

Chapter 1: UI Essentials

No Scaling	Horizontally Scaling Only	No Scaling
Vertical Scaling Only	Horizontally and Vertical Scaling	Vertical Scaling Only
No Scaling	Horizontally Scaling Only	No Scaling

Canvas Scaler (Script)

Ui Scale Mode: **Scale With Screen Size**

Reference Resolution: X 800 Y 600

Screen Match Mode: **Match Width Or Height**

Match: **0.5**

Reference Pixels Per: 100

Scene

Shaded 2D

Hand, Move, Rotate, Scale, Crop

The screenshot shows the Adobe Photoshop interface. The main canvas displays a white circle on a transparent background (checkered pattern). The top menu bar includes File, Modifica, Immagine, Livello, Testo, Selezione, Filtro, 3D, Visualizza, Finestra, and Aiuto. The top toolbar shows various tools like Move, Lasso, Eraser, etc. The right sidebar contains the Properties panel (currently showing 'Essenziale'), the Layers panel (showing 'Ellisse 1'), and the Color panel. The status bar at the bottom indicates '66.67%' zoom and 'Dato: 3.00 MB (3 bytes)'.

Scroll Rect (Script)

Content: Image (Rect Tran)

Horizontal:

Vertical:

Movement Type: Clamped

Inertia:

Deceleration Rate: 0.135

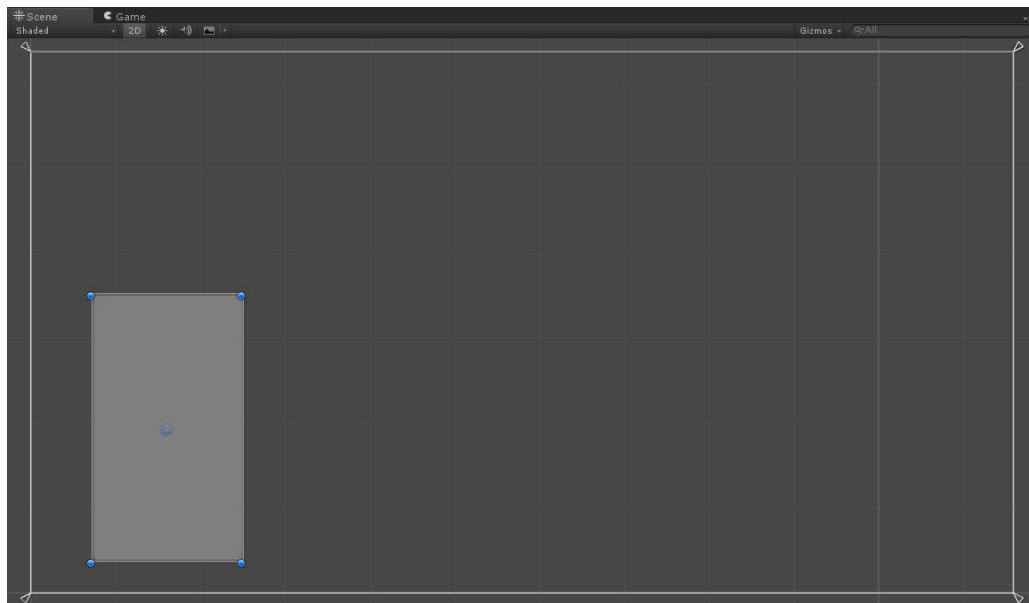
Scroll Sensitivity: 1

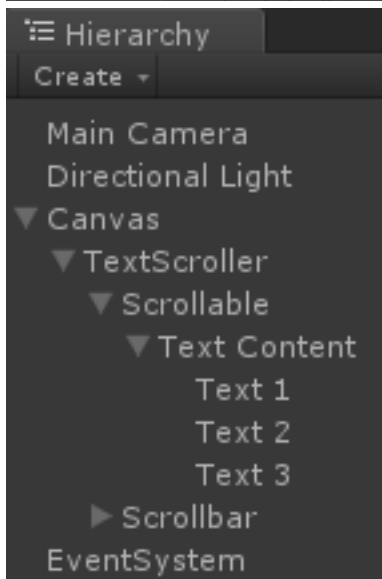
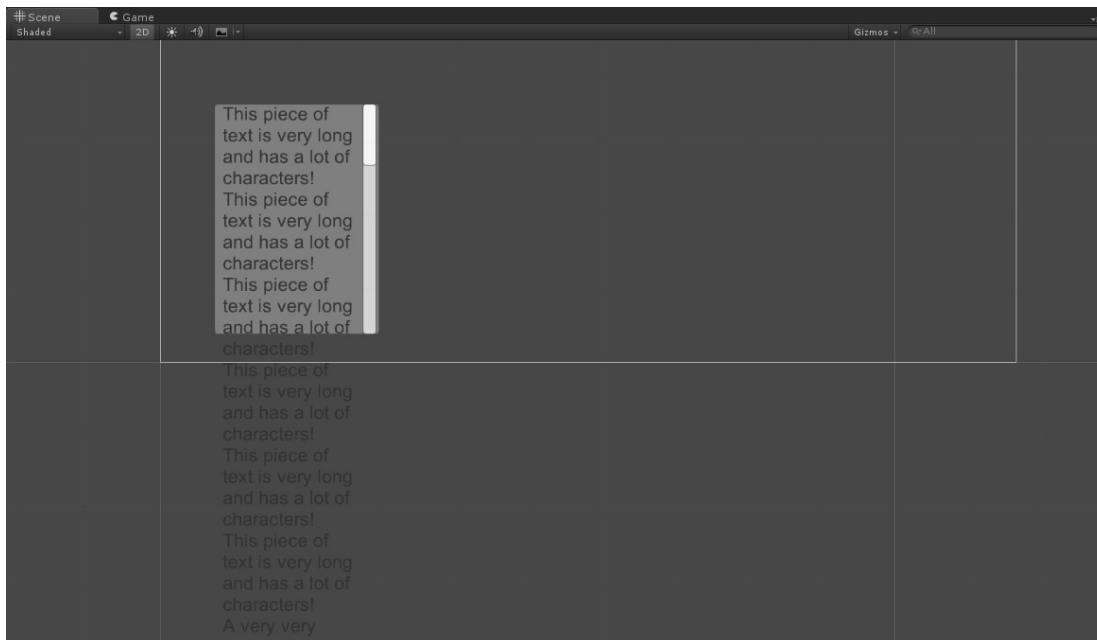
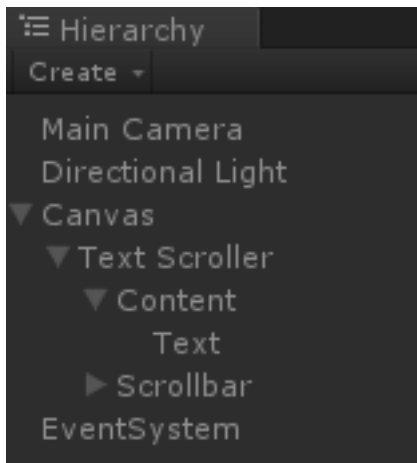
Horizontal Scrollbar: None (Scrollbar)

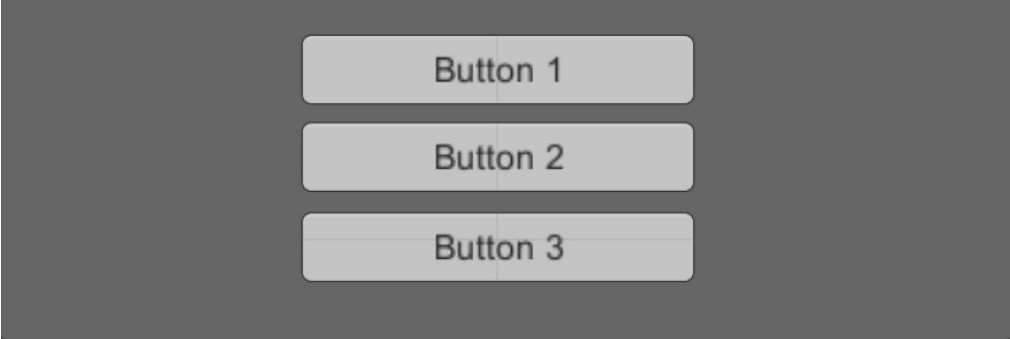
Vertical Scrollbar: None (Scrollbar)

On Value Changed (Vector2)

List is Empty







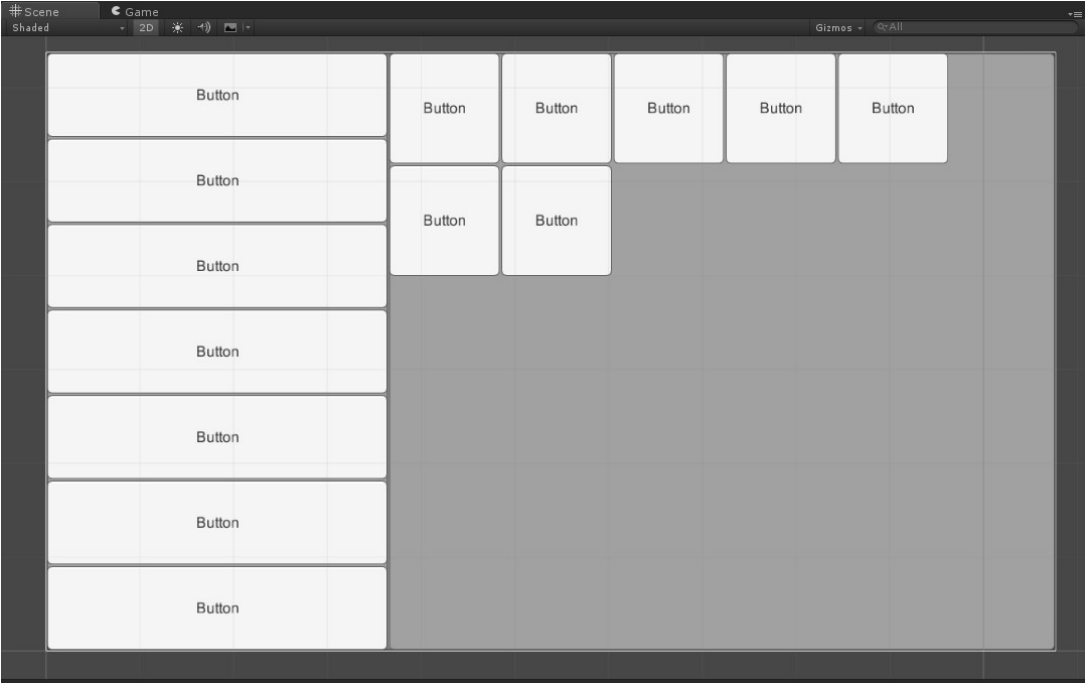
▼ **Button Through Key Selection (Script)**

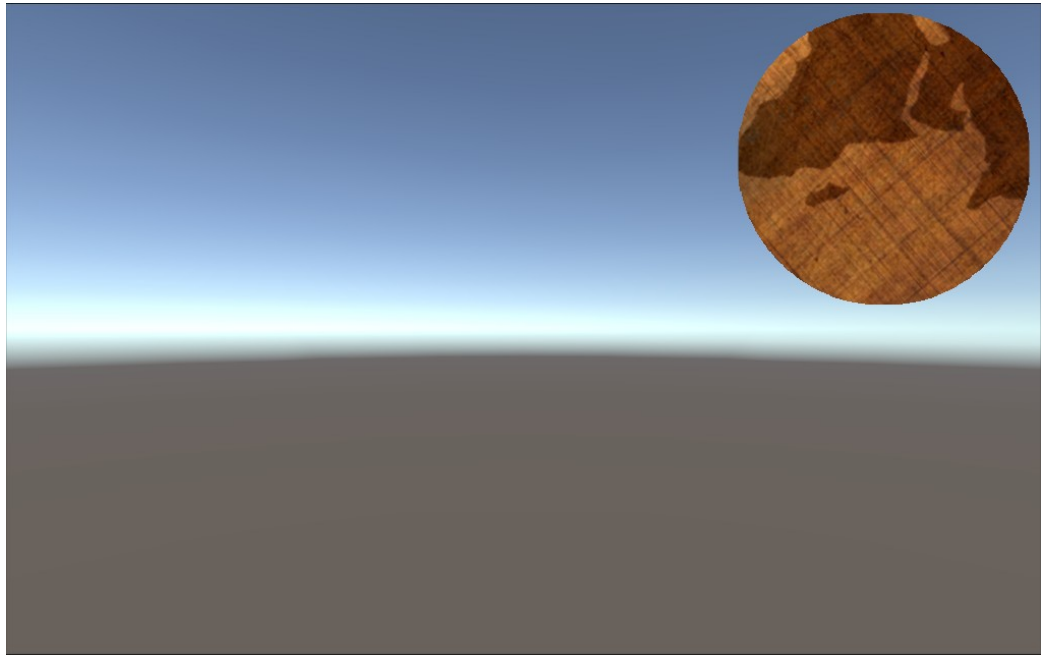
Script

Key

▼ Canvas

- ▼ External Panel
 - ▶ First Panel
 - ▶ Second Panel



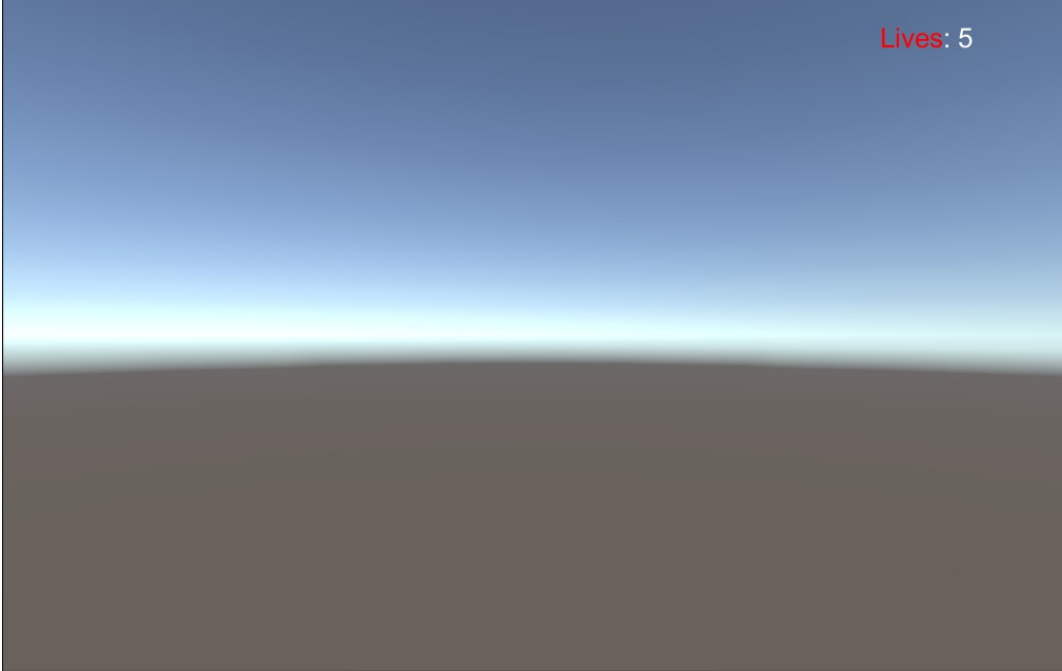
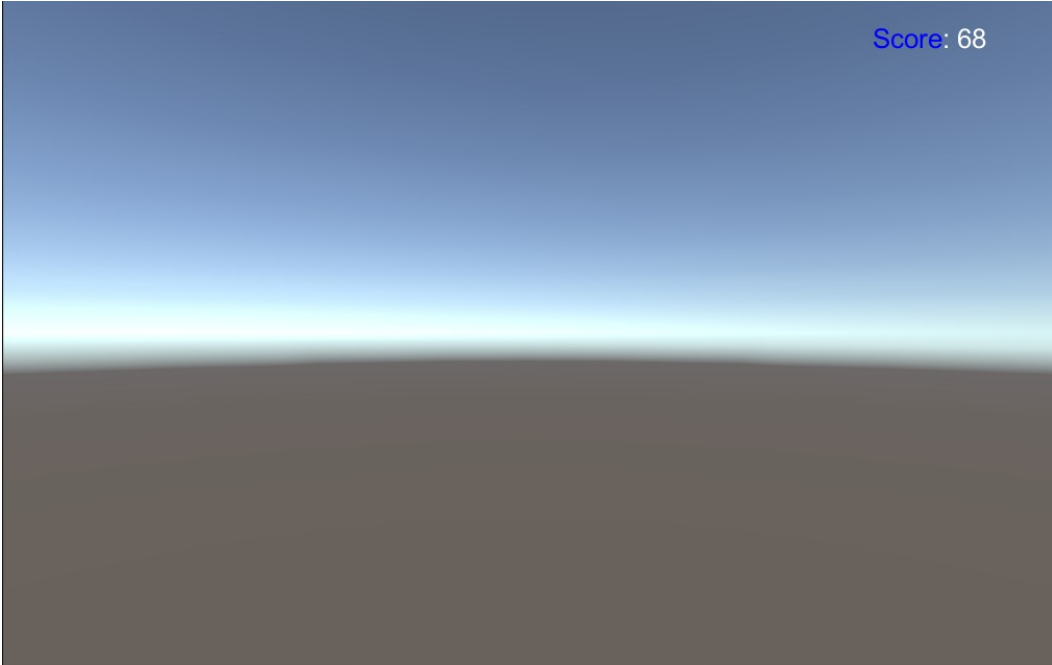


