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## Folders and Files

### UI

- ArrowPointer

    - Materials

        Arrow.mat

            (The material of the arrow pointer)

    Arrow.png

(Texture file for the arrow pointer)

Arrow.prefab

(Prefab for the arrow pointer)

#### - Coins

ARCHRISTY.ttf

(Text font file for the UI item count)

CoinUI.png

(Sprite file for the coin UI)

#### - EnemyHealth

HealthMaterial.mat

(The material of the health bar's health percentage)

NoHealthMaterial.mat

(The material of the health bar's no health percentage)

OutlineMaterial.mat

(The material of the health bar's outline)

#### - LockOnBars

BlackBars.png

(Sprite file for the black bars that appear on screen while locking on)

#### - PlayerHealth

##### - Hearts

0.psd

(Sprite file of a 0/4 full heart for the player's health)

1.psd

(Sprite file of a 1/4 full heart for the player's health)

2.psd

(Sprite file of a 2/4 full heart for the player's health)

3.psd

(Sprite file of a 3/4 full heart for the player's health)

4.psd

(Sprite file of a 4/4 full heart for the player's health)

## Models

### - Enemies

#### - Logs

##### - Materials

Body.mat

(The material of the log enemy)

Body.png

(Texture file for the log enemy)

LogEnemy.FBX

(.FBX model file of the log enemy)

LogEnemy.prefab

(Prefab for the log enemy)

#### - Robots

##### - Materials

Body.mat

(The material of the robot enemy's body)

Mouth.mat

(The material of the robot enemy's mouth)

Screws.mat

(The material of the robot enemy's screws)

Shoes.mat

(The material of the robot enemy's shoes)

Unlit-CullOff.shader

(Shader for the robot enemy's mouth material)

##### - Textures

Body.png

(Texture file for the robot enemy's body)

Mouth.png

(Texture file for the robot enemy's mouth)

ReflectionCubemap.png

(Texture file for the robot enemy's reflection)

Screws.png

(Texture file for the robot enemy's screws)

Shoes.png

(Texture file for the robot enemy's shoes)

EnemyController.controller

(Animator controller for the enemy)

RobotEnemy.FBX

(.FBX model file of the robot enemy)

RobotEnemy.prefab

(Prefab for the robot enemy)

## - Items

### - Coin

#### - Materials

Coin.mat

(The material of the coin item)

Coin.FBX

(.FBX model file of the coin)

Coin.png

(Texture file for the coin)

Coin.prefab

(Prefab for the coin)

### - Heart

#### - Materials

Heart.mat

(The material of the heart item)

Heart.FBX

(.FBX model file of the heart)

Heart.png

(Texture file for the heart)

Heart.prefab

(Prefab for the heart)

- LedgeClimbNinja

- Materials

LedgeClimbNinja.mat

(The material of the Ledge Climb Ninja)

FirstPersonArms.FBX

(.FBX model file of the Ledge Climb Ninja with separate arm models used for First Person mode)

LedgeClimbNinja.FBX

(.FBX model file of the Ledge Climb Ninja (player))

Contains 47 Mecanim animations; all root motion compatible

LedgeClimbNinja.png

(Texture file for the Ledge Climb Ninja)

PlayerController.controller

(Animator controller for the Ledge Climb Ninja)

- Stages

- ExampleStage1

- Materials

Ladder.mat

(The material of the ladder)

logo.mat

(The material of the Easy Ledge Climb (ELC) Character Controller logo)

mountains.mat

(The material of the stage's mountains)

standard.mat

(The main material of the stage)

Vines.mat

(The material of the vines)

ExampleStage1.FBX

(.FBX model file of the first example stage)

Ladder.png

(Texture file for the ladders)

logo.png

(Texture file for the Easy Ledge Climb (ELC) Character Controller logo)

Vines.png

(Texture file for the vines)

#### - ExampleStage2

##### - Materials

logo.mat

(The material of the Easy Ledge Climb (ELC) Character Controller logo)

mountains.mat

(The material of the mountains)

standard.mat

(The main material of the stage)

ExampleStage2.FBX

(.FBX model file of the second example stage)

#### - SideScrollerStage

##### - Materials

lava.mat

(The material of the lava)

lava.png

(Texture file for the lava)

SideScrollerStage.prefab

(Prefab for the side-scroller example stage)

