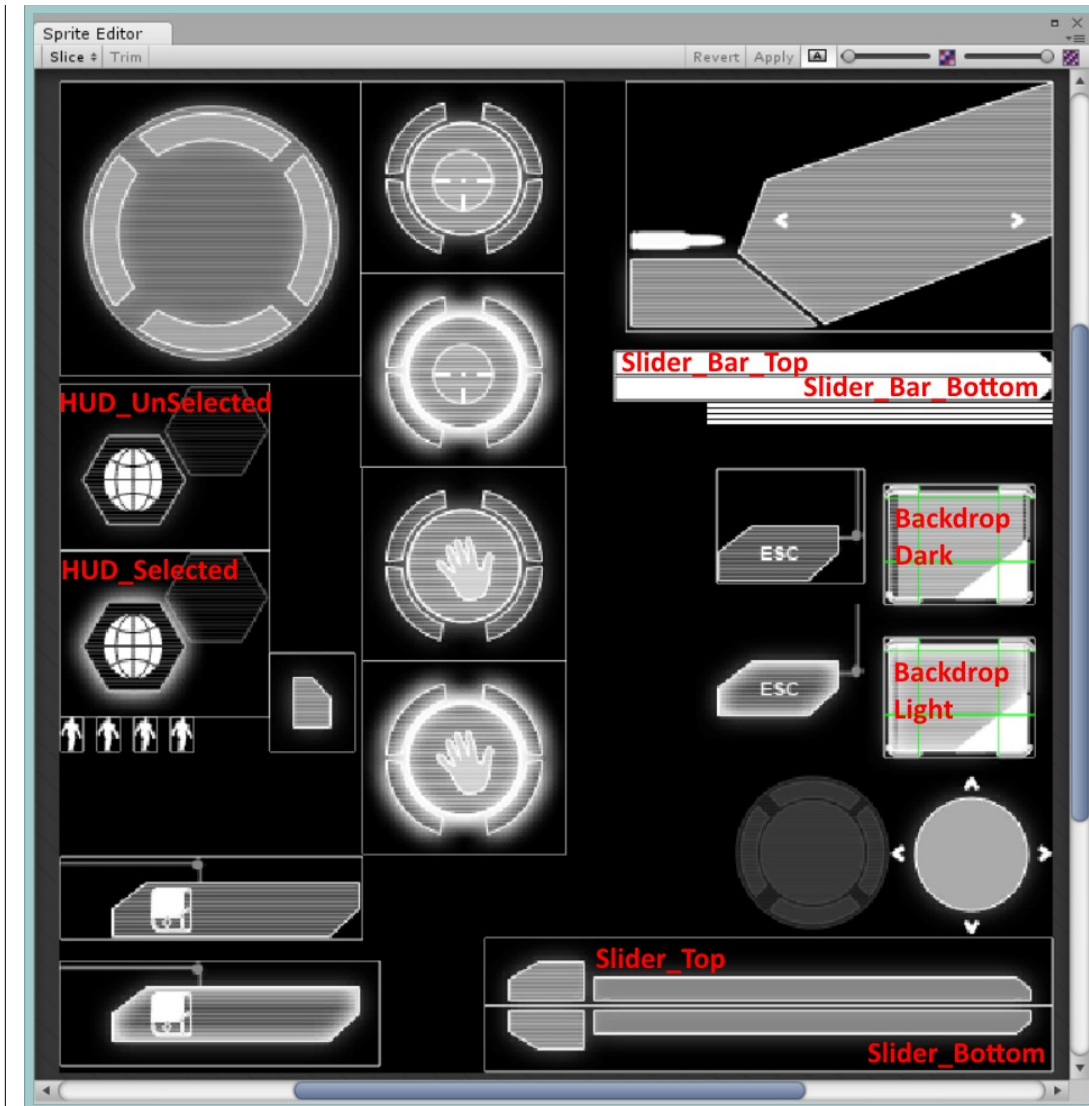


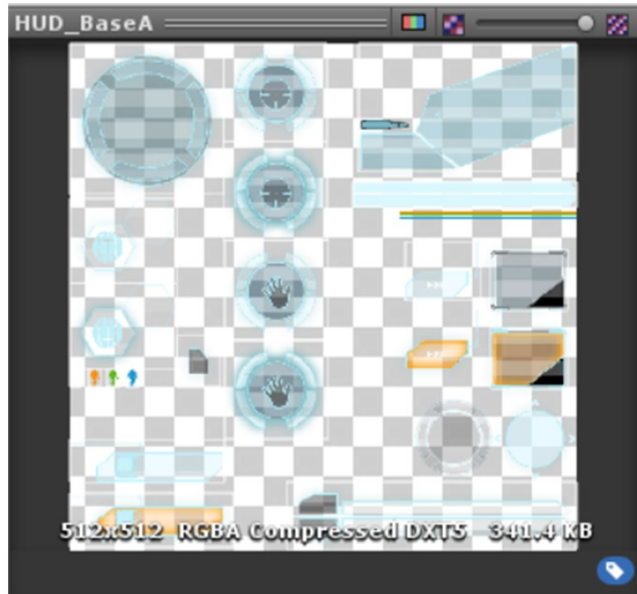
Woah, look how deep that goes!