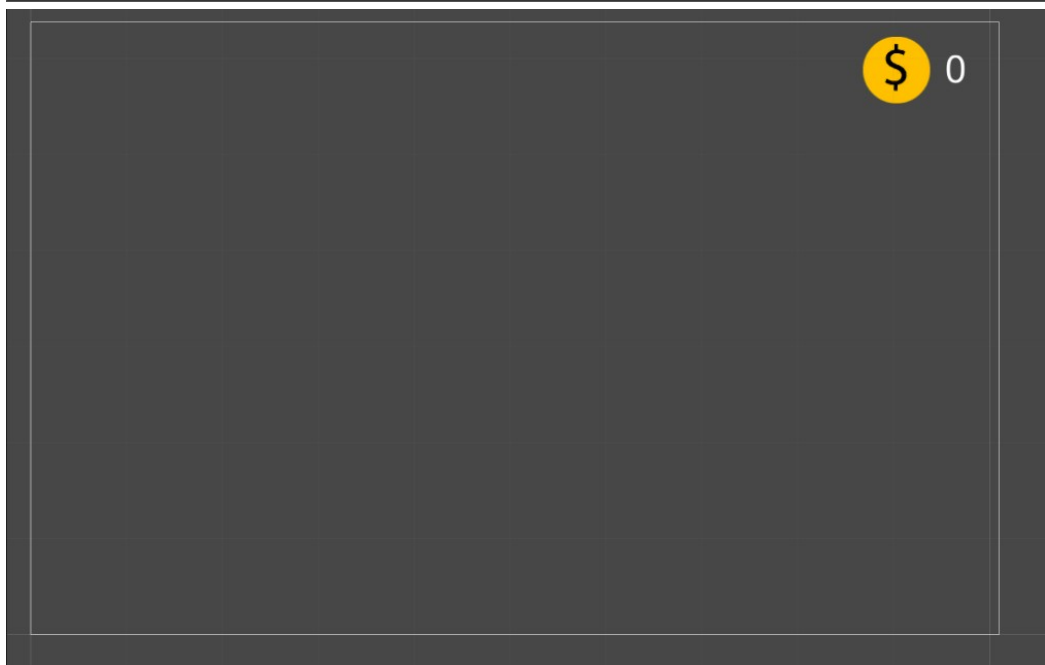
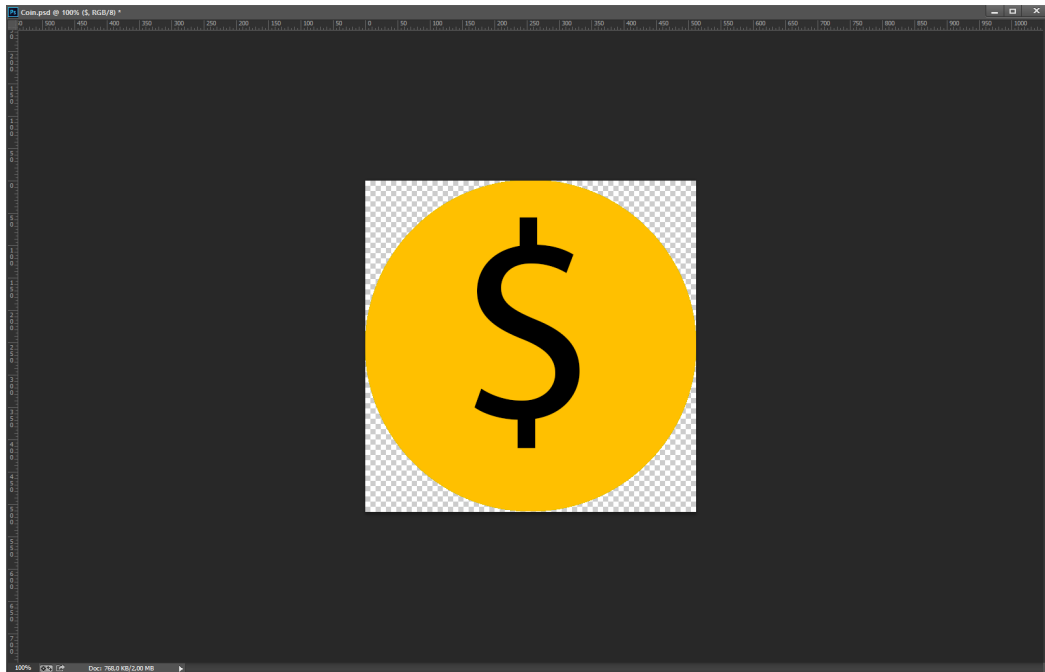
and has a lot of characters!
This piece of text is very long and has a lot of characters!
This piece of text is very long and has a lot of characters!
This piece of

This piece of text is very long and has a lot of characters! This piece of text is very long and has a lot of characters! This piece of text is very long and has a lot of	This piece of text belongs to the second column and it is different to the one in the previous column. Also this one can scroll like the previous	This piece of text in this third column, scrolls along with the other two.
--	--	--

his piece of text is very long and has a lot of characters! his piece of text is very long and has a lot of characters! his piece of	This piece of text belongs to the second column and it is different to the one in the previous column. Also this one	This piece of text in this third column, scrolls along with the other two.	This pie text in th fourth co scrolls a with the three.
--	---	--	---

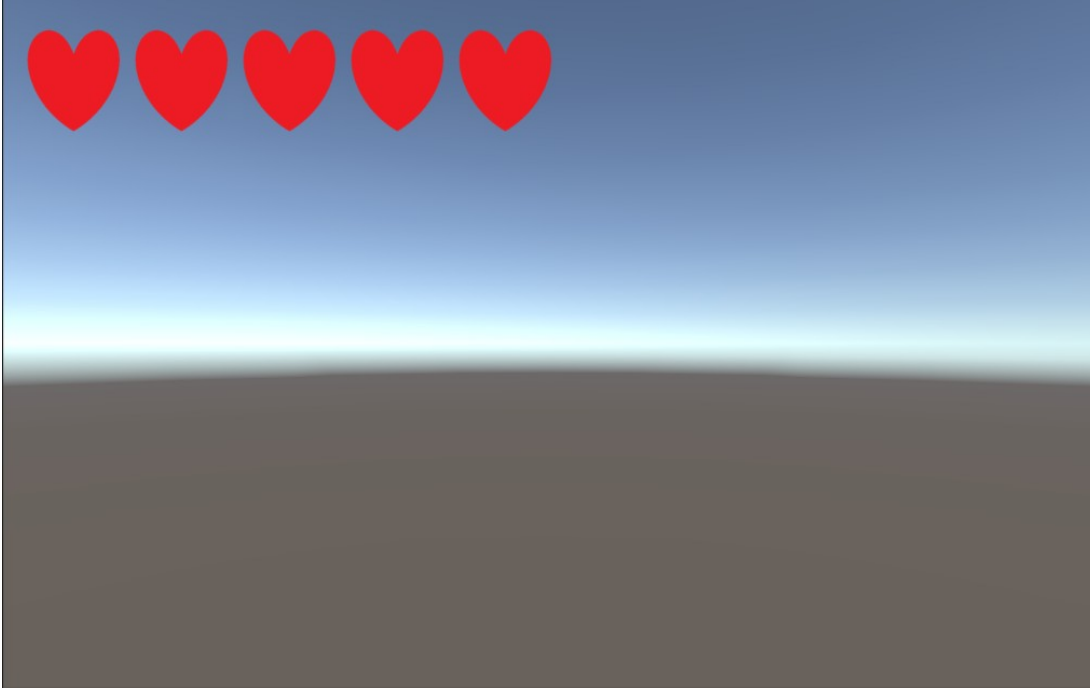
Chapter 2: Implementing Counters and Health Bars









\$ 56






- Hierarchy
- Create ▾
- Main Camera
- Directional Light
- ▼ Canvas
 - ▼ SymbolicLivesCounter
 - Heart1
 - Heart2
 - Heart3
 - Heart4
 - Heart5
- EventSystem






▼  **Symbolic Lives Counter Script (Script)**  


Script 


▼ Hearts

Size	<input type="text" value="5"/>
Element 0	<input type="text" value="Heart1"/> 
Element 1	<input type="text" value="Heart2"/> 
Element 2	<input type="text" value="Heart3"/> 
Element 3	<input type="text" value="Heart4"/> 
Element 4	<input type="text" value="Heart5"/> 



▼  **Image (Script)**  

Source Image 

Color 





Material 

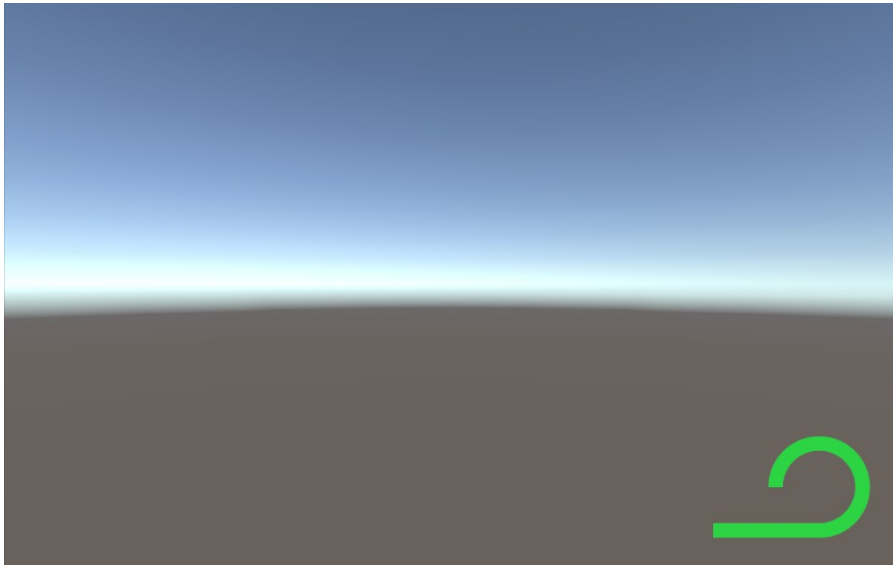
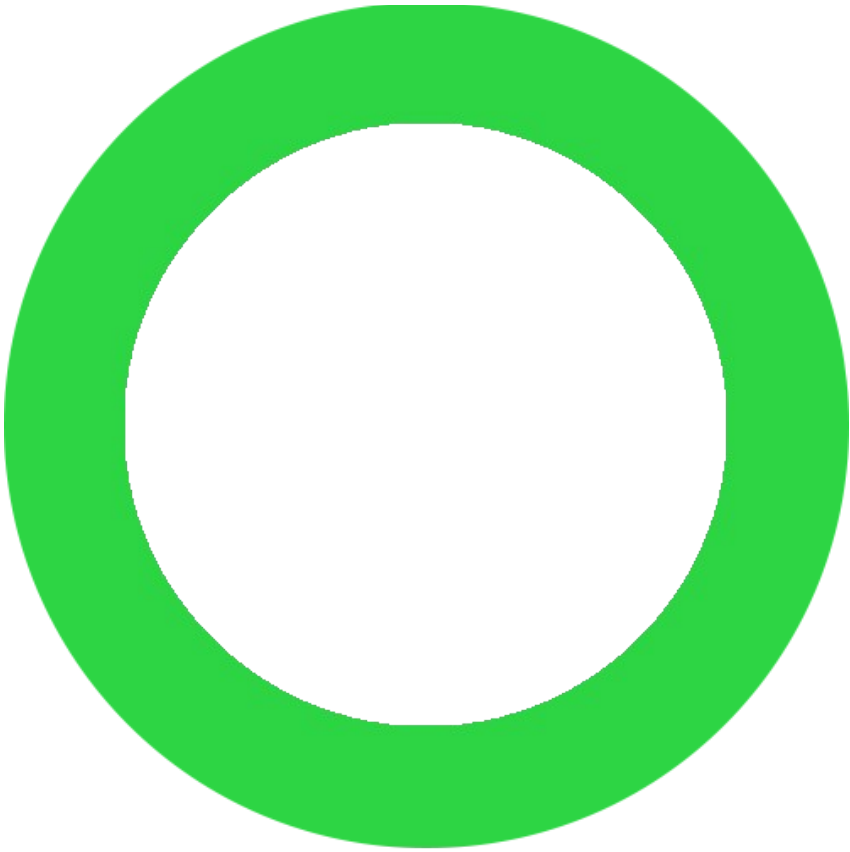
Image Type 

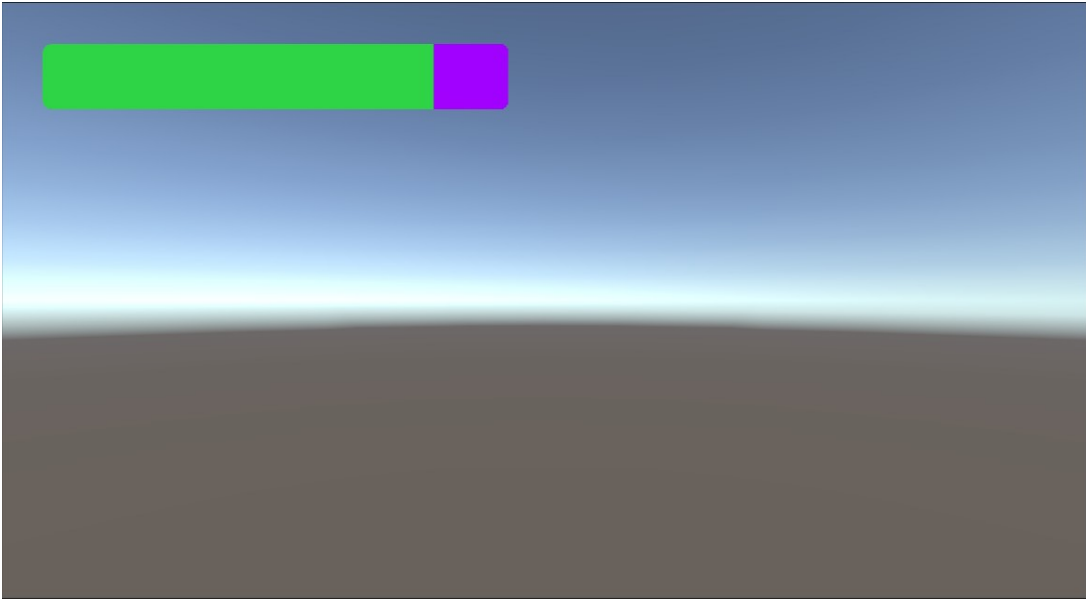
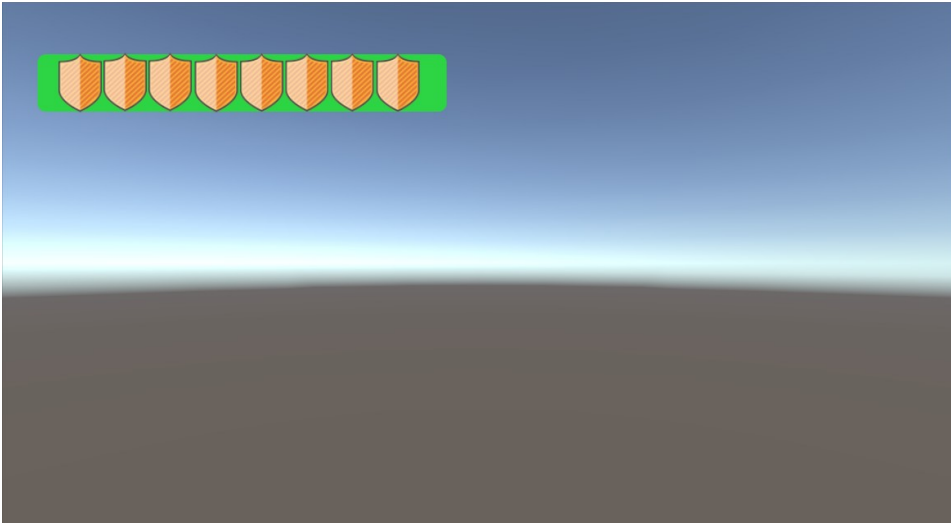
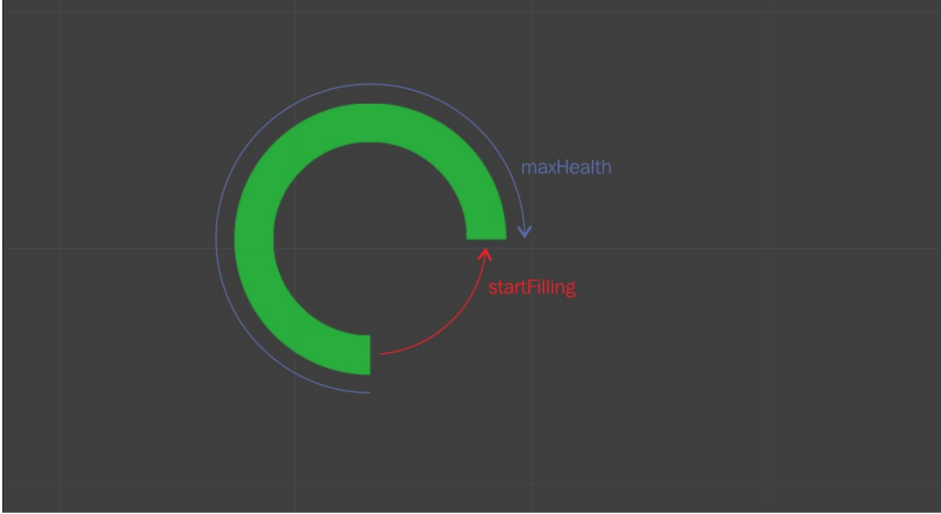
Fill Method 