#### - Water

##### - Materials

underwater.mat

(The material used for underwater)

water.mat

(The material of the water)

waterShadows.mat

(The material used for the water's shadows)

ScrollTexture.cs

(Scrolls the texture of a material)

StandardCullOff.shader

(.FBX model file of the first example stage)

UnlitTransparentCullOff.shader

(Texture file for the ladders)

water.png

(Texture file for the water)

## **ParticleEffects**

- Dust

- Materials

DustCloud.mat

(The material of the dust cloud particle effect)

DustDoubleJump.mat

(The material of the dust cloud particle effect used for the double jump)

DustCloud.prefab

(Prefab for the dust cloud particle effect)

DustDoubleJump.prefab

(Prefab for the DustDoubleJump particle effect)

DustParticle.png

(Texture file for the dust cloud particle effect used for the double jump)

- Spark

ParticleAfterburner.mat

(The material of the spark particle effect)



Spark.prefab

(Prefab for the spark particle effect)

- Splash

- Materials

ParticleSplashes.mat

(The material of the water drops from the splash particle effect)

ParticleWaterSpray.mat

(The material of the water ripples from the splash particle effect)

ParticleCloudWhite.png

(Texture file for the water ripples in the splash particle effect)

Splash.prefab

(Prefab for the splash particle effect)

SplashesFineParticle.png

(Texture file for the water drops in the splash particle effect)

AutoDestroyParticleSystem.cs

(Automatically destroys the script holder once its ParticleSystem has completed)

## Scenes

- FirstPerson

- ExampleStage1

DemoSceneCharacterController.unity

(Demo scene that uses a 1<sup>st</sup> person camera view, "ExampleStage1" as the stage, "FirstPersonArms" as the player, and a Character Controller for the movement)

DemoSceneRigidbody.unity

(Demo scene that uses a 1<sup>st</sup> person camera view, "ExampleStage1" as the stage, "FirstPersonArms" as the player, and a Rigidbody for the movement)

- ExampleStage2

DemoSceneCharacterController.unity

(Demo scene that uses a 1<sup>st</sup> person camera view, "ExampleStage2" as the stage, "FirstPersonArms" as the player, and a Character Controller for the movement)

DemoSceneRigidbody.unity

(Demo scene that uses a 1<sup>st</sup> person camera view, "ExampleStage2" as the stage, "FirstPersonArms" as the player, and a Rigidbody for the movement)

- SideScroller

- SideScrollerStage

DemoSceneCharacterController.unity

(Demo scene that uses a side-scrolling camera view, "SideScrollerStage" as the stage, "LedgeClimbNinja" as the player, and a Character Controller for the movement)

DemoSceneRigidbody.unity

(Demo scene that uses a side-scrolling camera view, "SideScrollerStage" as the stage, "LedgeClimbNinja" as the player, and a Rigidbody for the movement)

- ThirdPerson

- ExampleStage1

DemoSceneCharacterController.unity

(Demo scene that uses a 3<sup>rd</sup> person camera view, "ExampleStage1" as the stage, "LedgeClimbNinja" as the player, and a Character Controller for the movement)

DemoSceneRigidbody.unity

(Demo scene that uses a 3<sup>rd</sup> person camera view, "ExampleStage1" as the stage, "LedgeClimbNinja" as the player, and a Rigidbody for the movement)

- ExampleStage2

DemoSceneCharacterController.unity

(Demo scene that uses a 3<sup>rd</sup> person camera view, "ExampleStage2" as the stage, "LedgeClimbNinja" as the player, and a Character Controller for the movement)

DemoSceneRigidbody.unity

(Demo scene that uses a 3<sup>rd</sup> person camera view, "ExampleStage2" as the stage, "LedgeClimbNinja" as the player, and a Rigidbody for the movement)

## Scripts

### - Camera

CameraController.cs - modified from John McElmurray's and Julian Adams' "ThirdPersonCamera.cs" script

- Follow the player at a set speed, height, and distance.
- Follow the player as a side-scroller.
- Lock on behind the player.
- Lock on to objects.
- Mouse Orbit the player.
- Enter First Person mode.
- Mouse Orbit in First Person mode.