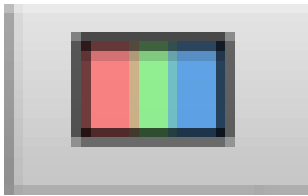




Default color view

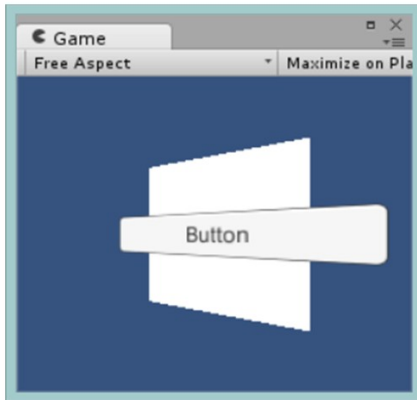


Alpha mask view

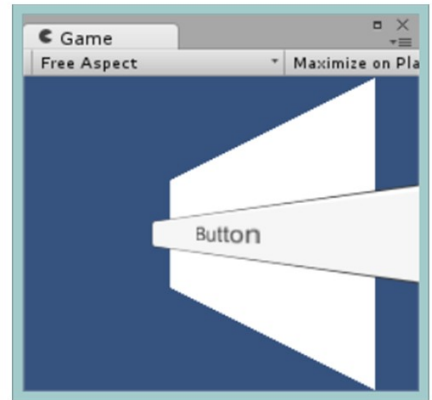




FOV = 1




FOV = 130



FOV = 160

[Chapter 6: Working with the UI Source](#)



Unity-Technologies
UI

ACTIONS

- Clone**
- Compare
- Fork

NAVIGATION

- Overview

Overview

HTTPS `hg clone https://ddreaper@bitbucket.`

Need help cloning? Visit [Bitbucket 101](#).

Clone in SourceTree

Atlassian SourceTree is a free Git and Mercurial client for Windows.

Fork Unity-Technologies / UI

You can also create a patch queue

Name*

Description

It's encouraged to write a little about why you are forking.

Access level This is a private repository

Permissions Inherit repository user/group permissions

Project management Issue tracking Wiki

Repository integrations


HipChat Enable HipChat notifications

Fork at

Fork repository Cancel

What is a fork?

Forking is a great way to contribute to a project even though you don't have write access. Check out our documentation for more details.



Unity Technologies UI repository overview on Bitbucket.

Overview

Last updated	2014-11-23	2 Branches	4 Tags
Website	http://unity3d.com/	11 Forks	22 Watchers
Language	C#		
Access level	Read		

README

The Unity UI system is open and available for use in your games and applications. This document details how to get it up and running on your computer and start modifying the code!

What license is the UI system shipped under

Like the rest of the Unity open source projects, the UI system is released under an MIT/X11 license.

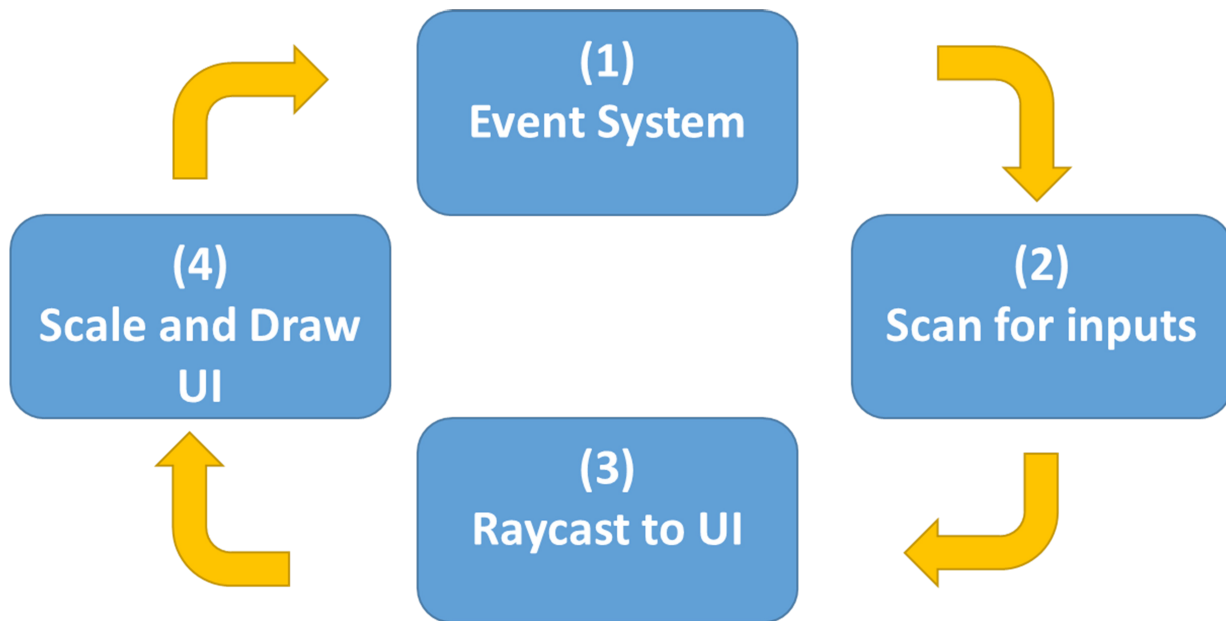
How do I get started?