Fill Origin 

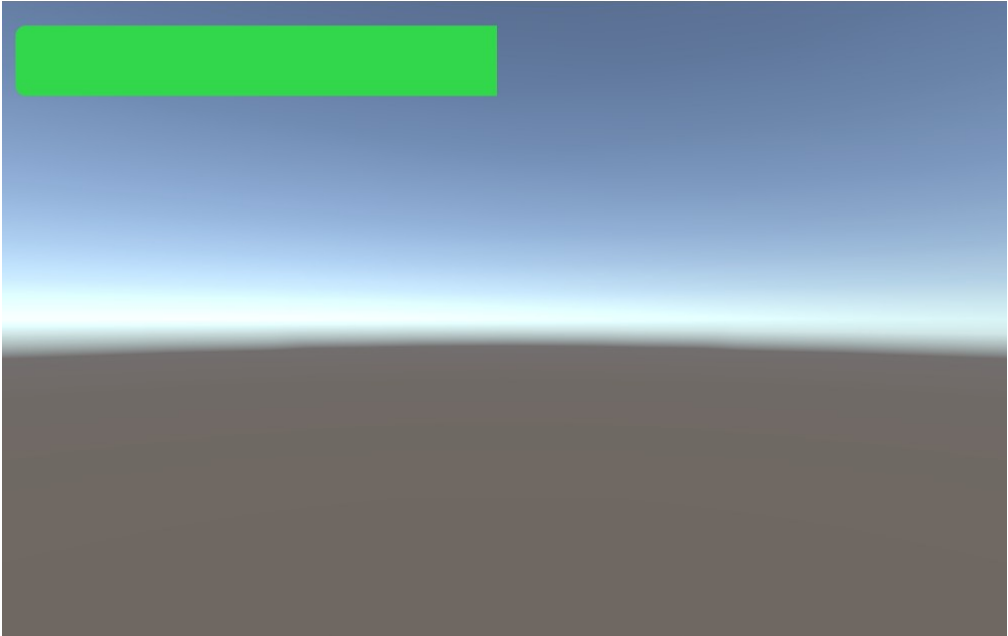
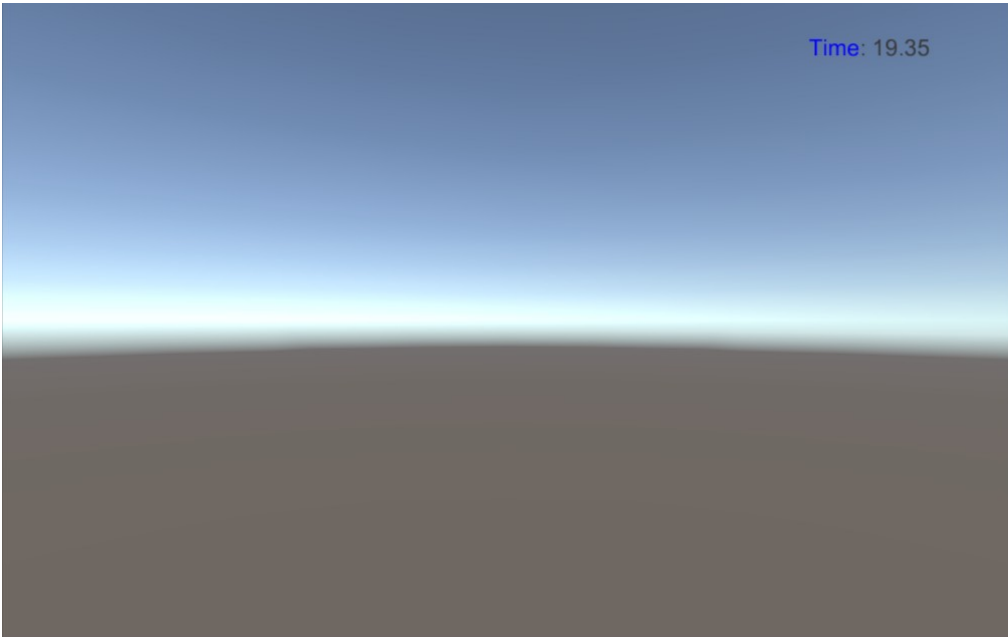
Fill Amount

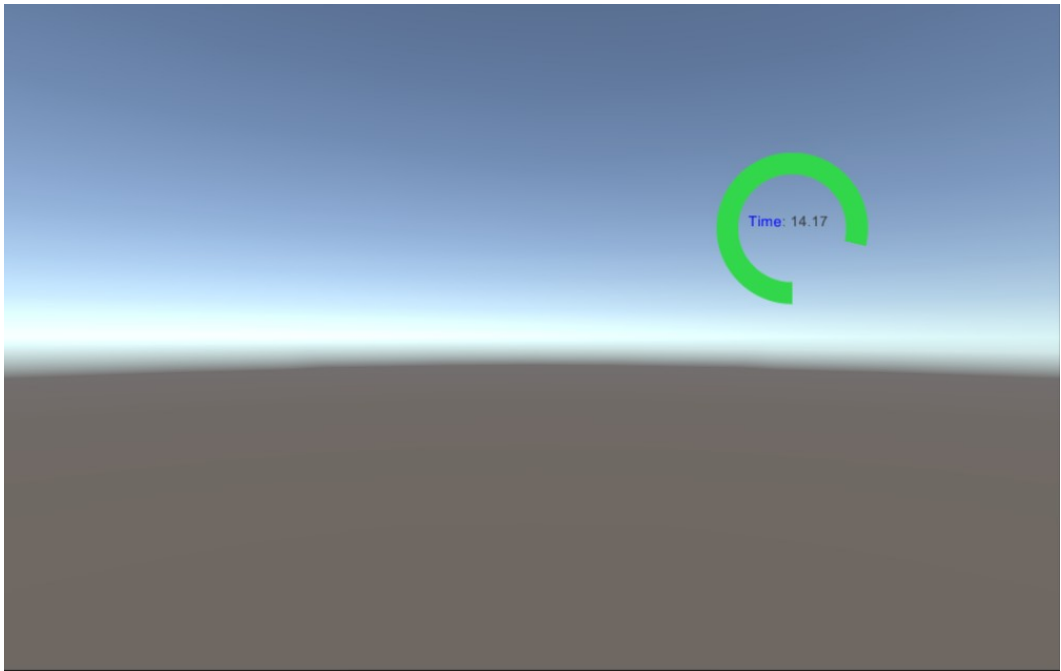
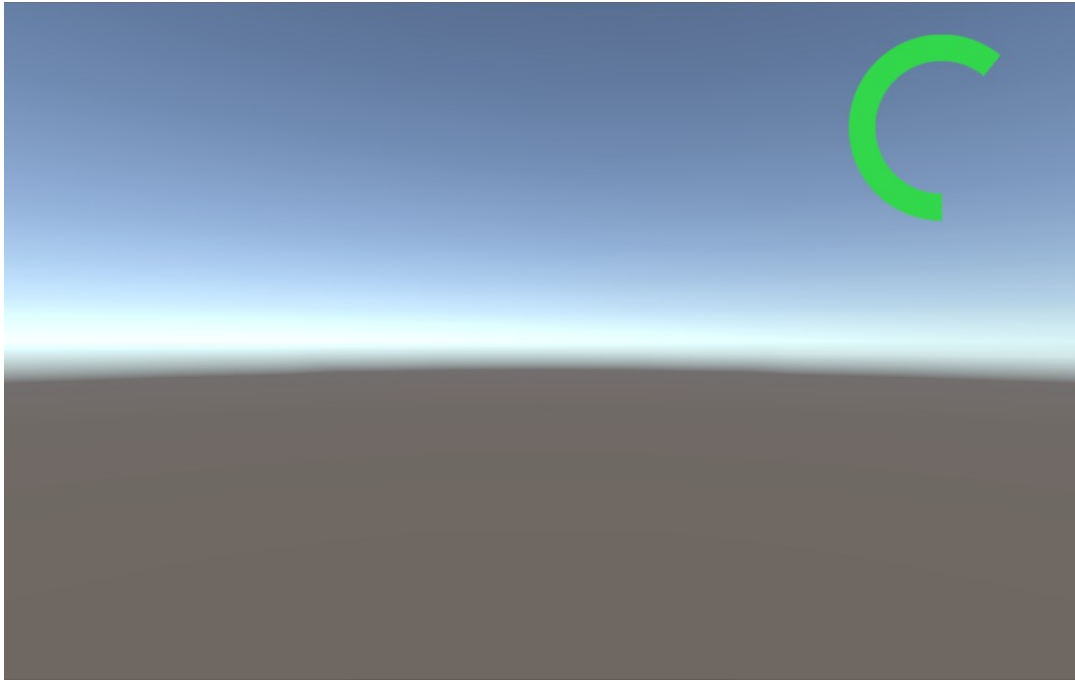
Preserve Aspect