*NOTE: \*You should always set a layer for your player so that you can disable collisions with that layer (by unchecking it in the script's Collision Layers). If you do not, the camera will collide with the player himself!\**

### - Enemy

\*(Enemy must have a CharacterController or Rigidbody component in order for the enemy AI script to work!)\*

EnemyAI.cs

- Follow the player at a set speed and rotation.
- Attack the player.
- Receive damage.
- Regain health.
- Use a health bar.
- Respawn.

*NOTE: \*You should always set a layer for your enemy so that you can disable collisions with that layer (by unchecking it in the script's Collision Layers). If you do not, the raycasts and linecasts will collide with the enemy itself and keep the script from working properly!\**

### - Items

ItemRotation.cs

- Rotate towards a set direction (the higher the number, the faster the item will rotate).

### - MobileSupport

- CrossPlatformInput

(The cross platform input from Unity's "Standard Assets" pack)

#### - MovingPlatforms

MovingPlatform.cs

- Move to and from a set position.
- Move at a set speed.
- Rotate towards a set direction.
- Wait before moving.

#### - Player

\*(Player must have a CharacterController or Rigidbody component in order for these to work!)\*

Health.cs

- Have a set health.
- Receive damage from enemies, items, and falls.
- Regain health over time, or from items.
- Respawn.
- Set UI images for the health.
- Position the health UI anywhere on the screen, and limit the number of UI images (hearts) that can be on each row of health.

ItemManager.cs

- Have an inventory of different items.
- Count and display the number of items the player currently holds (either by simply counting the number, showing the number relative to the item's limit (with zeros before it), or by adding by a prefix or suffix to the number).
- Set limits for the number of items the player can have.
- Set UI images and text for different items.
- Position the UI images and text anywhere on the screen.

LedgeClimbController.cs

- Grab on to, and climb up and over ledges (Climbing Detectors).
- Move from side to side on ledges, either in a fully 3D setting, or in a 2.5D side-scrolling setting (Moving Detectors).
- Jump from one ledge to another / switch ledges (Ledge Switching Detectors).
- Grab back on to or jump off of a ledge that you just walked off of (Walking Off Ledge Detectors).

- Enable or disable scripts when grabbing on to a ledge, as well as when letting go of a ledge (Scripts To Enable On Grab/Scripts To Disable On Grab).

*-> You should always disable any other scripts that affect the movement or rotation of the player. If you do not, this script will not work properly.*

#### MovingPlatformController\_Standalone.cs

*\*(This script is the exact same as the “Moving Platforms” section of the PlayerController.cs script, only this is a standalone version of the section)\**

- Ride moving and rotating platforms (Moving Platforms).

#### PlayerController.cs

- Move and rotate (Movement).
- Slide down slopes (Movement).
- Perform any combo of jumps with different heights and animations (Jumping).
- Perform a double jump (Jumping).
- Wall jump (Wall Jumping).
- Perform any combo of attacks with different strengths and animations (Attacking).
- Climb ladders and walls (Climbing).
- Swim (Swimming).
- Ride moving and rotating platforms (Moving Platforms).

#### WallClimbController\_Standalone.cs

*\*(This script is the exact same as the “Climbing” section of the PlayerController.cs script, only this is a standalone version of the section)\**

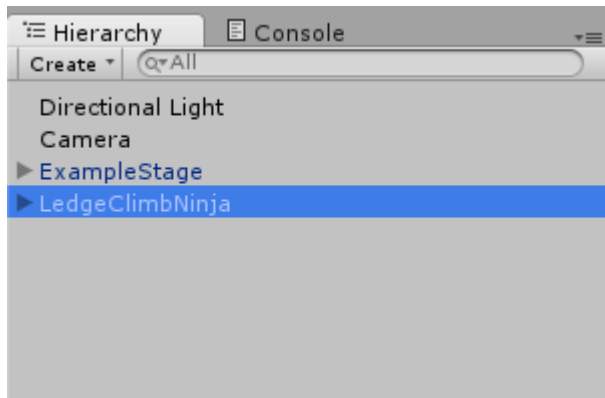
- Climb ladders and walls (Climbing).
  - Enable or disable scripts when grabbing on to a ladder or wall, as well as when letting go of one (Scripts To Enable On Grab/Scripts To Disable On Grab).
- > You should always disable any other scripts that affect the movement or rotation of the player. If you do not, this script will not work properly.*

***NOTE: \*You should always set a layer for your player so that you can disable collisions with that layer (by unchecking it in the script's Collision Layers). If you do not, the raycasts and linecasts will collide with the player himself and keep the script from working properly!\****

## Setting Up the All in One Game Kit - ELC Character System with a New Character

### Making the player scripts work with your character

1. Select your character in the “Hierarchy” tab.



2. If your character does not already have one, add a CharacterController **OR** Rigidbody component (only add one) to your character from the “Inspector” tab:

### Character Controller:

I recommend using a CharacterController for the player.