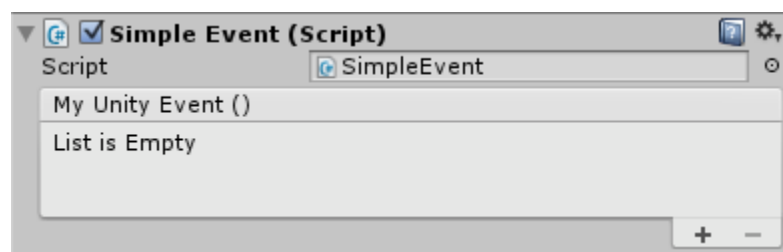
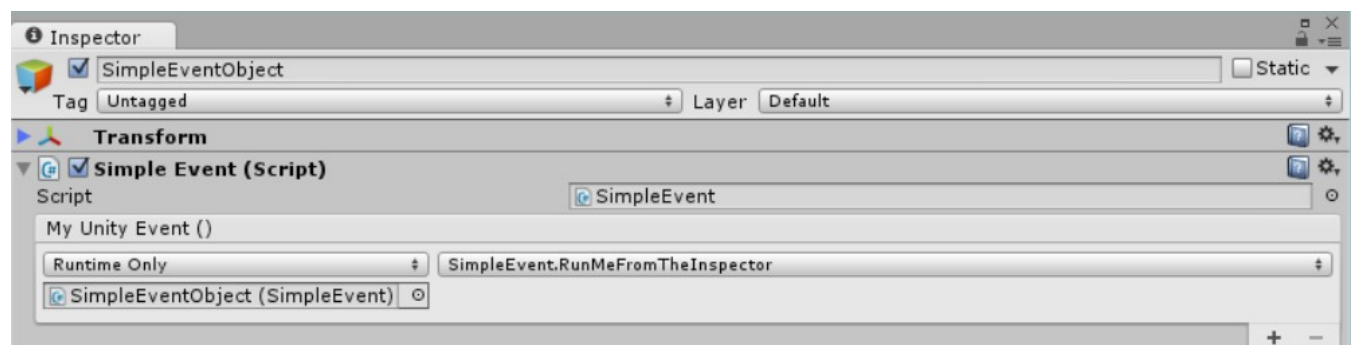
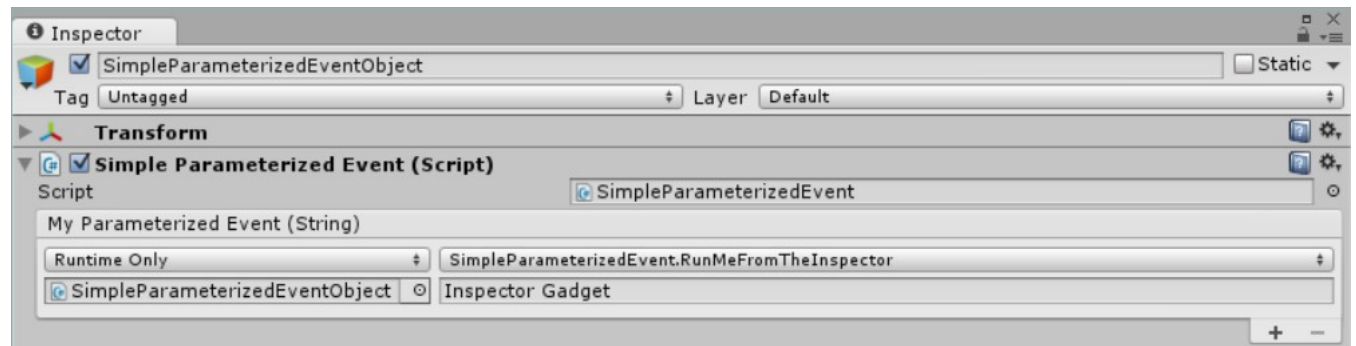
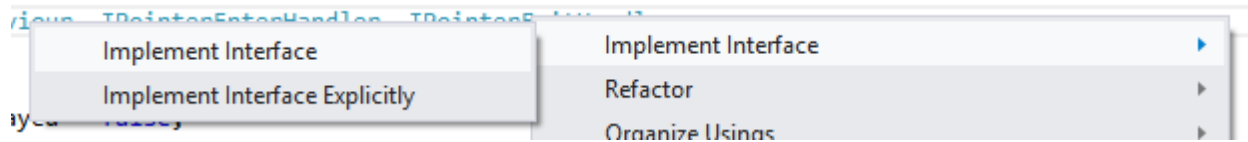
- Clone this repository onto a location on your computer.
- Configure your IDE for the Unity coding standard, look in the .editorconfig file for more information
- Open the project in Visual Studio or MonoDevelop
 - If you are using MonoDevelop
 - Ensure you enable XBuild (Preferences -> Projects -> Build -> "Compile projects using MSBuild/XBuild")
 - You may need to restart MonoDevelop
 - Build the solution
- A folder will be created in the root directory called "Output", the generated dlls will output here in the correct folder structure
 - If you wish to use these dlls
 - Locate your Unity install location
 - Windows: Copy the contents of Output folder to: Data\Unity\Extensions\Unity\GUI\System\UNITY_VERSION\
 - OSX: Copy the contents of Output folder to: Unity.app\Contents\Unity\Extensions\Unity\GUI\System\UNITY_VERSION\
- If you want the dlls to copy automatically on build
 - For each visual studio project file
 - Open the file in a text editor
 - Locate the section: <Target Name="AfterBuild">
 - Follow the instructions in the comments