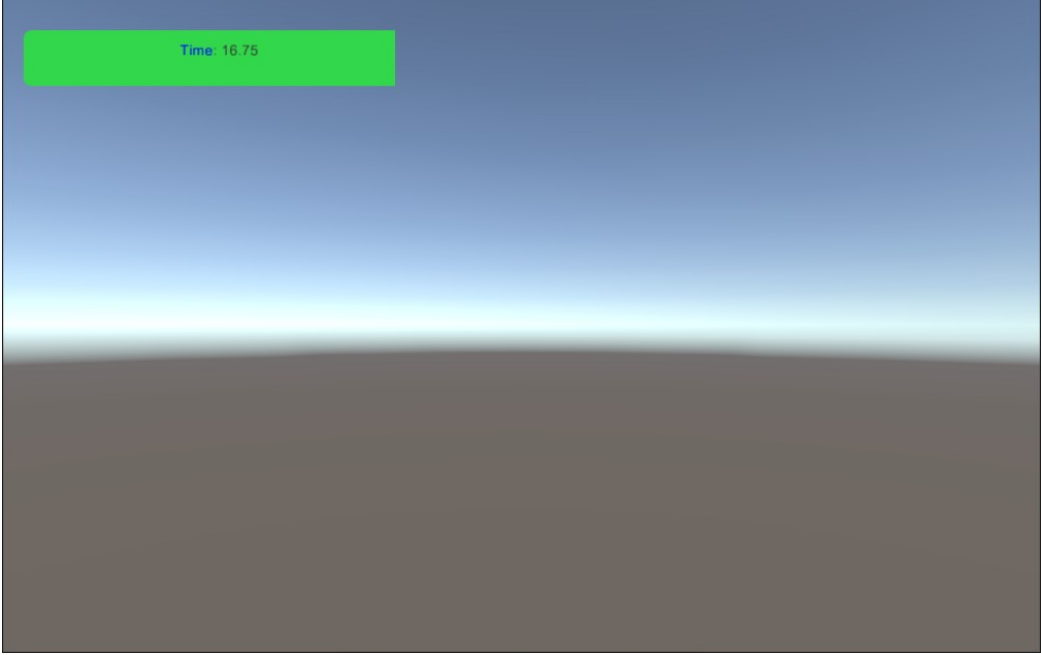


Chapter 3: Implementing Timers

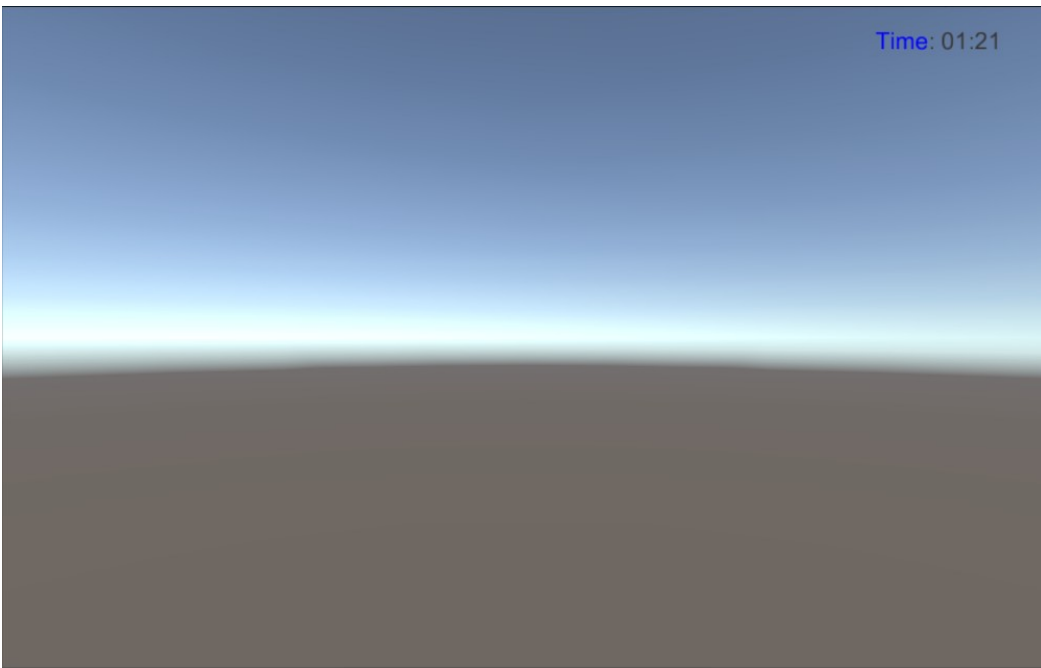




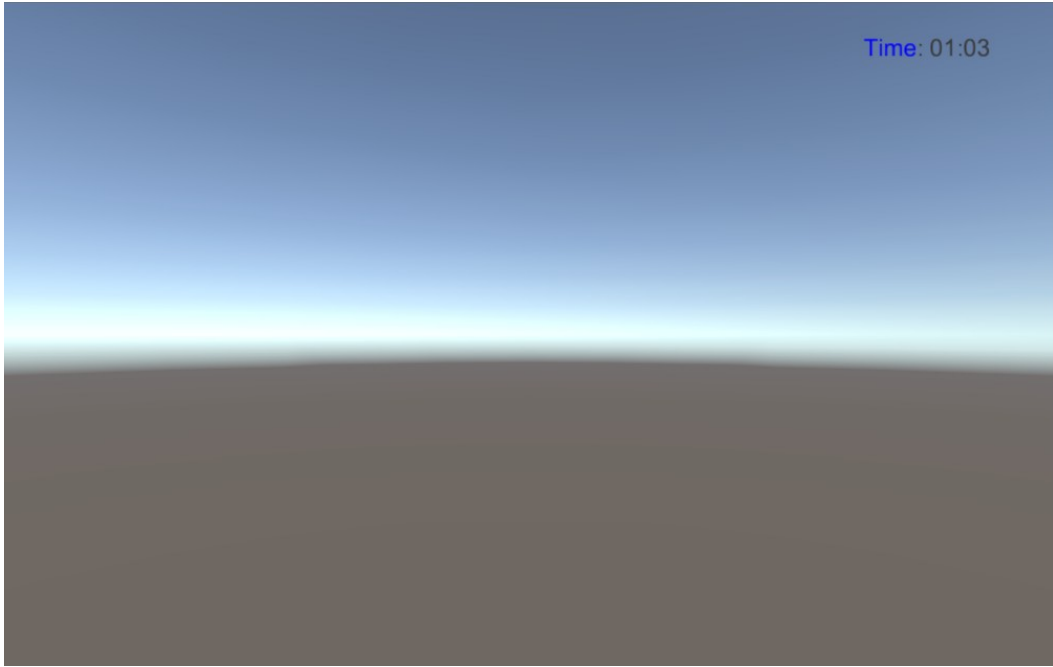
Time: 16:75



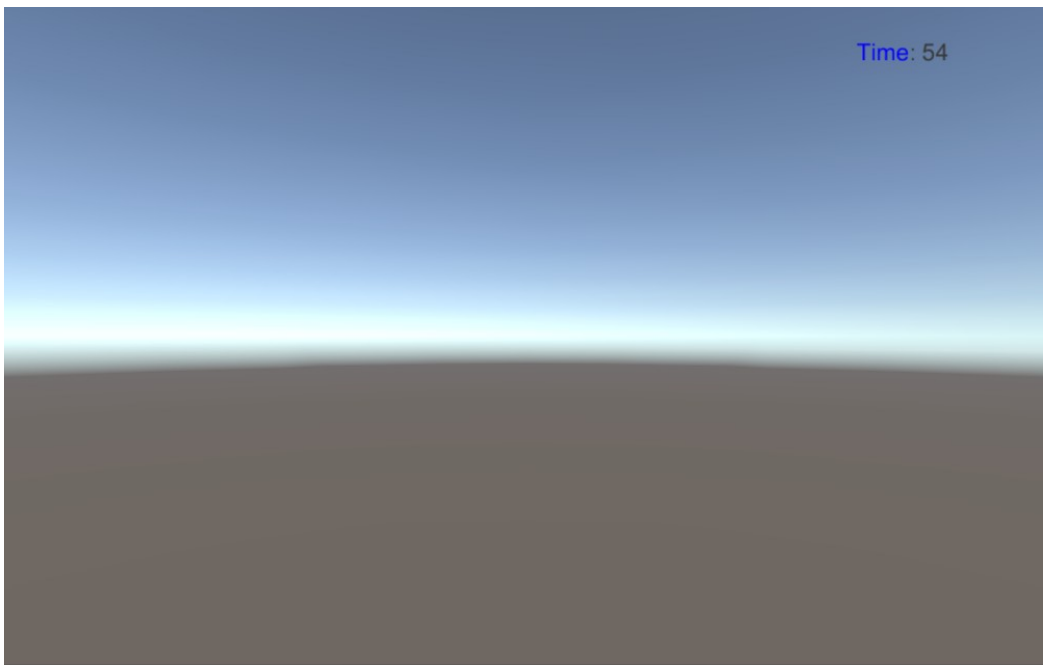
Time: 01:21

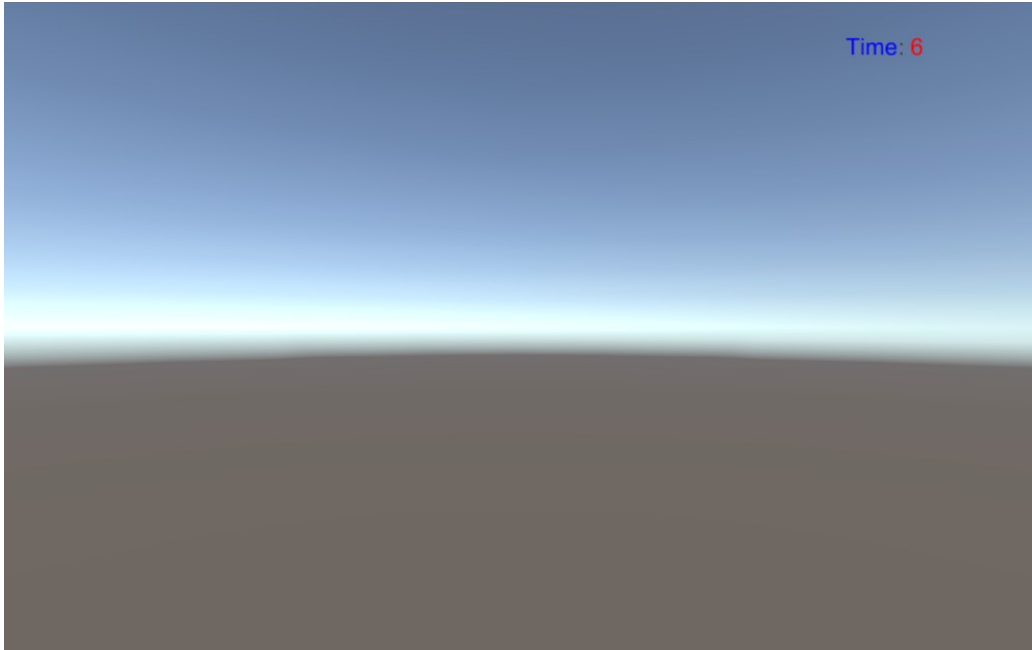


Time: 01:03



Time: 54





Chapter 4: Creating Panels for Menus



Toggle (Script) ? ⚙

Interactable

Transition

Target Graphic Background (Image) ⊙

Normal Color ✎

Highlighted Color ✎

Pressed Color ✎

Disabled Color ✎

Color Multiplier 1

Fade Duration

Navigation

Is On

Toggle Transition

Graphic Checkmark (Image) ⊙

Group Toggle Group Panel (ToggleGroup) ⊙

On Value Changed (Boolean)

List is Empty

+ -

On Value Changed (Single)

List is Empty

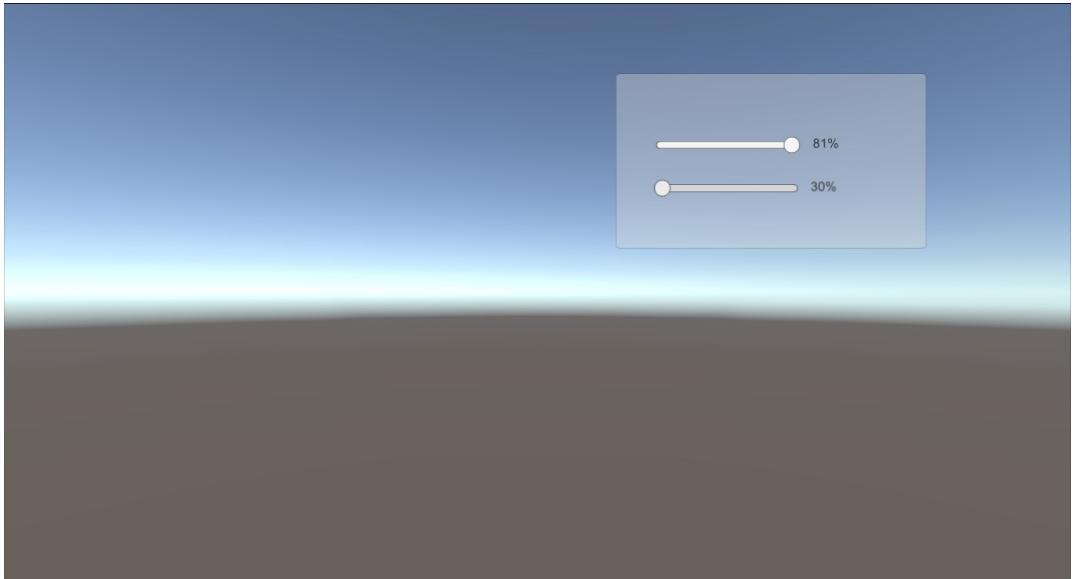
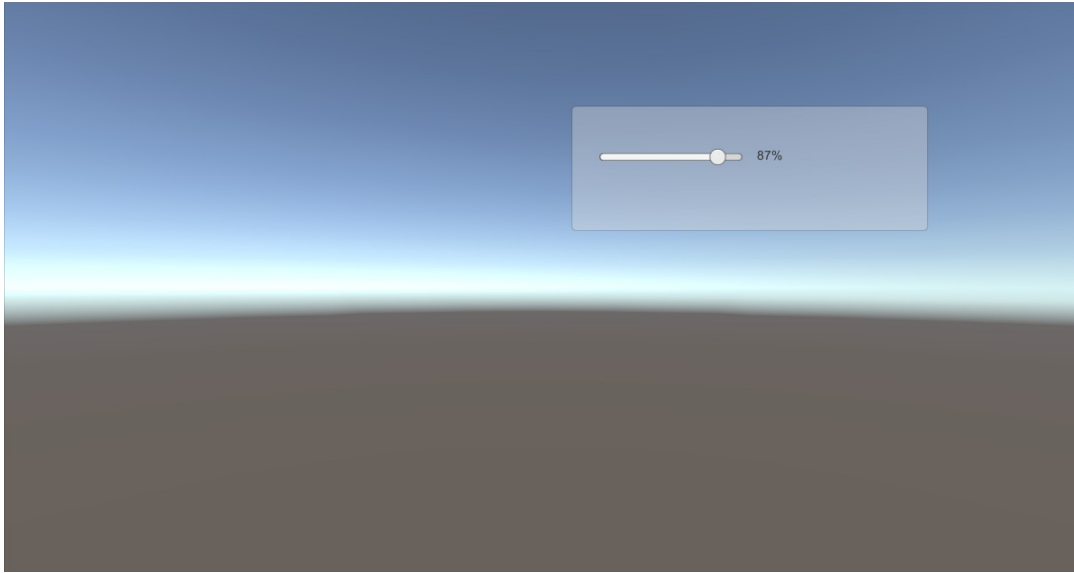
+ -

On Value Changed (Single)

Runtime Only

Slider Shower (ShowSliderValueScript) ⊙

+ -

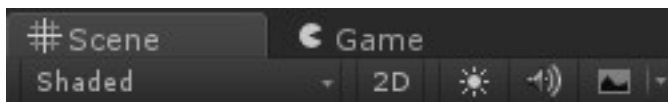


On Value Changed (Single)

Runtime Only	ShowSliderValueScript.updateValue
SliderShower (ShowSliderValueScript)	
Runtime Only	UpperAndLowerBoundsForSlidersScript.checkBounds
Slider (UpperAndLowerBoundsForSlidersScript)	

Upper And Lower Bounds For Sliders Script (Script)

Script	UpperAndLowerBoundsForSlidersScript
Lower Bound	0.2
Upper Bound	0.81



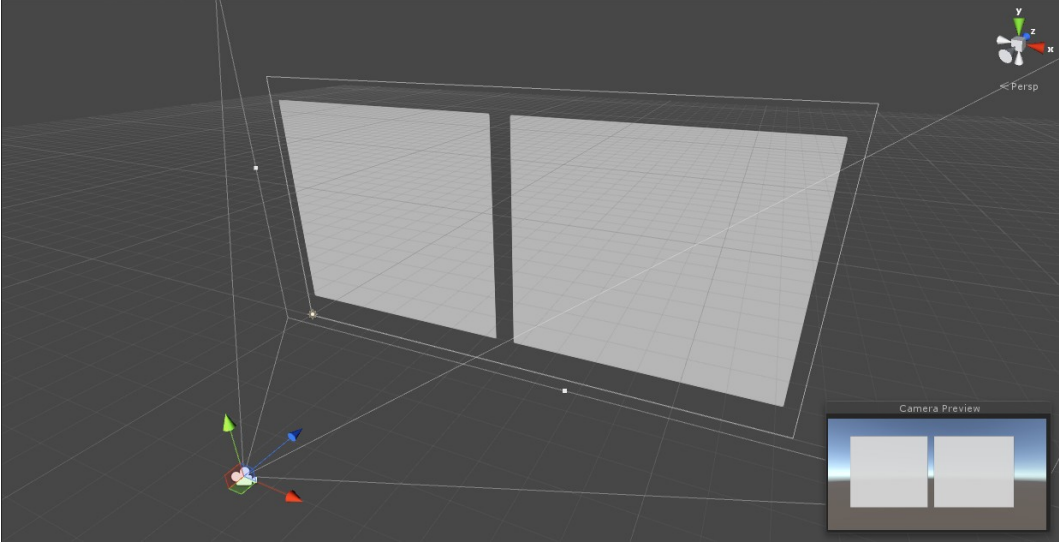
Scene

Game

Shaded

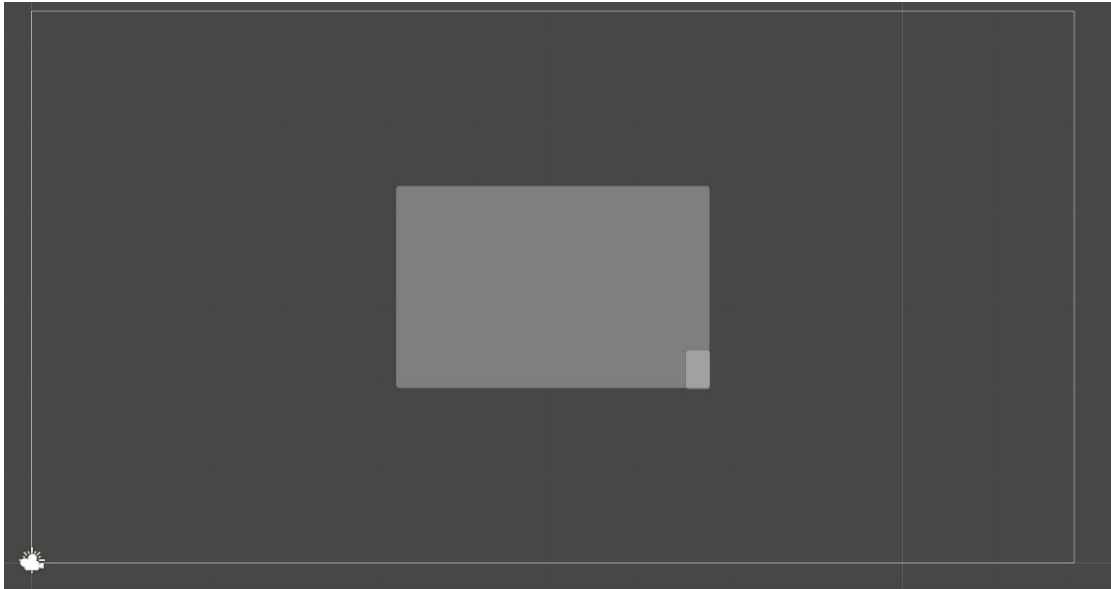
2D





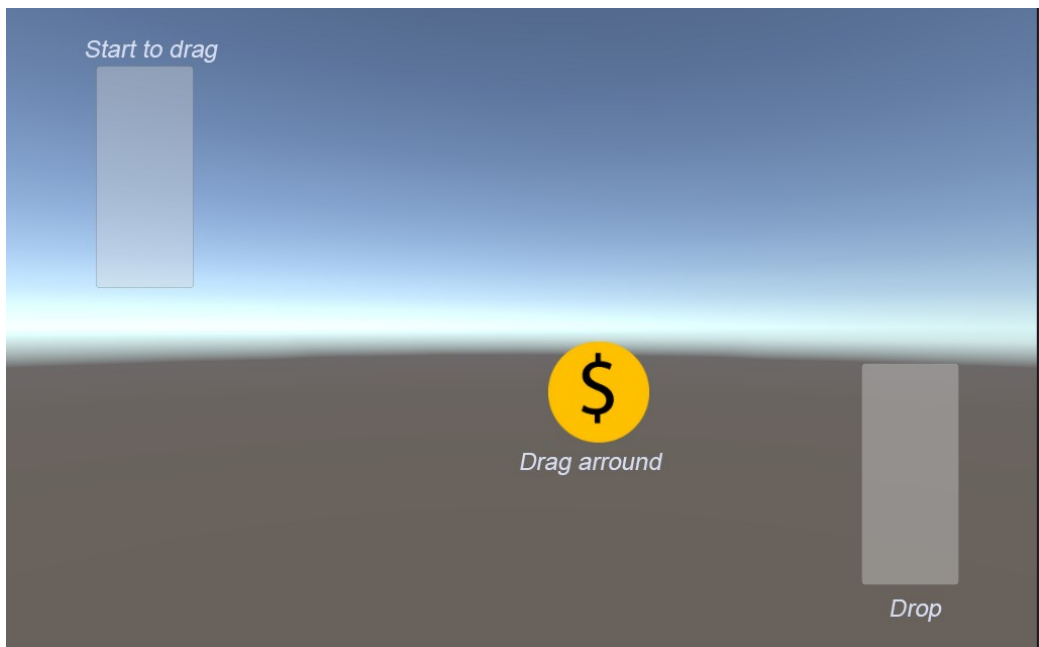
▼ Layers

Builtin Layer 0	Default
Builtin Layer 1	TransparentFX
Builtin Layer 2	Ignore Raycast
Builtin Layer 3	
Builtin Layer 4	Water
Builtin Layer 5	UI
Builtin Layer 6	
Builtin Layer 7	
User Layer 8	UI1
User Layer 9	UI2
User Layer 10	
User Layer 11	
User Layer 12	
User Layer 13	
User Layer 14	
User Layer 15	
User Layer 16	
User Layer 17	
User Layer 18	
User Layer 19	
User Layer 20	
User Layer 21	
User Layer 22	
User Layer 23	
User Layer 24	
User Layer 25	
User Layer 26	
User Layer 27	
User Layer 28	
User Layer 29	
User Layer 30	
User Layer 31	

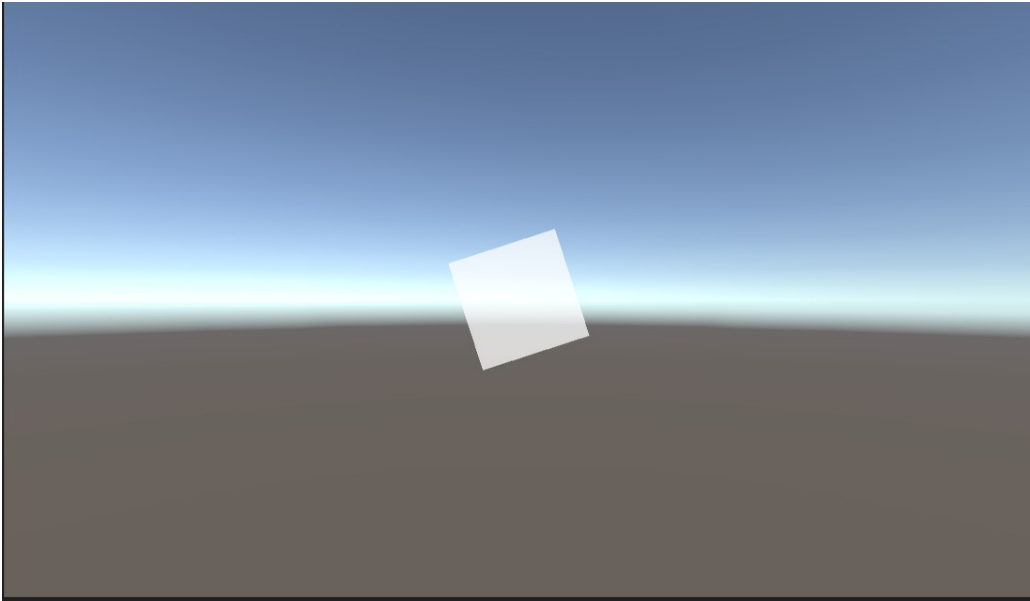
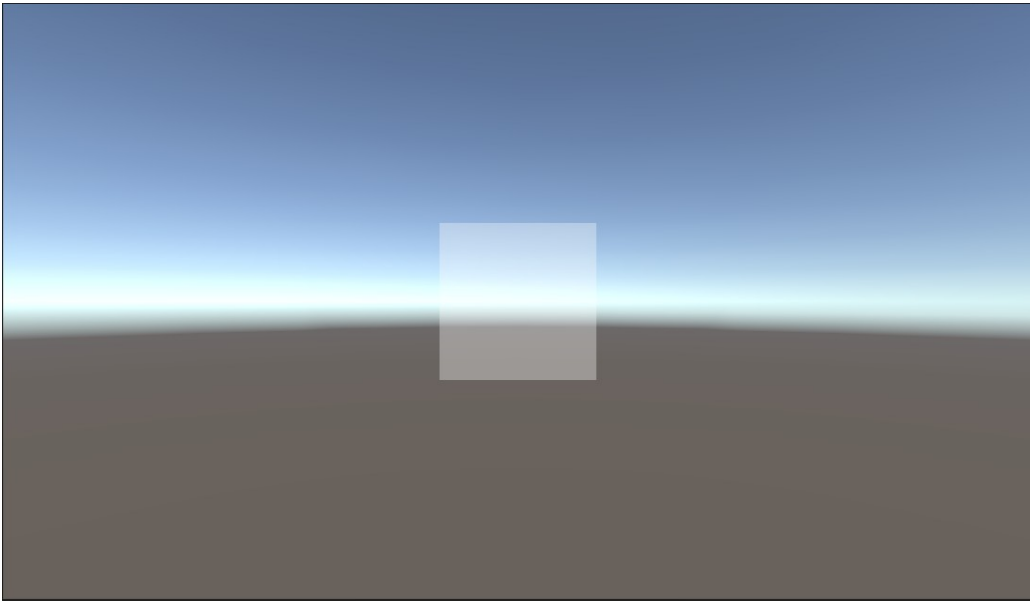