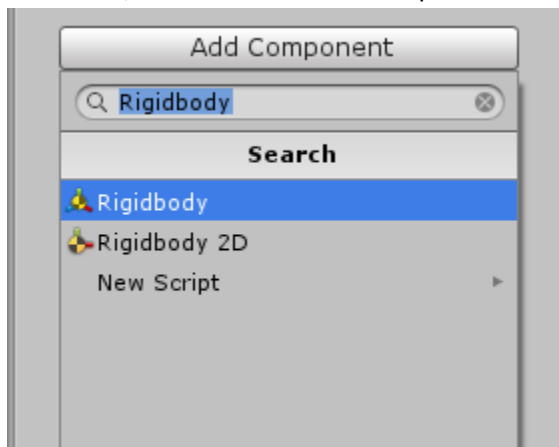
To do this, simply click the “Add Component” button in the Inspector tab, search “Character Controller”, then select it.



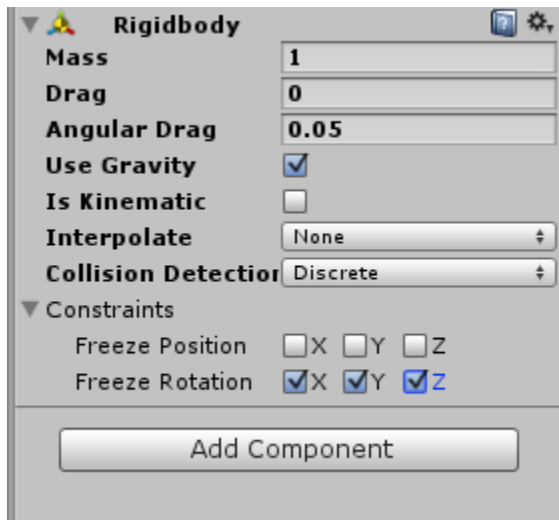
### Rigidbody:

If you use a Rigidbody, you must freeze the Rigidbody’s rotation, disable its “Use Gravity” option, and add a collider component as well.

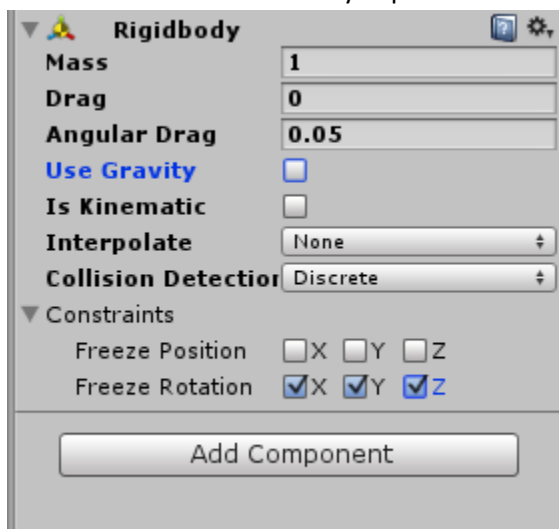
To do this, first click the “Add Component” button in the Inspector tab, search “Rigidbody”, then select it.



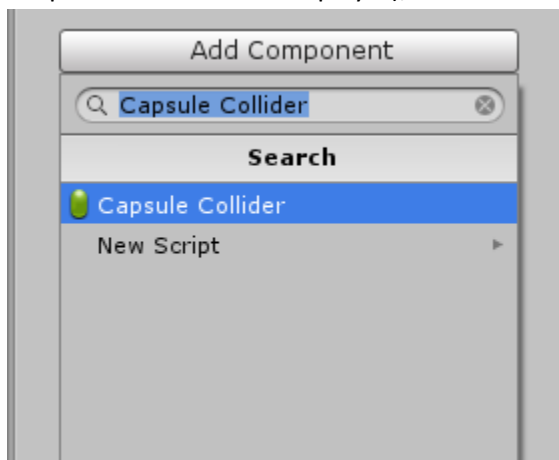
Next, freeze the Rigidbody’s rotation by enabling the X, Y, and Z axis options of “Freeze Rotation”.