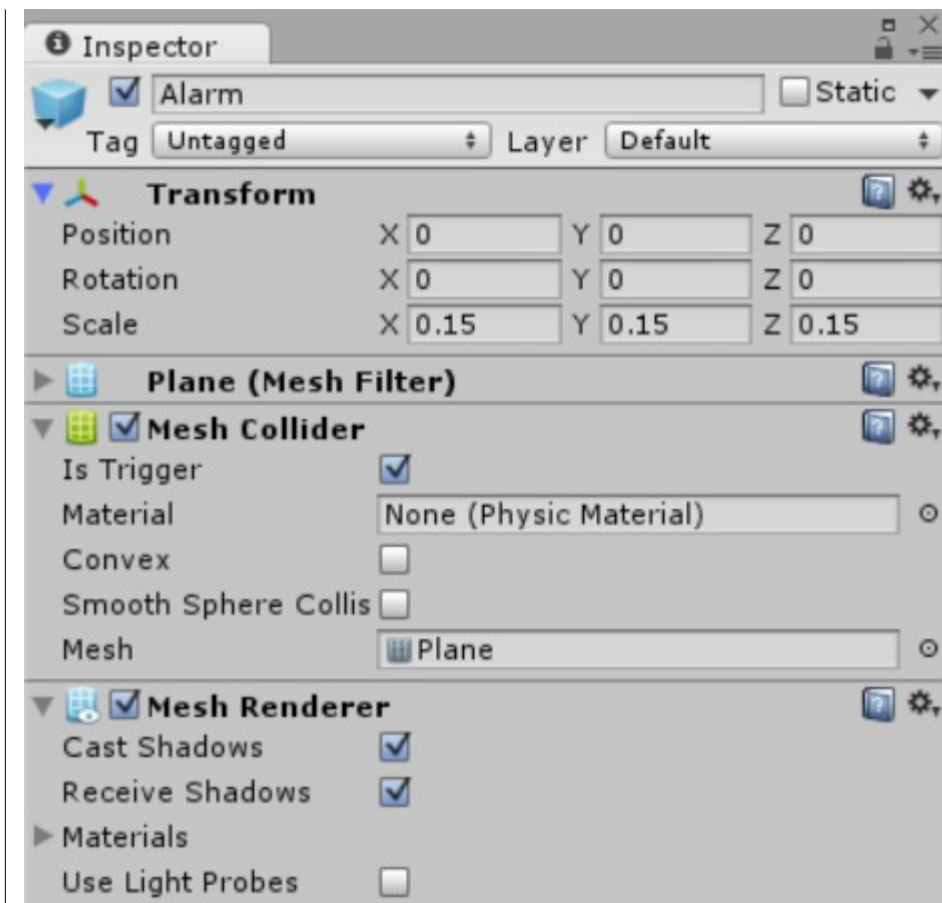
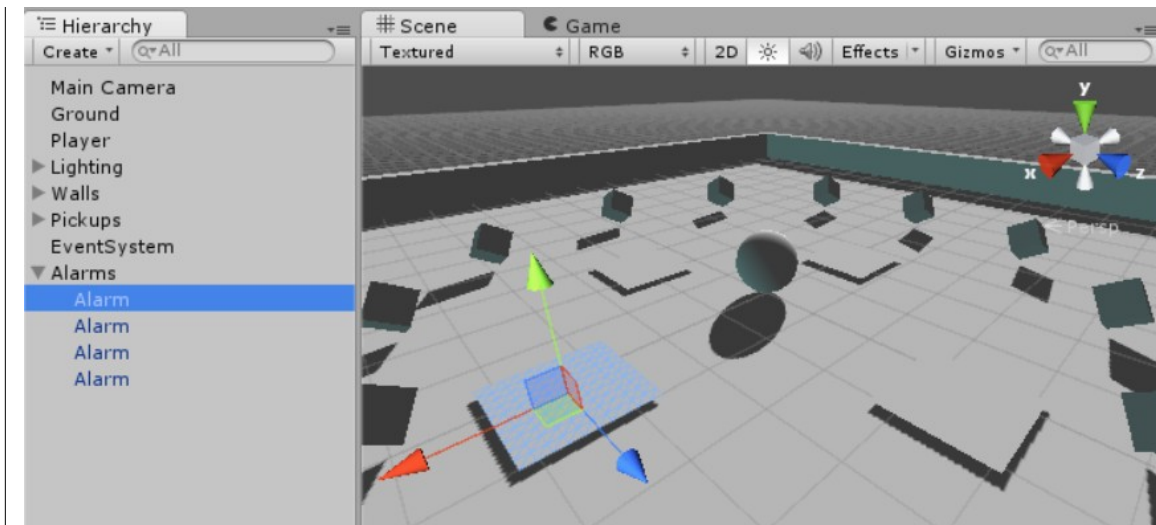
Will you be taking pull requests?