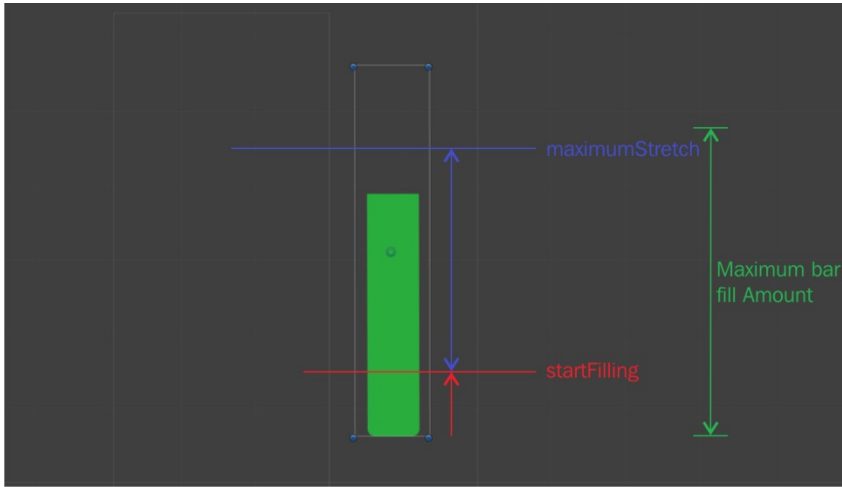
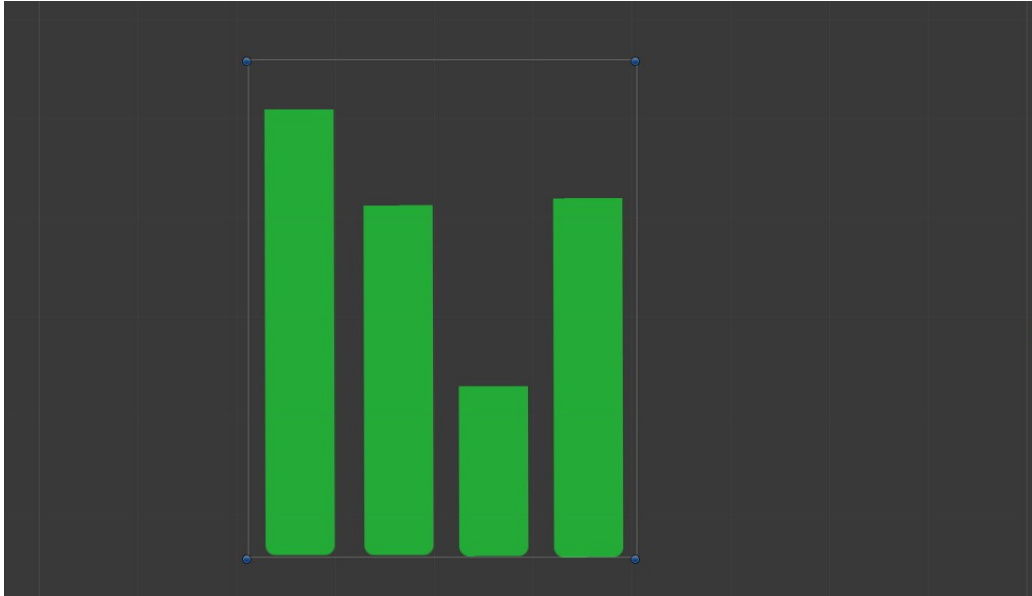
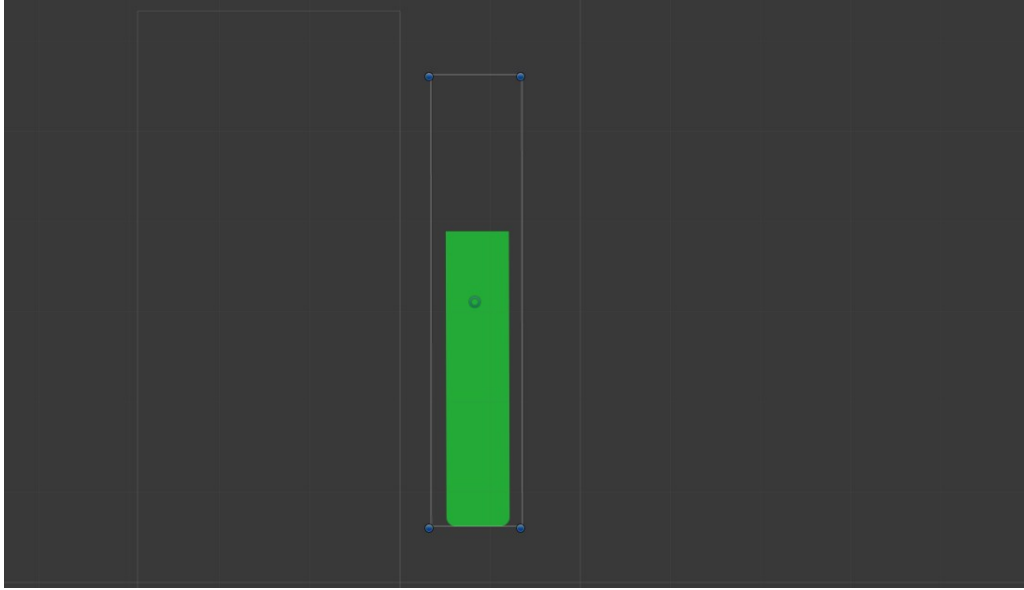
Anchor Presets
Shift: Also set pivot Alt: Also set position

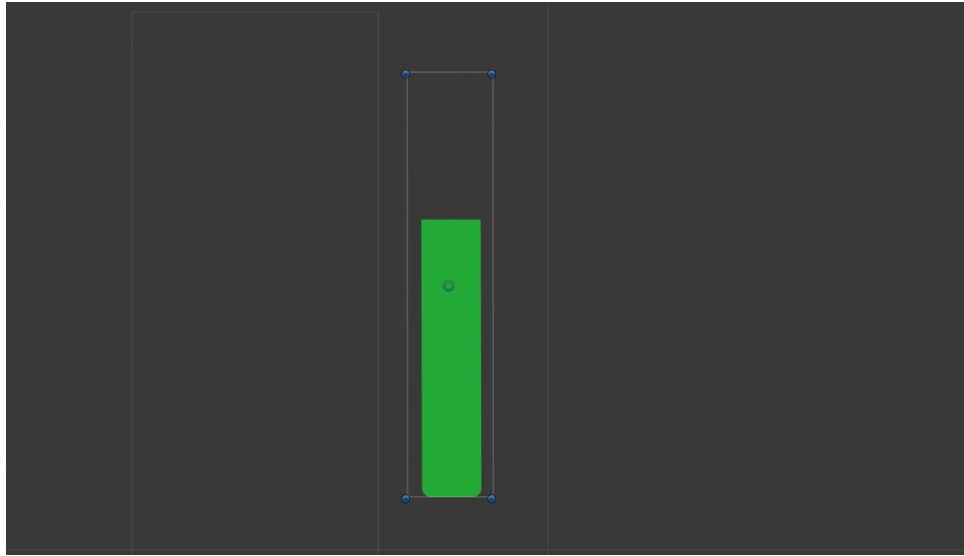
	left	center	right	stretch
top				
middle				
bottom				
stretch				



Chapter 5: Decorating the UI







▼ Floating UI Script (Script)



Script	FloatingUIScript
Xspeed	1
X Amplitude	15
Yspeed	2
Y Amplitude	40



▼ Floating UI Script (Script)



Script	FloatingUIScript
Xspeed	500
X Amplitude	300
Yspeed	80
Y Amplitude	350

▼ Floating UI Script (Script)

Script	FloatingUIScript
Xspeed	20
X Amplitude	10
Yspeed	50
Y Amplitude	180

Shadow (Script)  

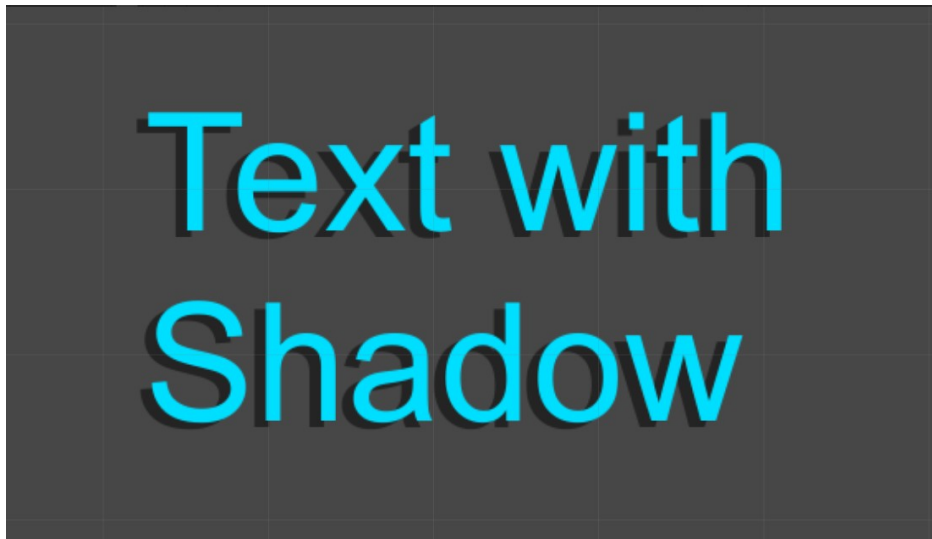
Script  Shadow 

Effect Color  

Effect Distance

X -7 Y -3

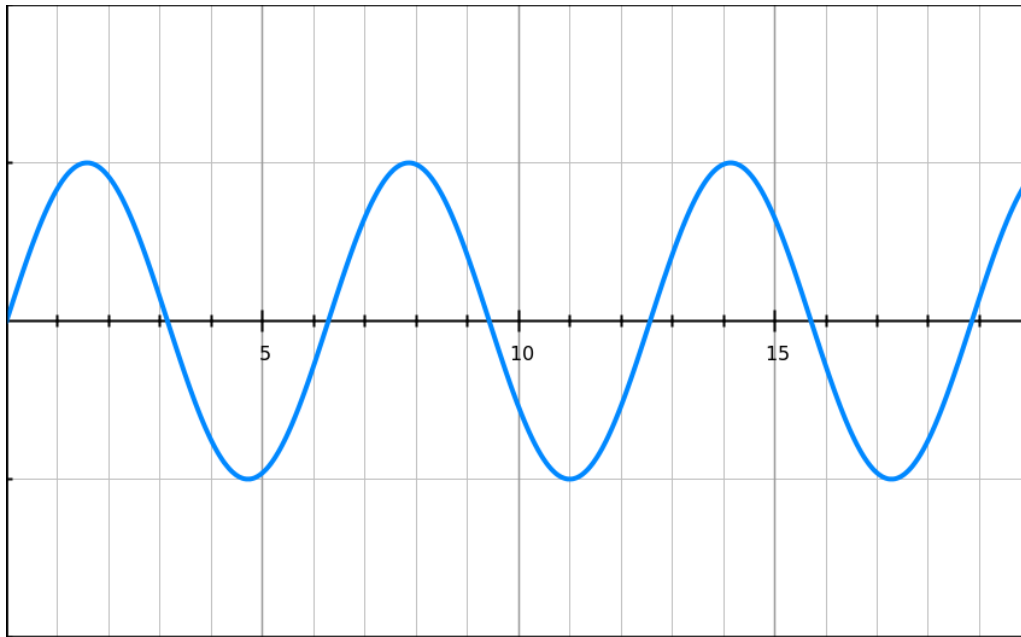
Use Graphic Alpha



Text with
Outline

Text with
Outline

Shadow



▼ **Outline (Script)**

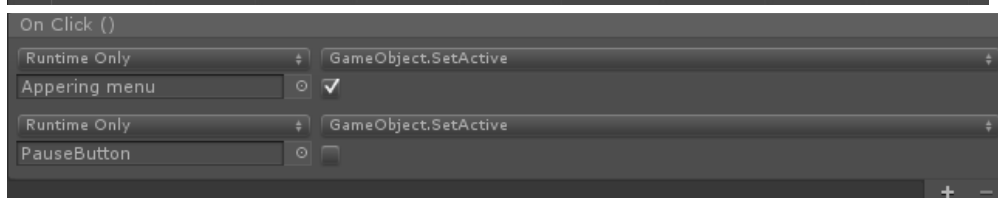
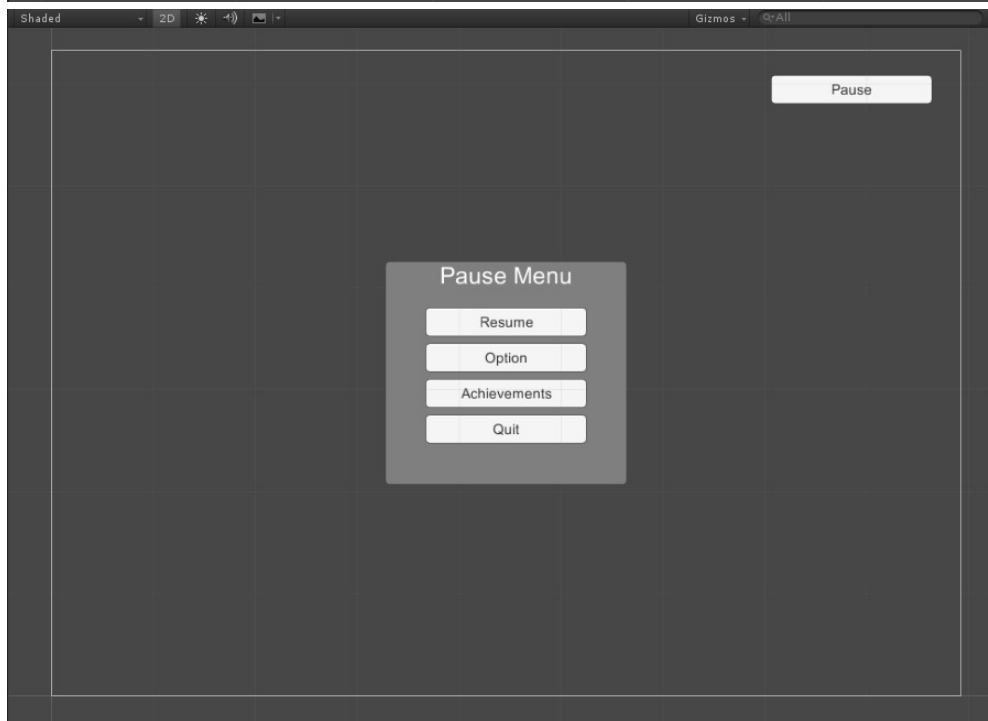
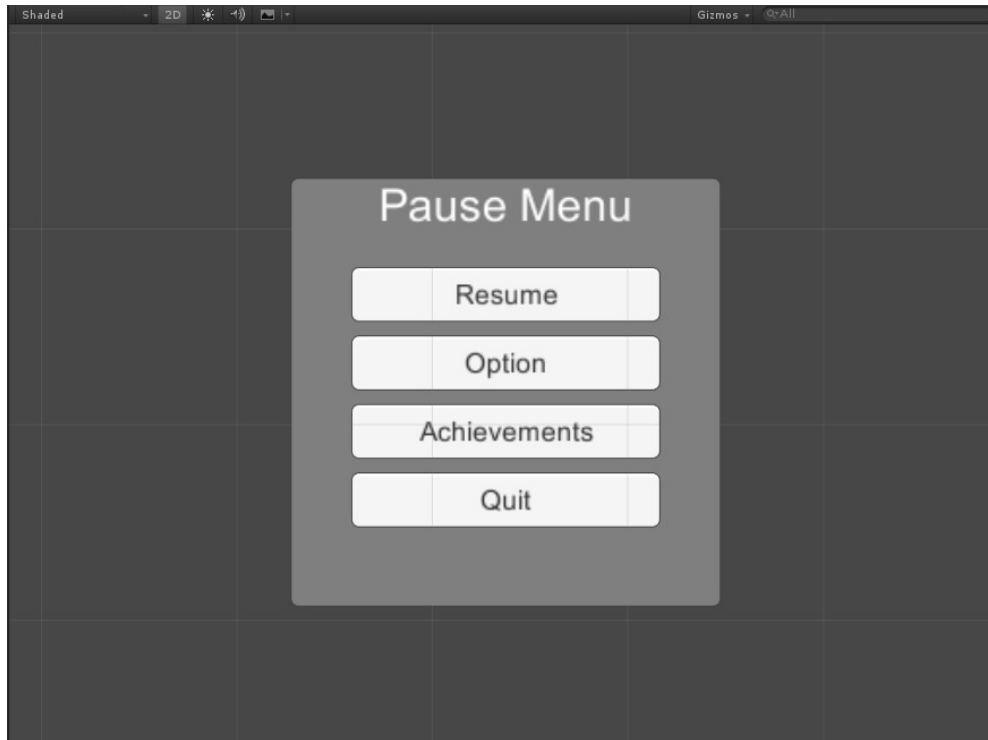
Script