Now disable the “Use Gravity” option.

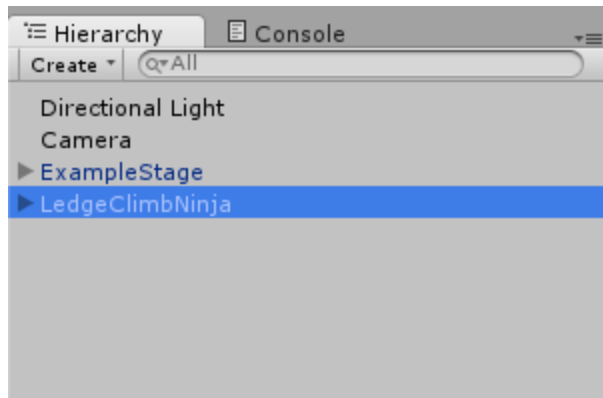


Finally, click the “Add Component” button in the Inspector tab, search a collider (I recommend using the “Capsule Collider” for the player), then select it.

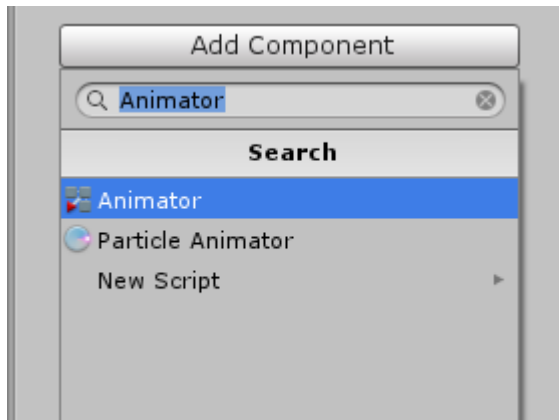


## Making the animations work with your character

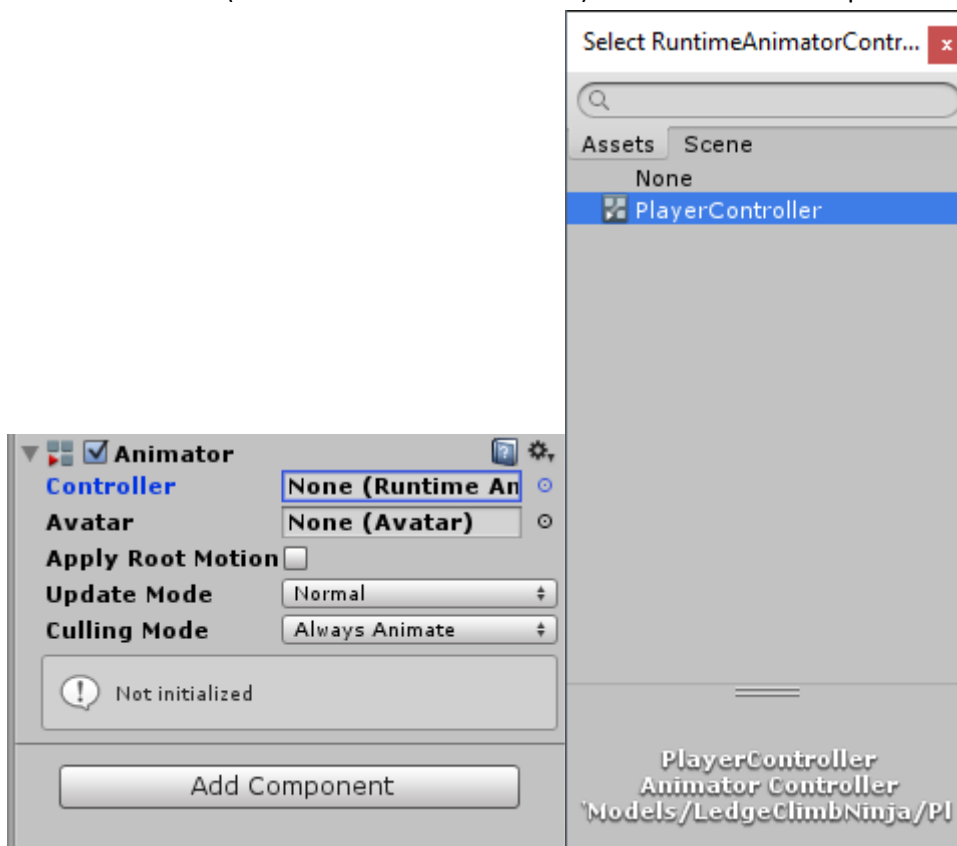
1. Select your character in the “Hierarchy” tab.