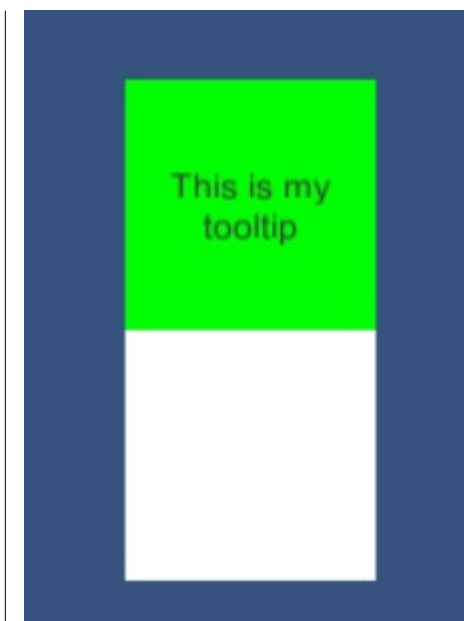
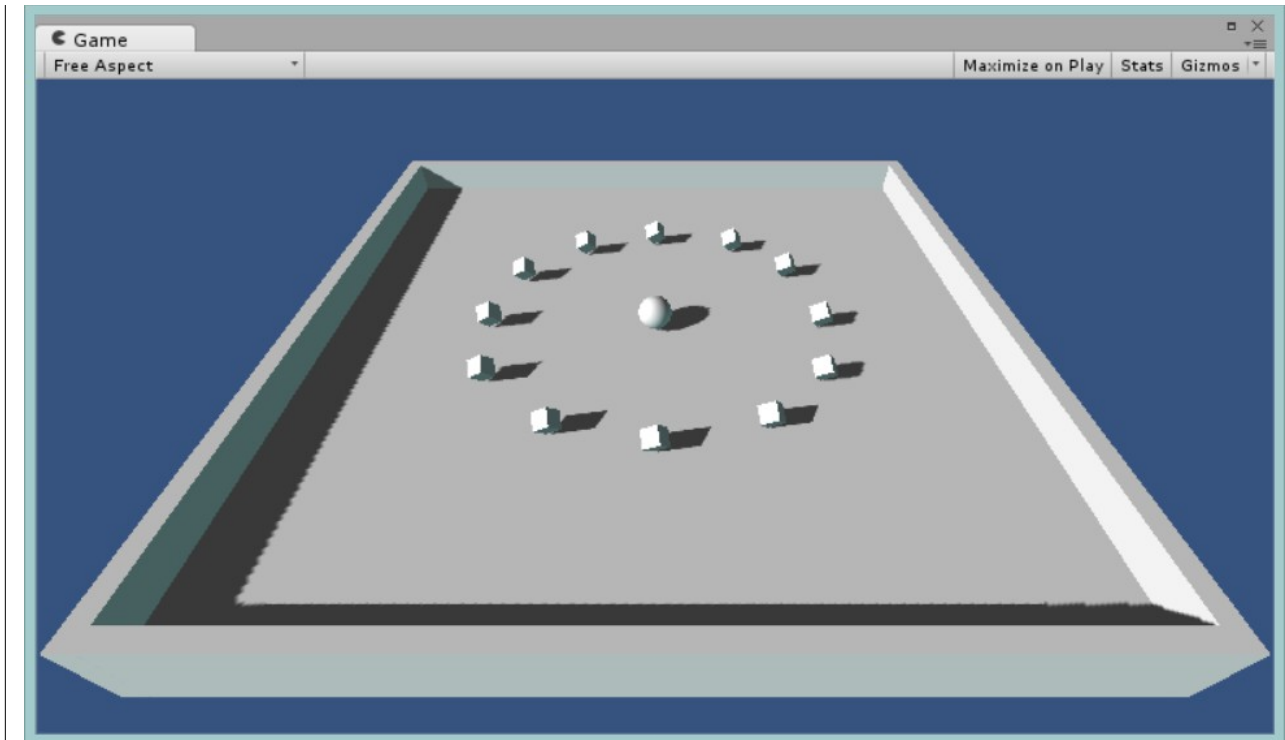
Recent activity