Effect Color

Effect Distance X Y

Use Graphic Alpha

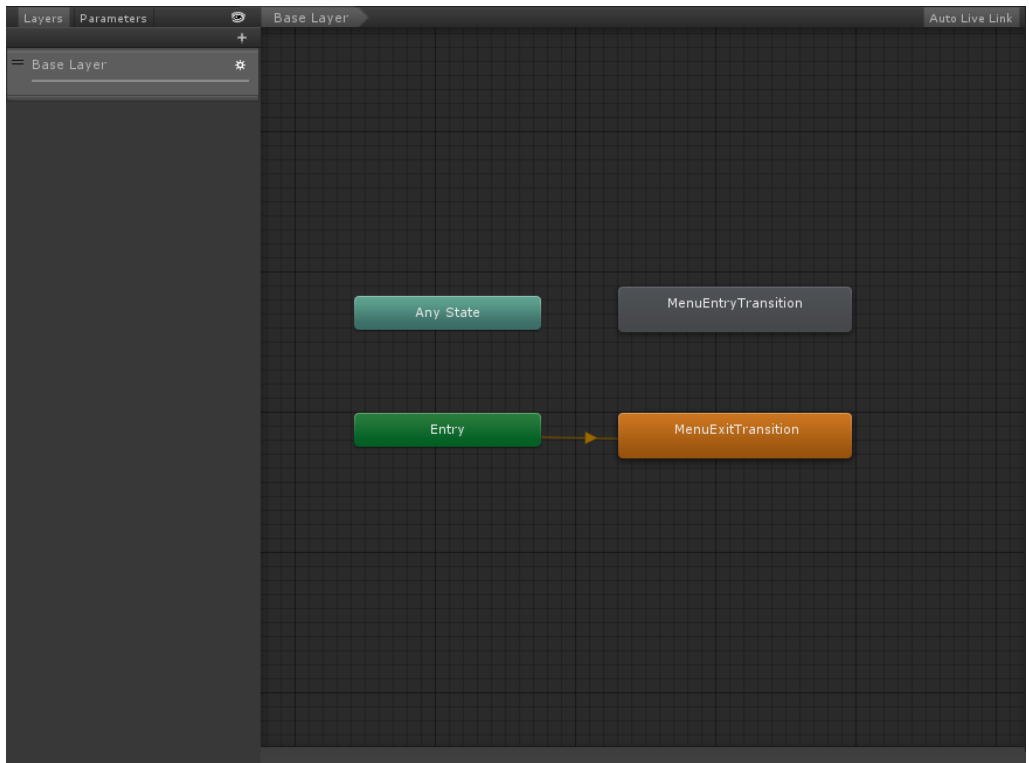
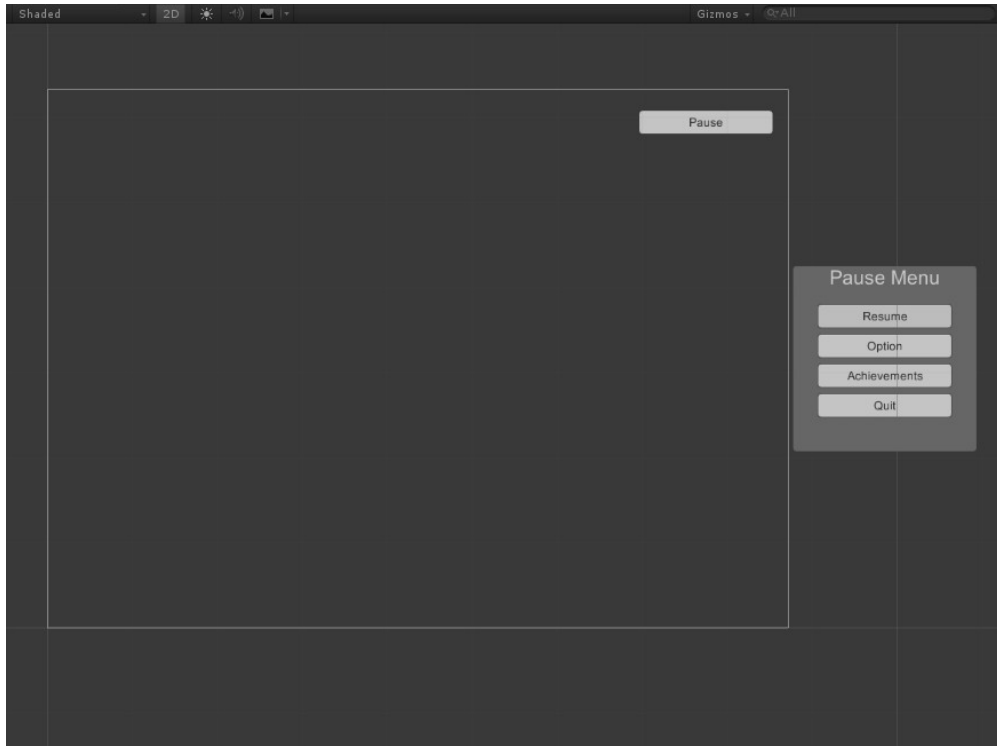
Chapter 6: Animating the UI



On Click ()

Runtime Only	+	GameObject.SetActive	+
PauseButton	○	<input checked="" type="checkbox"/>	
Runtime Only	+	GameObject.SetActive	+
Appering menu	○	<input type="checkbox"/>	

+ -



On Click ()

Runtime Only	Animator.Play
Appering menu (Animator)	MenuEntryTransition
Runtime Only	GameObject.SetActive
PauseButton	

On Click ()

Runtime Only	GameObject.SetActive
PauseButton	<input checked="" type="checkbox"/>
Runtime Only	Animator.Play
Appering menu (Animator)	MenuExitTransition

Button (Script)

Interactable

Transition: Animation

Normal Trigger: Normal

Highlighted Trigger: Highlighted

Pressed Trigger: Pressed

Disabled Trigger: Disabled

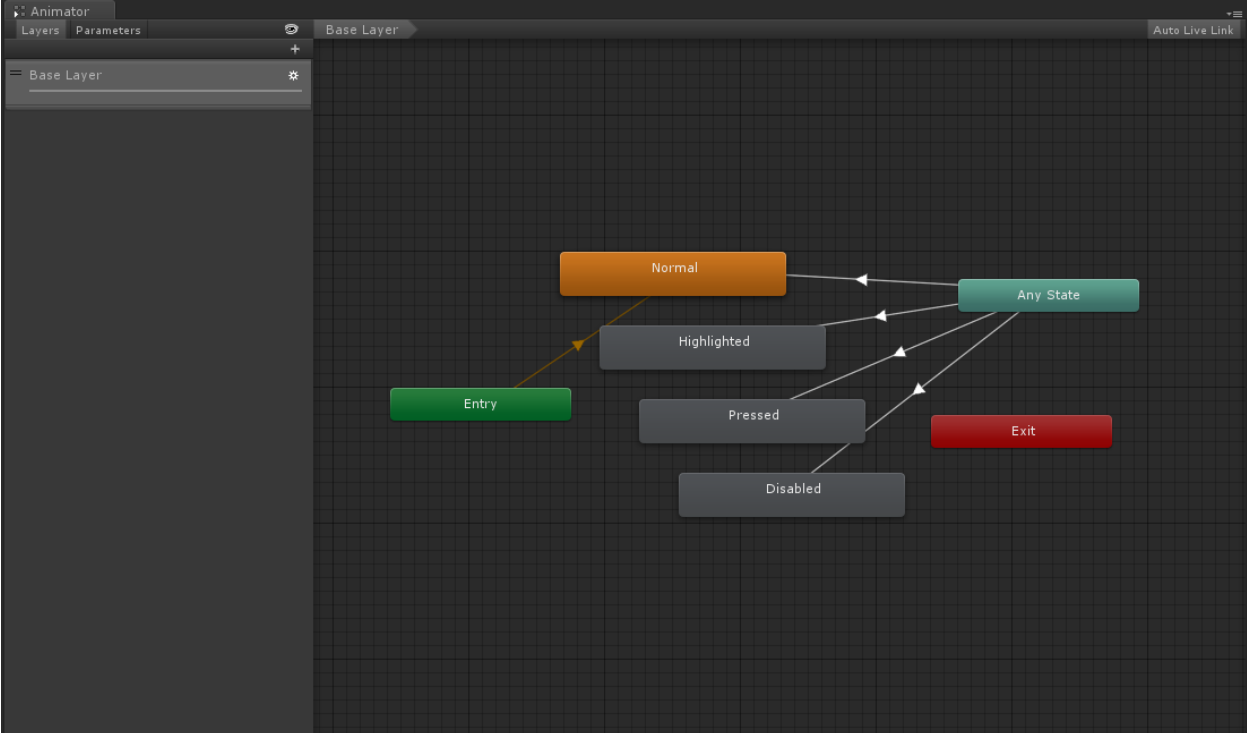
Auto Generate Animation

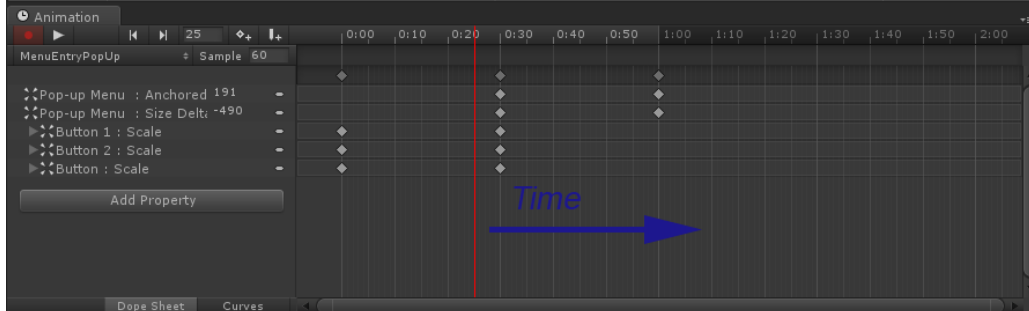
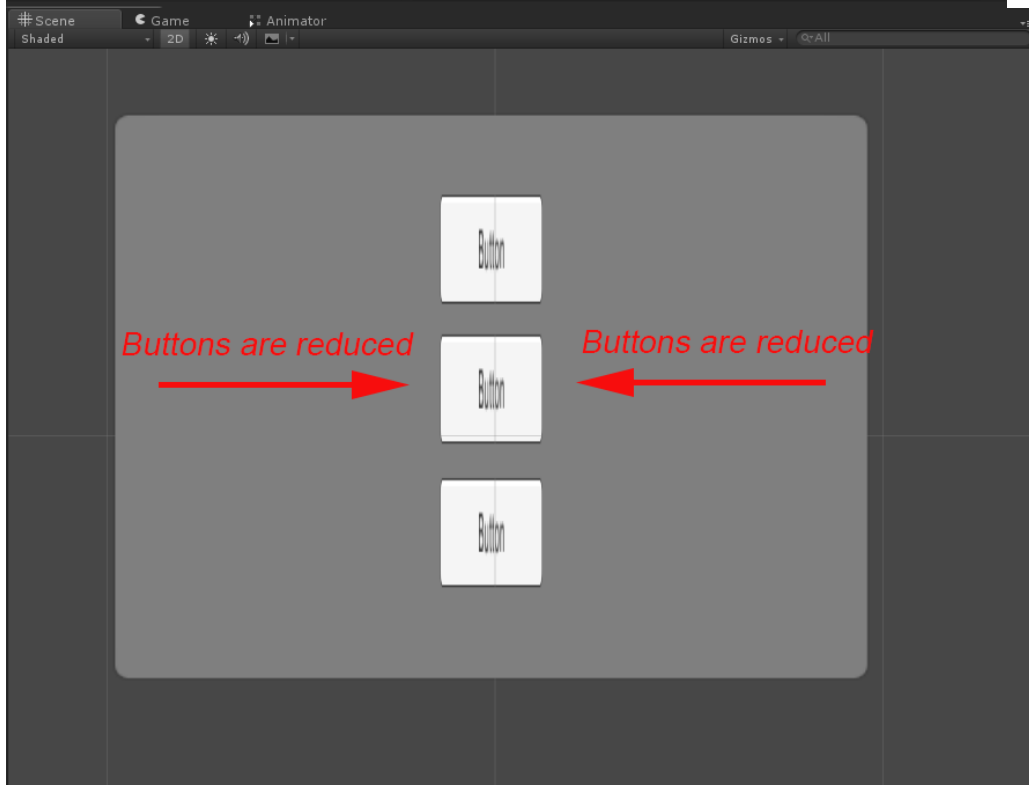
Navigation: Automatic

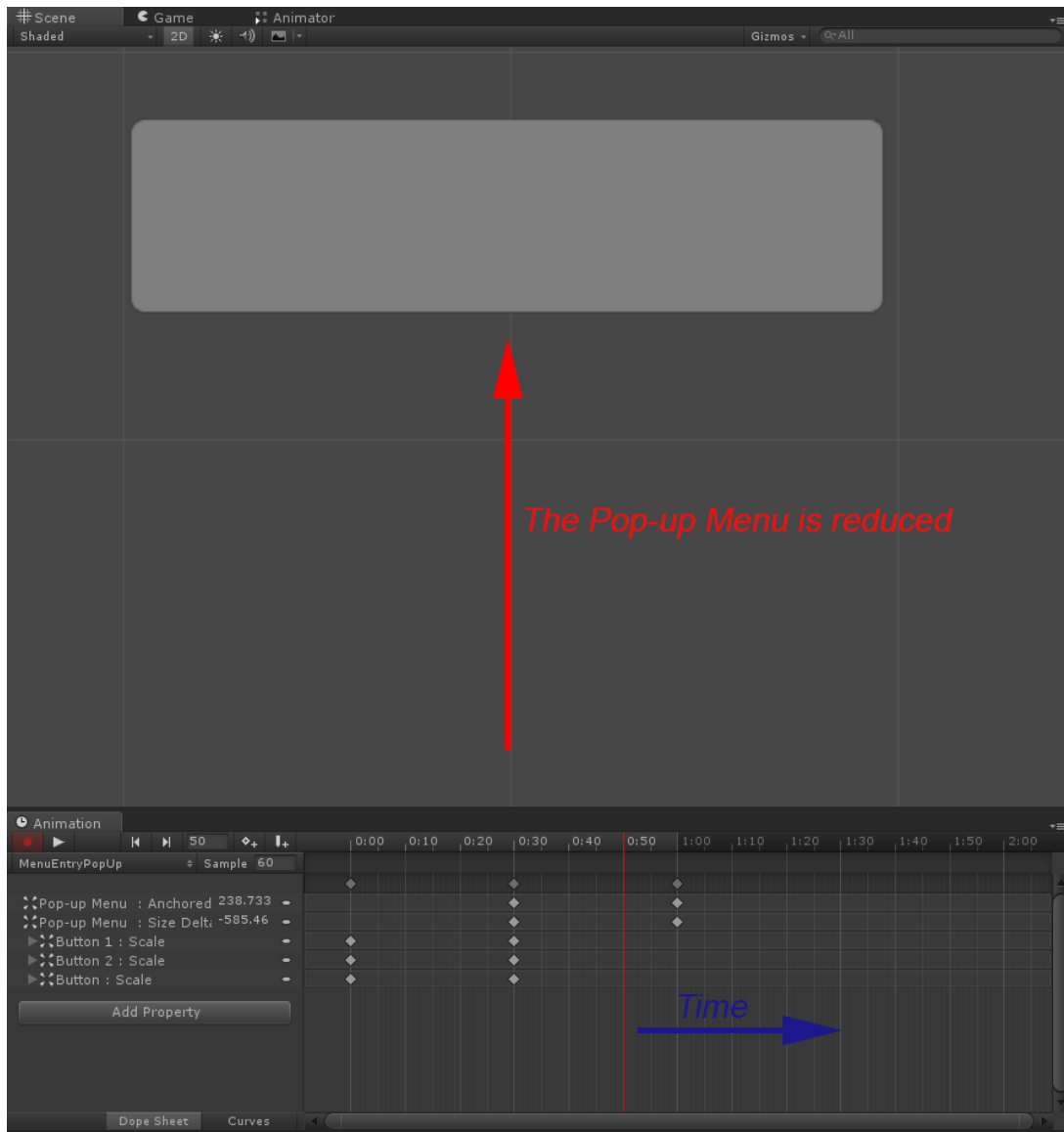
Visualize

On Click ()