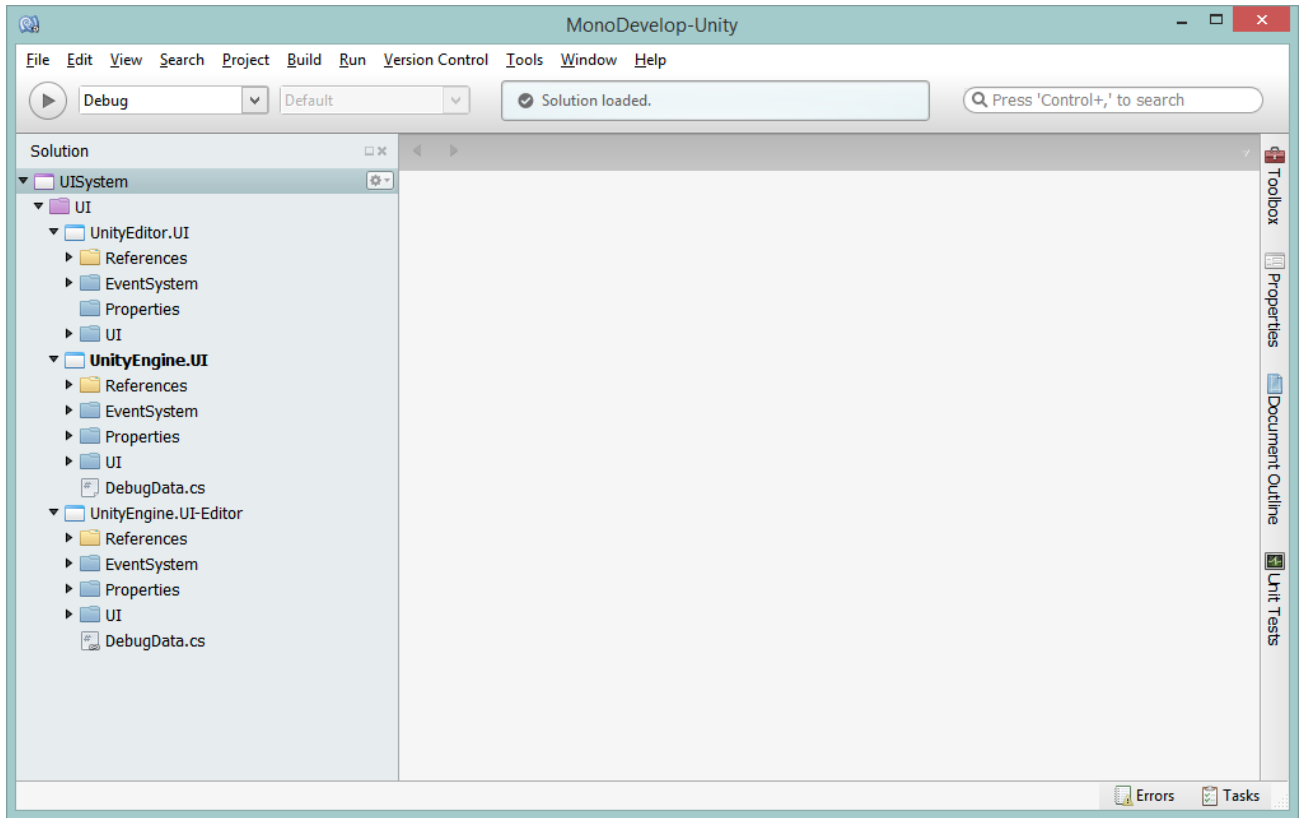
- Issues to custom Text. Pull request #4 created in Unity-Technologies/UI. RyoheiTokimura - 3 hours ago
- An example on how the Description att... Pull request #2 commented on in Unity-Technologies/UI. lonacoder - yesterday
- An example on how the Description att... Pull request #2 commented on in Unity-Technologies/UI. Tim Cooper - yesterday
- An example on how the Description att... Pull request #2 declined in Unity-Technologies/UI. Tim Cooper - yesterday
- Fix for issue #650120. Pull request #3 created in Unity-Technologies/UI. Lior Tali - 2 days ago
- 2 commits. Pushed to Unity-Technologies/UI. ee188cc Added tag 4.6.0f3 for changeset... 5051b99 Commit of UI System (4.6.0f3). Tim Cooper - 3 days ago
- An example on how the Description att... Pull request #2 commented on in Unity-Technologies/UI. Tim Cooper - 3 days ago
- An example on how the Description att... Pull request #2 updated in Unity-

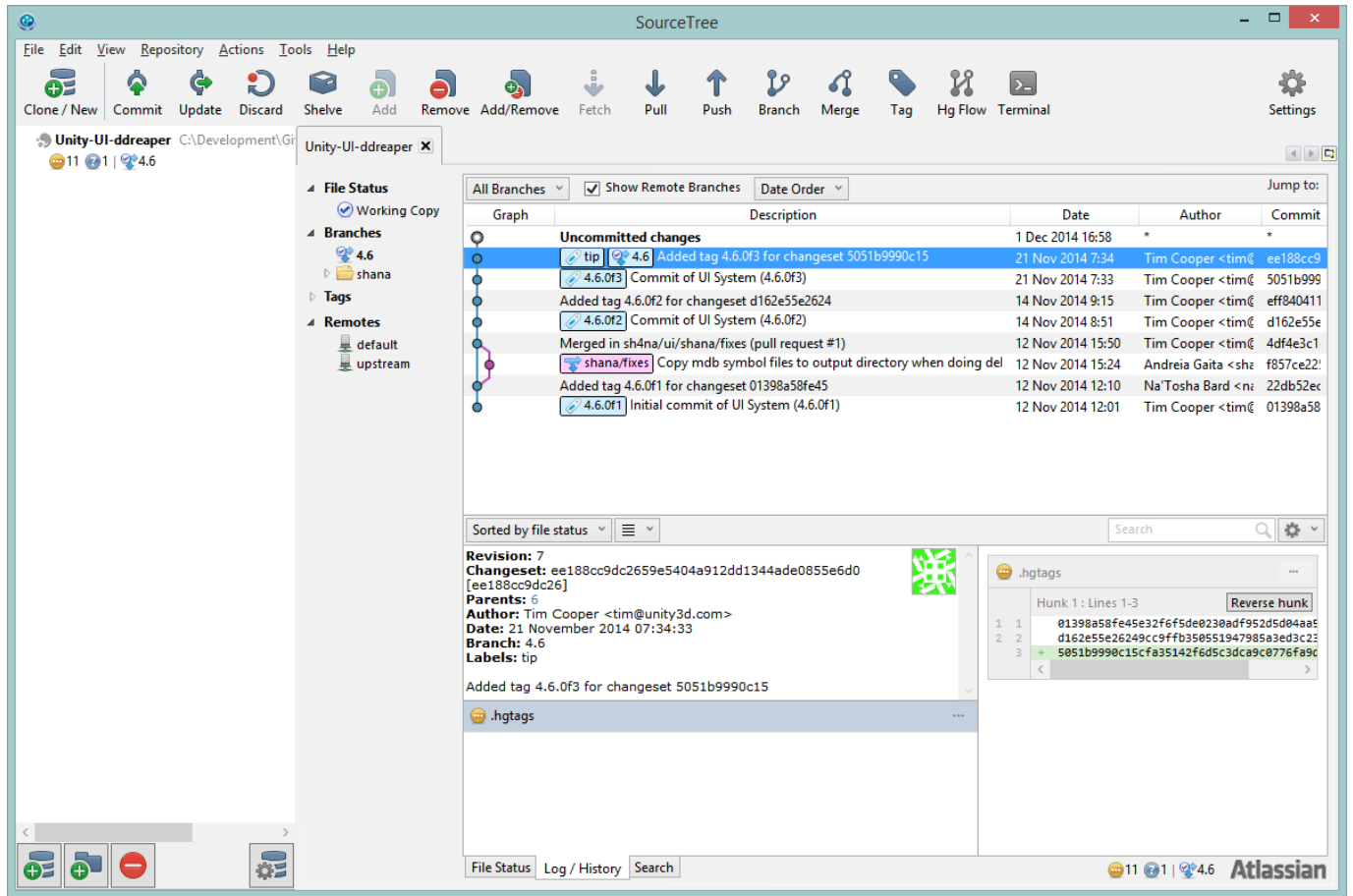






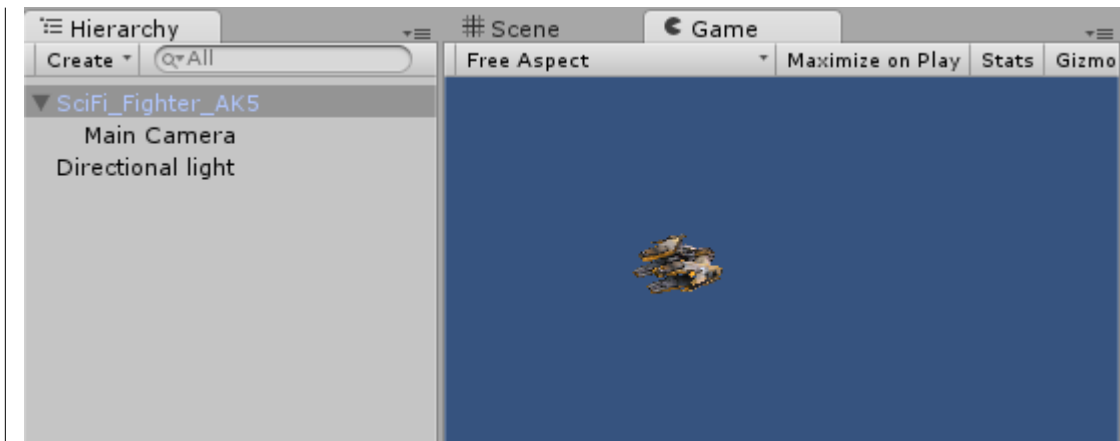
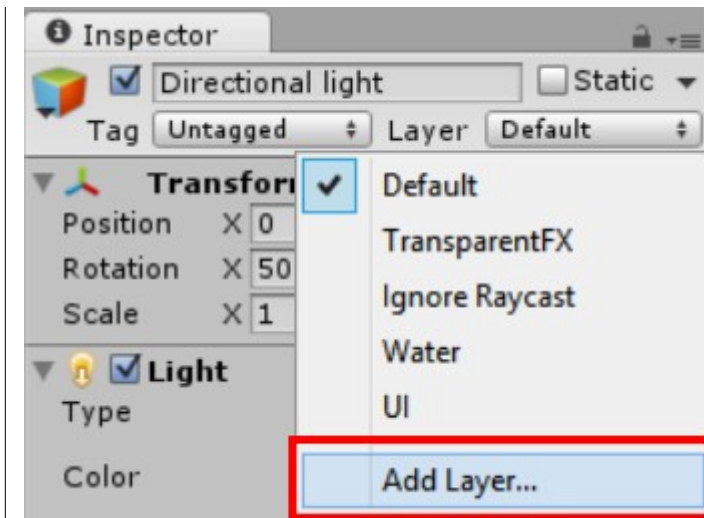