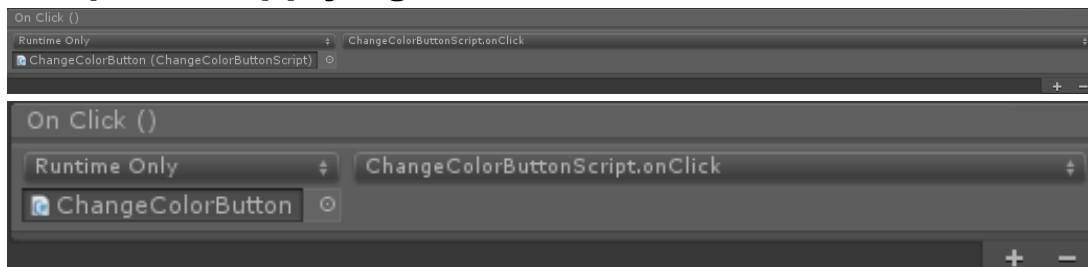
List is Empty







Chapter 7: Applying Runtime Customizations



Dynamic float

- ✓ change

Static Parameters

- bool enabled
- string name
- string tag
- bool useGUILayout
- BroadcastMessage (string)
- CancelInvoke (string)
- CancelInvoke ()
- change (float)
- SendMessage (string)
- SendMessageUpwards (string)
- StopAllCoroutines ()
- StopCoroutine (string)

On Value Changed (Single)

Runtime Only GraduallyColorSliderScript.change

GraduallyColorSlider (Gra)

+ -

On Value Changed (Single)

Runtime Only SlideShowerScript.changePicture

SlideShowerSlider (SlideS)

+ -

- Dynamic float
- changePicture**
- Static Parameters
- bool enabled
- string name
- string tag
- bool useGUILayout
- BroadcastMessage (string)
- CancelInvoke (string)
- CancelInvoke ()
- changePicture (float)
- SendMessage (string)
- SendMessageUpwards (string)
- StopAllCoroutines ()
- StopCoroutine (string)



▼ **Slide Shower Script (Script)**

Script

▼ Pictures

Size

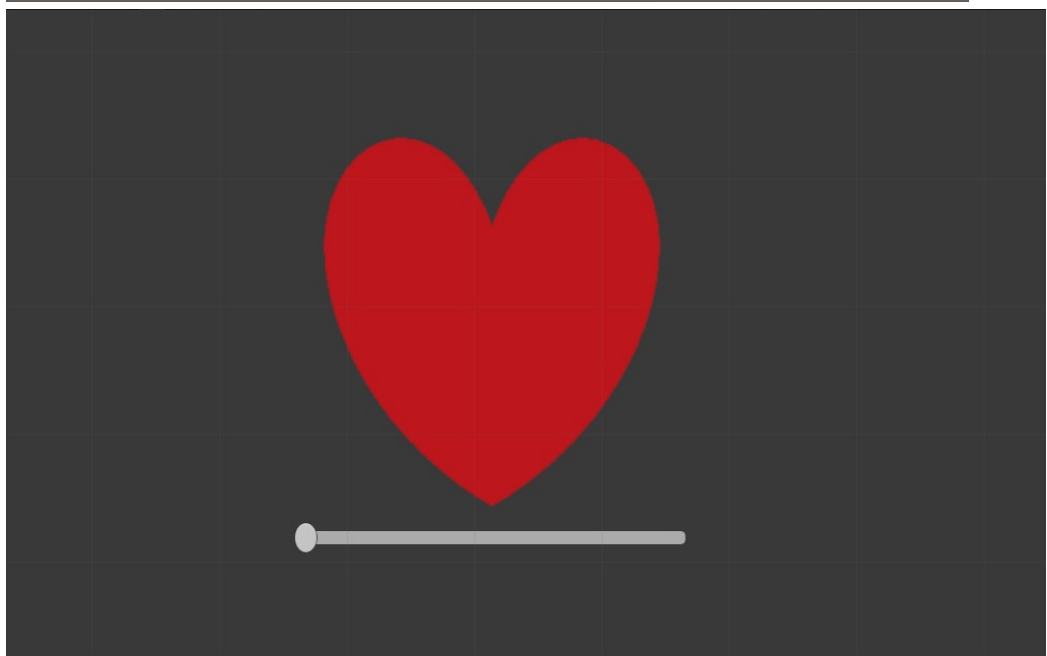
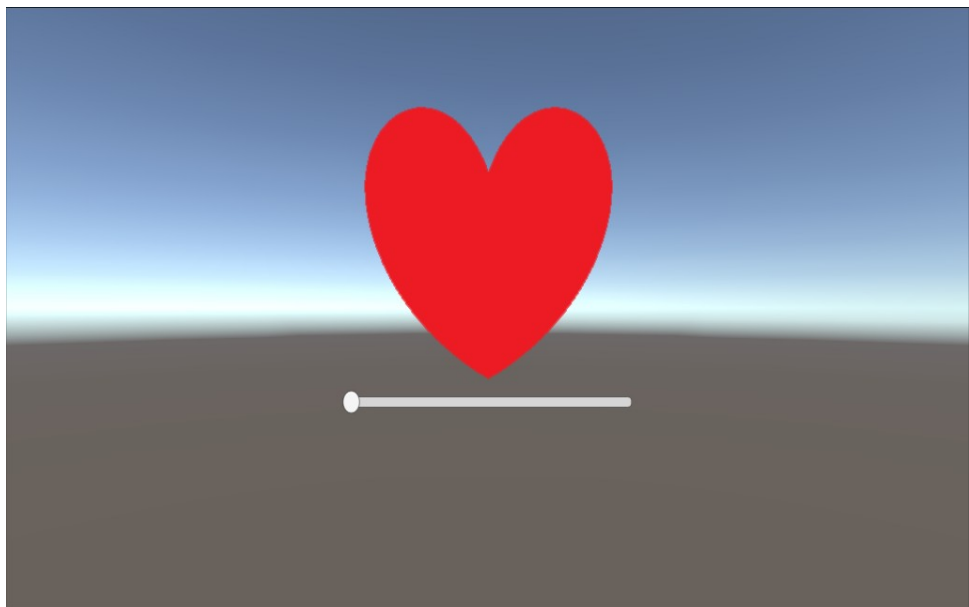
Element 0

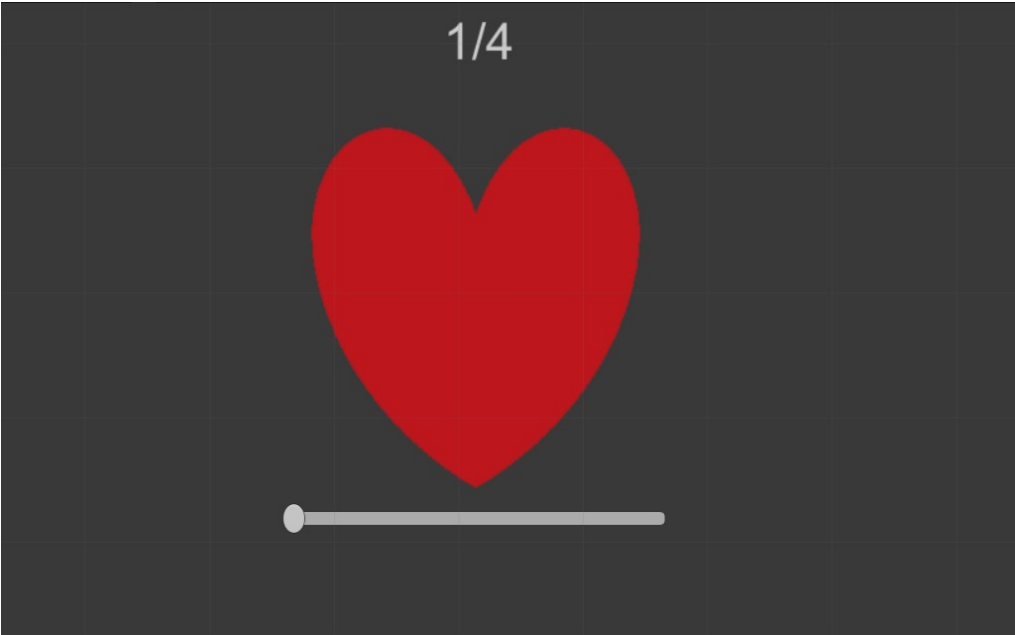
Element 1

Element 2

Element 3

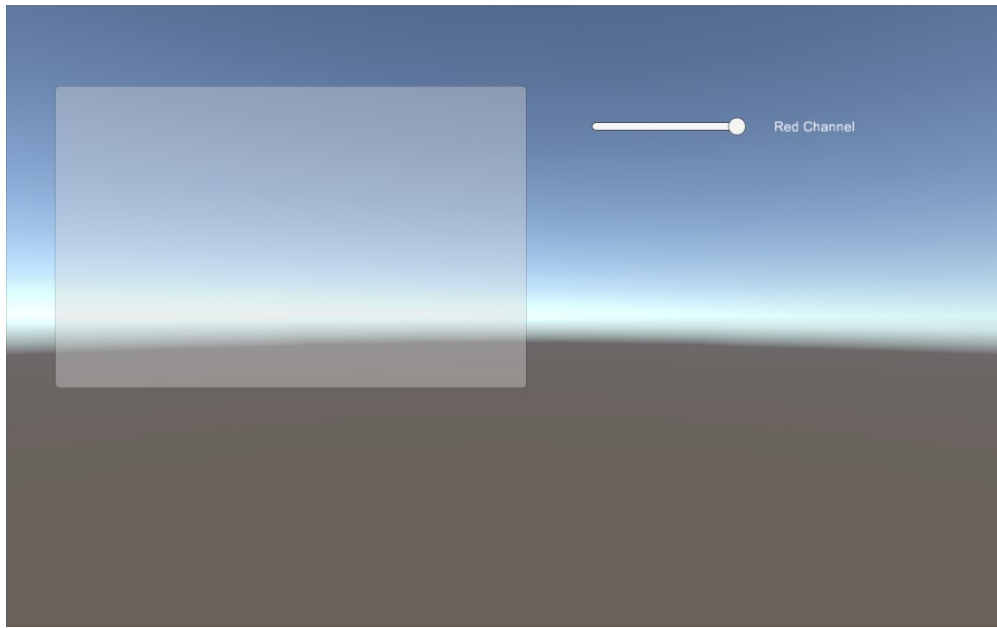
Img

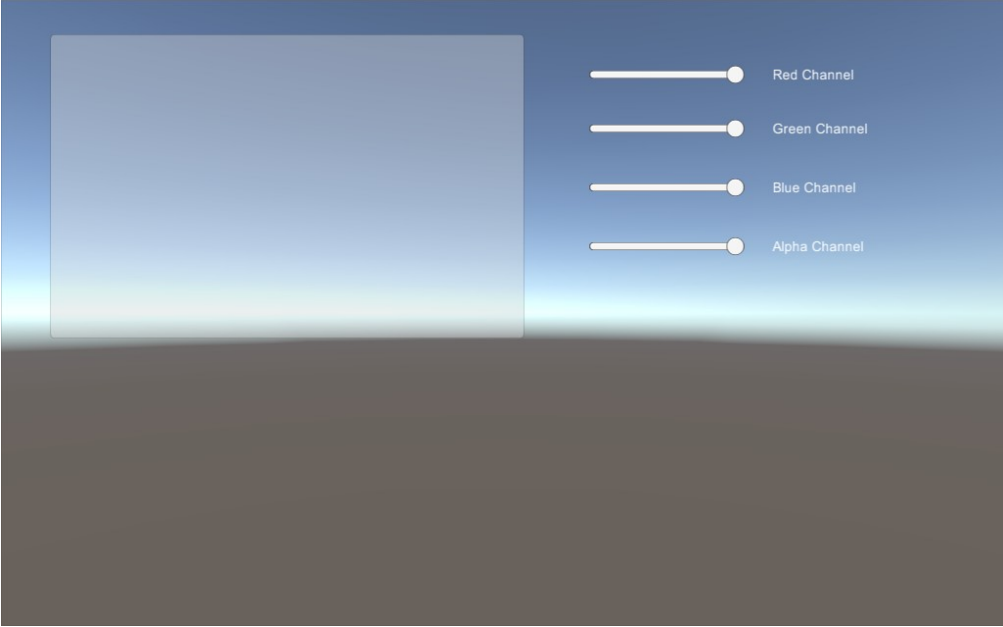




```
On Value Changed (Single)  
Runtime Only + ChangeColorChannelSliderScript.changeRed +  
RedChannelColorSlider (C) o + -
```

	Dynamic float
✓	changeAlpha
	changeBlue
	changeGreen
	changeRed
	Static Parameters
	bool enabled
	string name
	string tag
	bool useGUILayout
	BroadcastMessage (string)
	CancelInvoke (string)
	CancelInvoke ()
	changeAlpha (float)
	changeBlue (float)
	changeGreen (float)
	changeRed (float)
	SendMessage (string)
	SendMessageUpwards (string)
	StopAllCoroutines ()
	StopCoroutine (string)





	Dynamic string
	name
	tag
	BroadcastMessage
	CancellInvoke
✓	Check
	SendMessage
	SendMessageUpwards
	StopCoroutine
	Static Parameters
	bool enabled
	string name
	string tag
	bool useGUILayout
	BroadcastMessage (string)
	CancellInvoke (string)
	CancellInvoke ()
	Check (string)
	SendMessage (string)
	SendMessageUpwards (string)
	StopAllCoroutines ()
	StopCoroutine (string)

On Value Change (String)

Runtime Only PersonalTextValidation.Check

InputField ()

+ -

End Edit (String)

List is Empty

+ -

▼ **Personal Text Validation (Script)**

Script PersonalTextValidation

On Value Change (String)

List is Empty

+ -

End Edit (String)

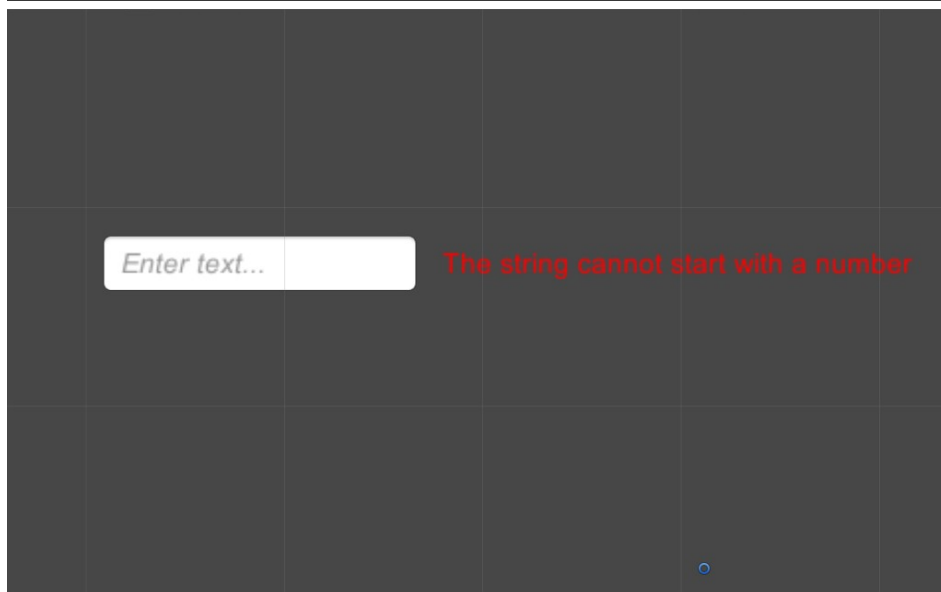
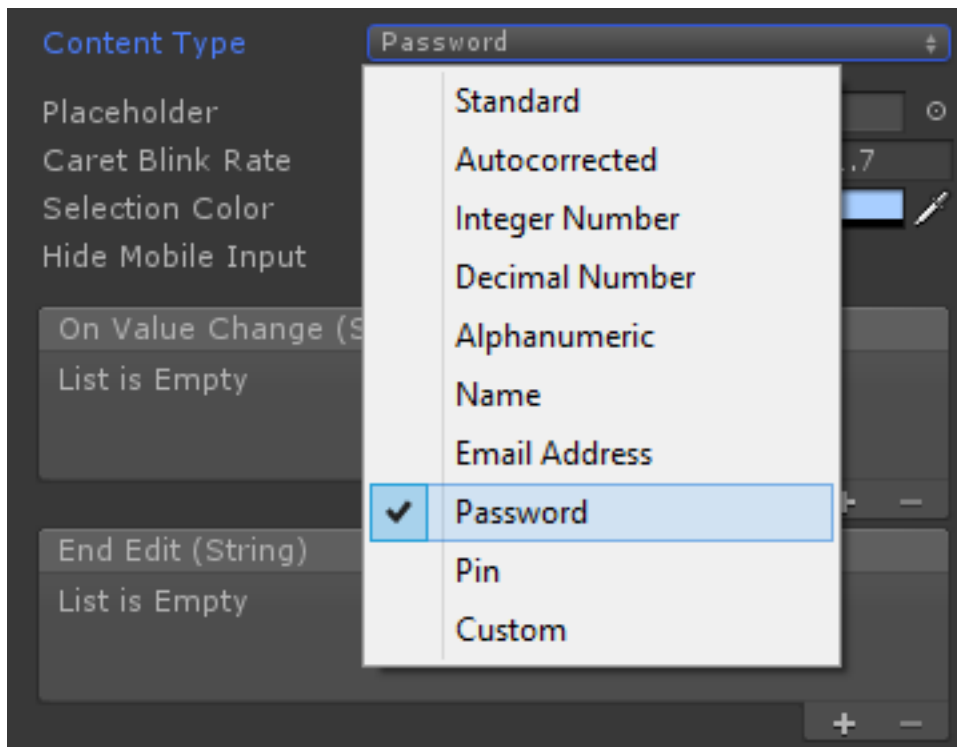
Runtime Only PersonalTextValidation.Check

InputField ()

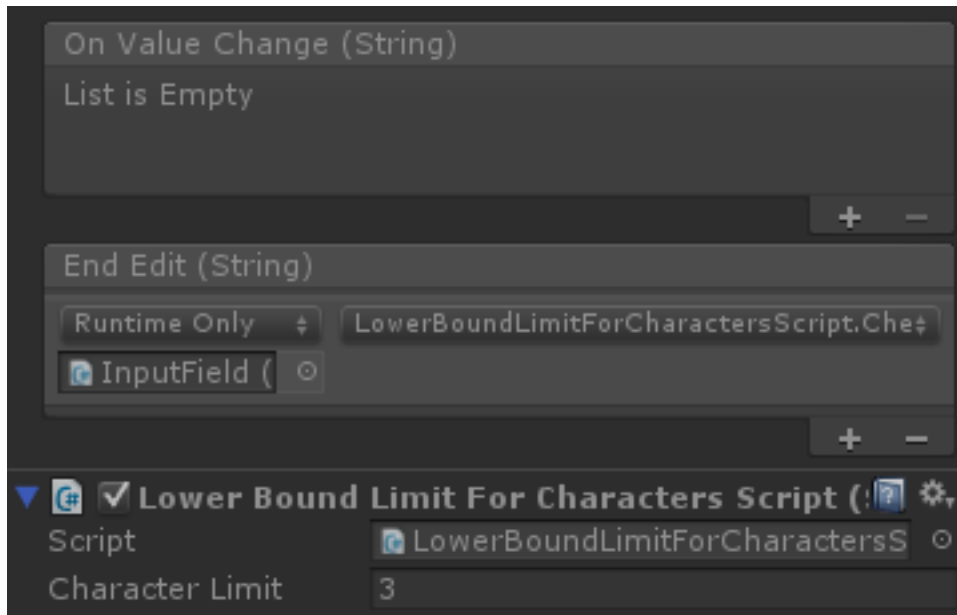
+ -

▼ **Personal Text Validation (Script)**

Script PersonalTextValidation



	Dynamic string
	name
	tag
	BroadcastMessage
	CancellInvoke
✓	Check
	SendMessage
	SendMessageUpwards
	StopCoroutine
	Static Parameters
	bool enabled
	string name
	string tag
	bool useGUILayout
	BroadcastMessage (string)
	CancellInvoke (string)
	CancellInvoke ()
	Check (string)
	SendMessage (string)
	SendMessageUpwards (string)
	StopAllCoroutines ()
	StopCoroutine (string)



Chapter 8: Applying Runtime Customizations



Event Trigger (Script)

Drag (BaseEventData)

Runtime Only DraggablePanelScript.OnDrag

PlayerObject

+

-

Add New Event Type

Draggable Panel Script (Script)

Script DraggablePanelScript

Distance Displayer Script (Script)

Script DistanceDisplayerScript

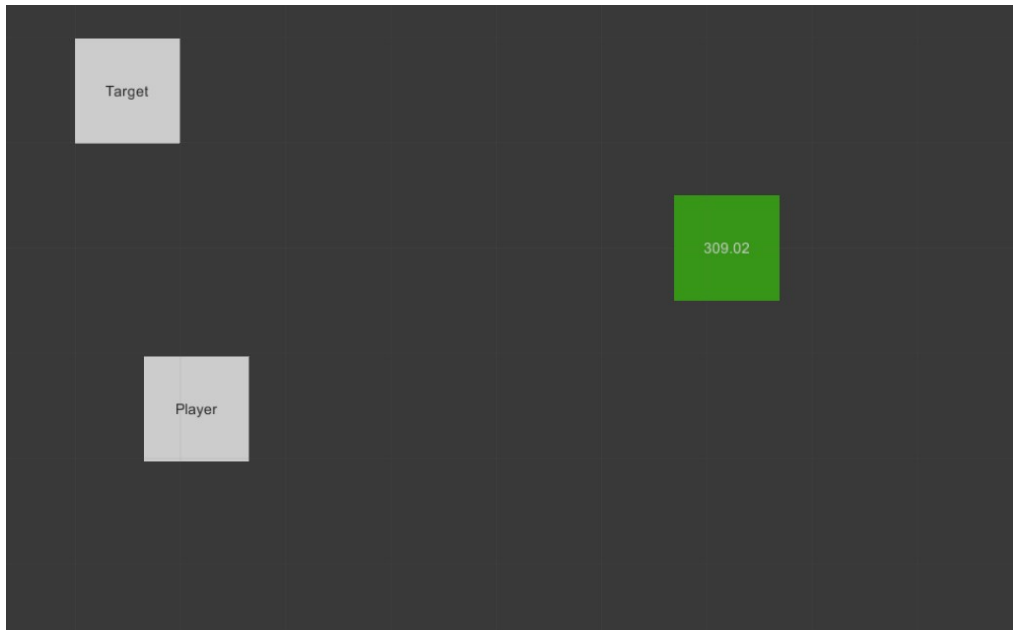
Player PlayerObject (Rect Transform)

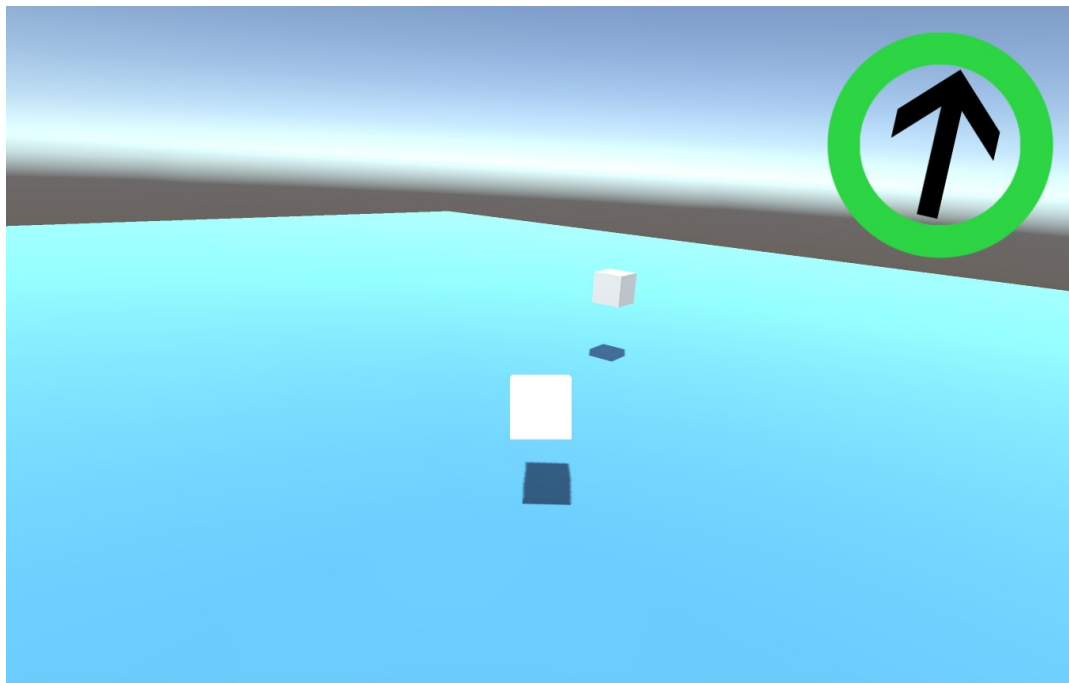
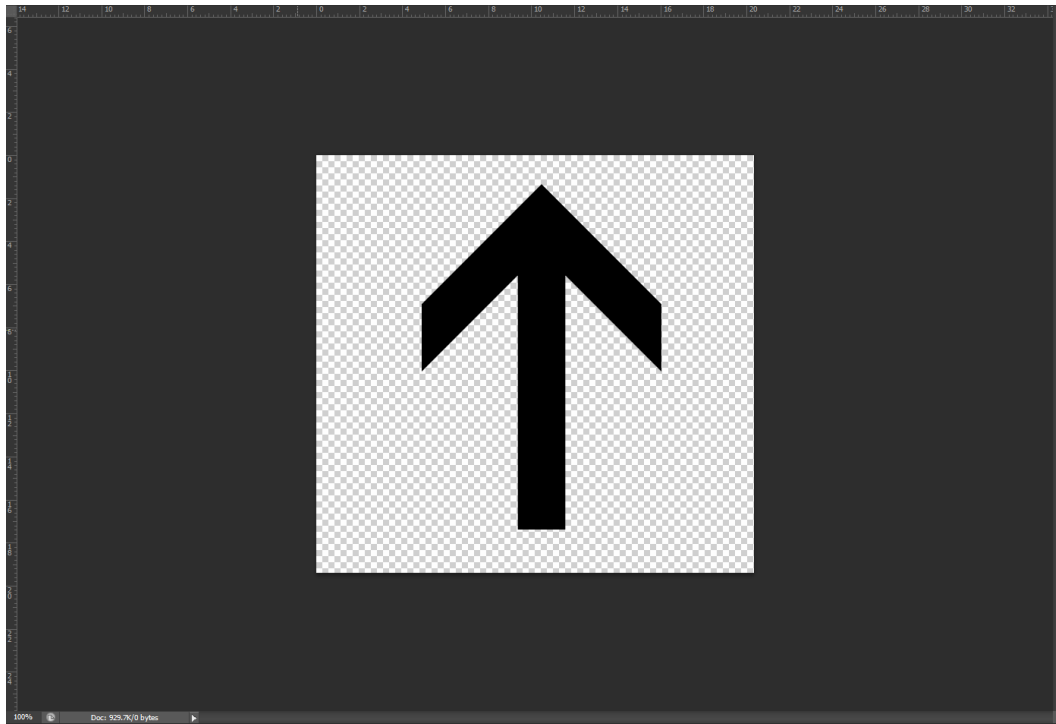
Target TargetObject (Rect Transform)

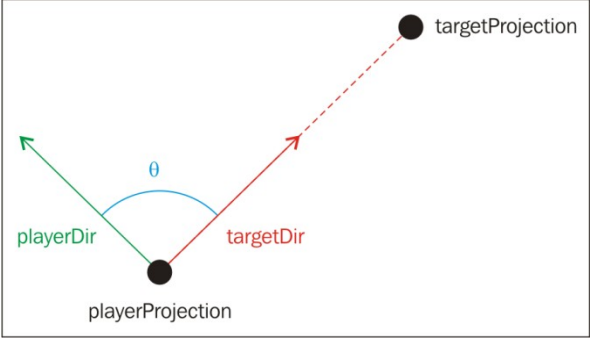
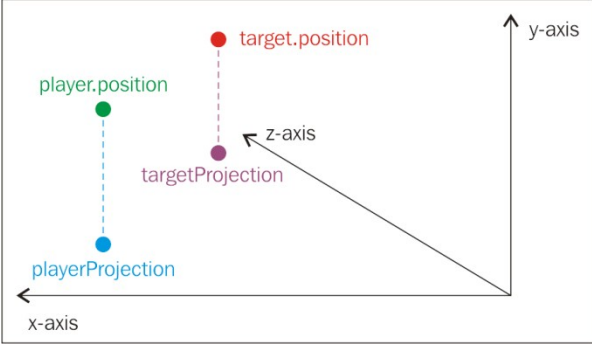
First Color

Second Color

Farthest Distance 400







Placeholder content area containing a text block:

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Chapter 9: Diving into 3D UIs

Welcome!

button 1

button 2

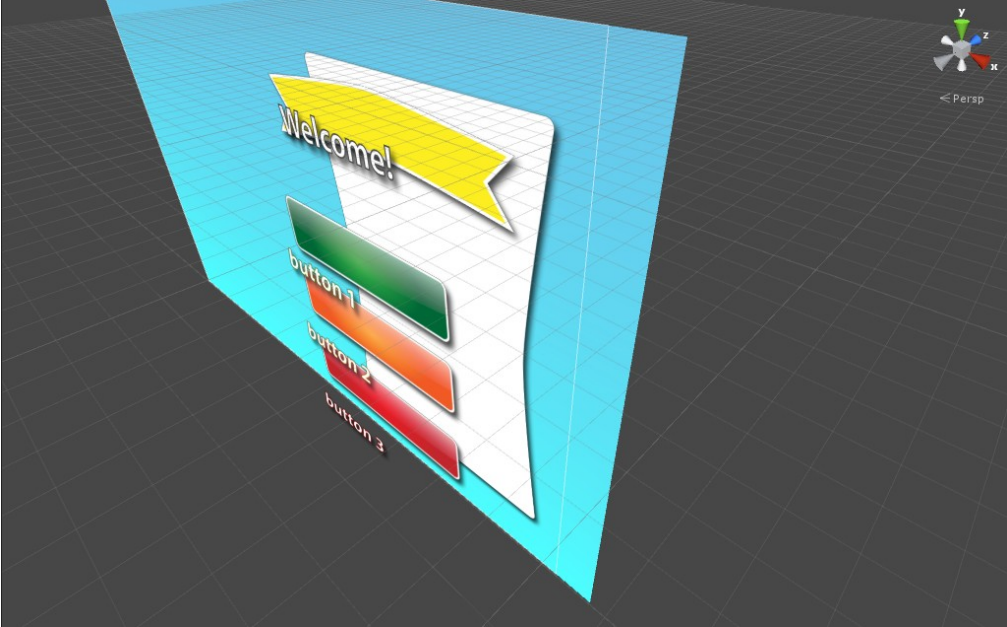
button 3

Welcome!

button 1

button 2

button 3

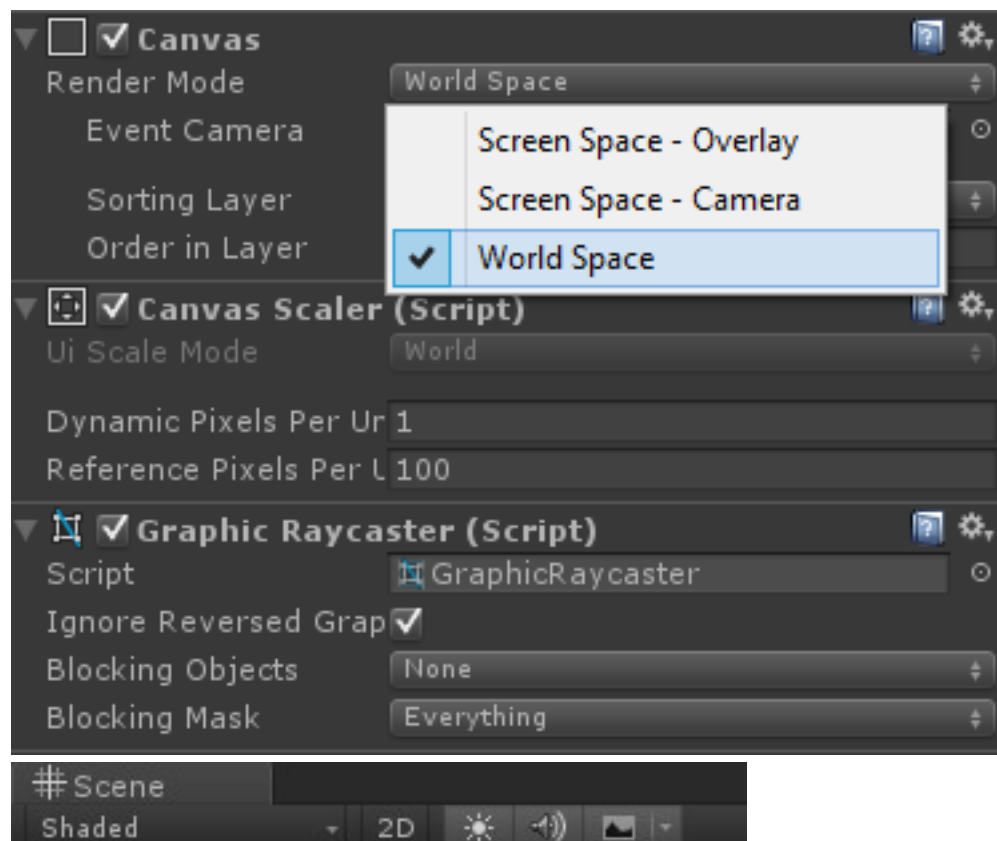


Welcome!

button 1

button 2

button 3



WARNING

**THIS IS AN
IMPORTANT
MESSAGE**



Chapter 10: Creating Minimaps



Camera

Clear Flags: Skybox

Background: [Color Picker]

Culling Mask: Mixed ...

Projection: Perspective

Field of View: 60

Clipping Planes: Near 0.01, Far 1000.14

Viewport Rect: X 0, Y 0, W 1, H 1

Depth: 0

Rendering Path: Use Player Settings

Target Texture: MinimapRenderTexture

Occlusion Culling:

HDR:

Raw Image (Script)

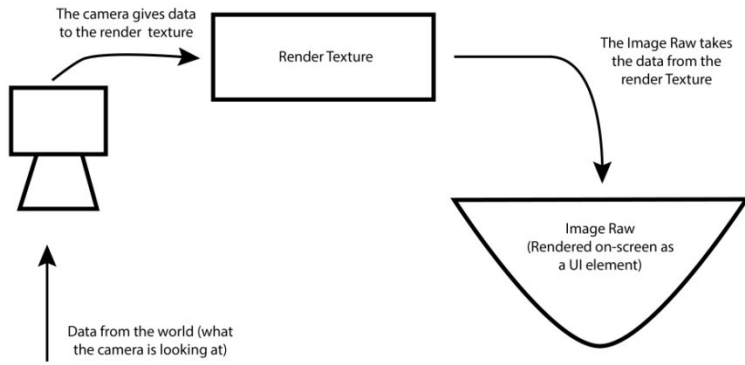
Texture: MinimapRenderTexture

Color: [Color Picker]

Material: None (Material)

UV Rect: X 0, Y 0, W 1, H 1

Set Native Size



Note: this is not intended to demonstrate how Unity really works, but rather to provide an understanding of the work flow process.