↓ HTTPS <https://ddreaper@bitbucket.org/Unity> 👁

Appendix: The 3D Scene Sample







Inspector

Static

Tag Untagged Layer Default

Transform

Trail Renderer

Cast Shadows
Receive Shadows

Materials

Size 2
Element 0 FlameE
Element 1 Smoke Trail
Use Light Probes
Light Probe Anchor None (Transform)
Time 2
Start Width 5
End Width 0.5

Colors

Min Vertex Distance 0.1
Autodestruct

FlameE

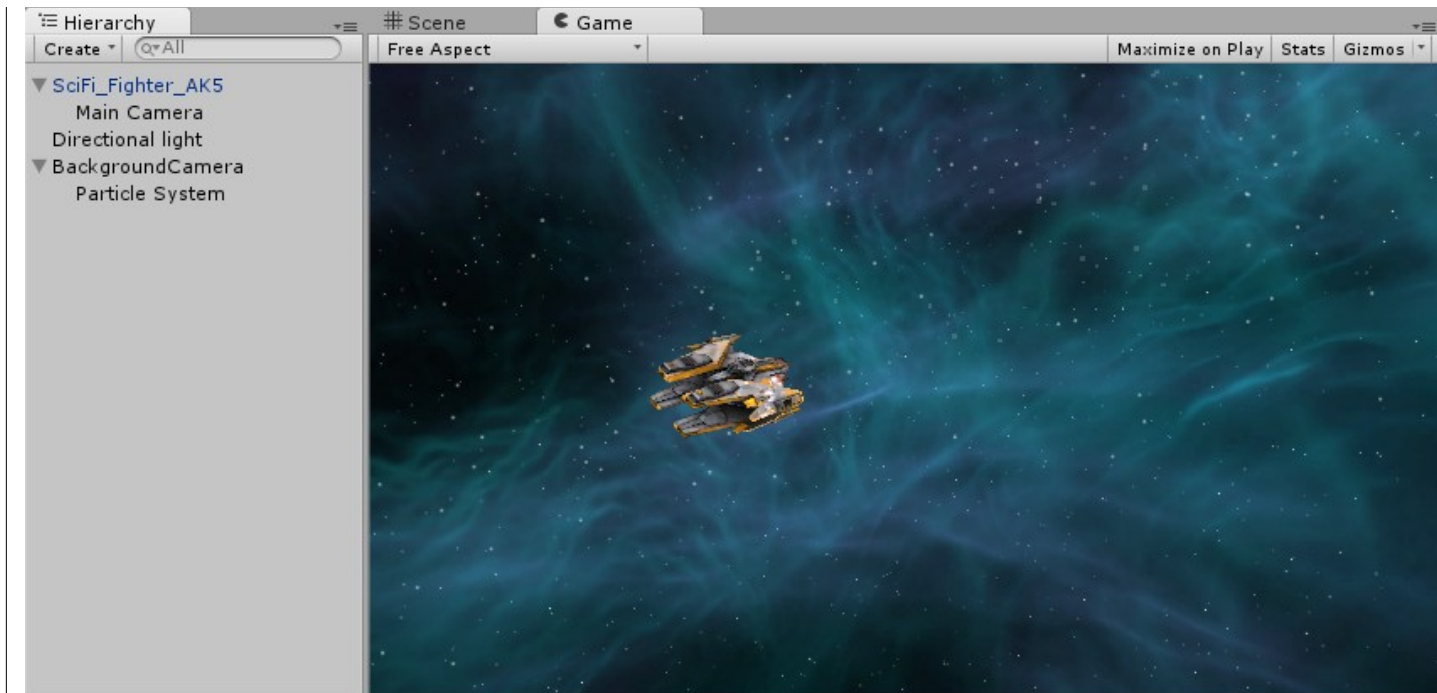
Shader Particles/Additive Edit...

Tint Color
Particle Texture
Tiling Offset
x 1 0
y 1 0
Soft Particles Factor

Smoke Trail

Shader Particles/Additive Edit...

Tint Color
Particle Texture
Tiling Offset
x 0.5 0.5
y 1 0
Soft Particles Factor



Inspector

Particle System Static

Tag: Untagged Layer: Background

Transform

Position	X	83	Y	28	Z	76
Rotation	X	10	Y	240	Z	1.8
Scale	X	1	Y	1	Z	1

Particle System [Open Editor...](#)

Particle System

Duration	20.00
Looping	<input checked="" type="checkbox"/>
Prewarm	<input type="checkbox"/>
Start Delay	0
Start Lifetime	20
Start Speed	10
Start Size	1
Start Rotation	0
Start Color	
Gravity Multiplier	0
Inherit Velocity	0
Simulation Space	Local
Play On Awake	<input checked="" type="checkbox"/>
Max Particles	1000

Emission

Rate	5
	Time

Bursts: Time | Particles

Shape

Shape	Box
Box X	50
Box Y	50
Box Z	5
Random Direction	<input type="checkbox"/>

Velocity over Lifetime