2. If your character does not already have one, add an Animator component to your character from the "Inspector" tab.

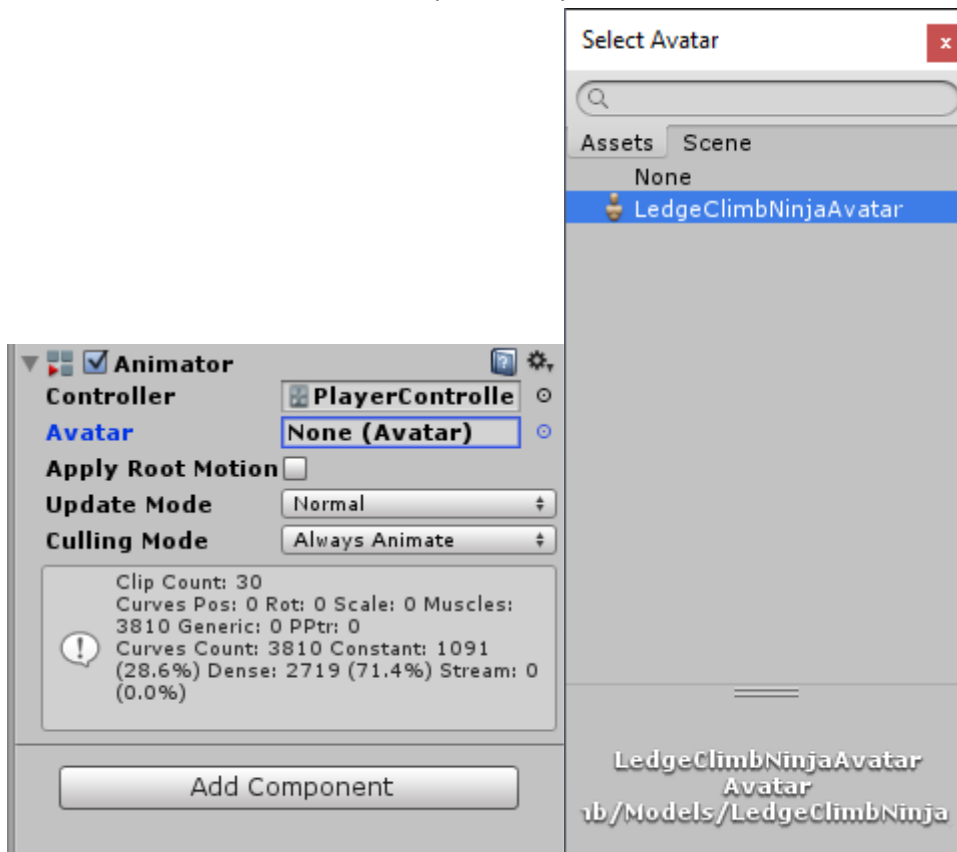


3. Set the Controller (Runtime Animator Controller) of the Animator Component to PlayerController.



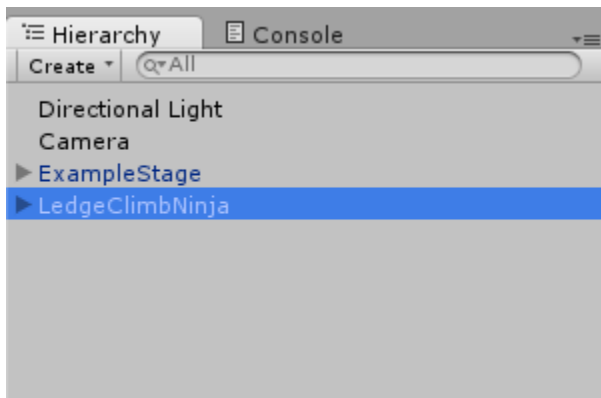


4. Set the Avatar of the Animator Component to your character's avatar.



### Setting up PlayerController.cs with your character

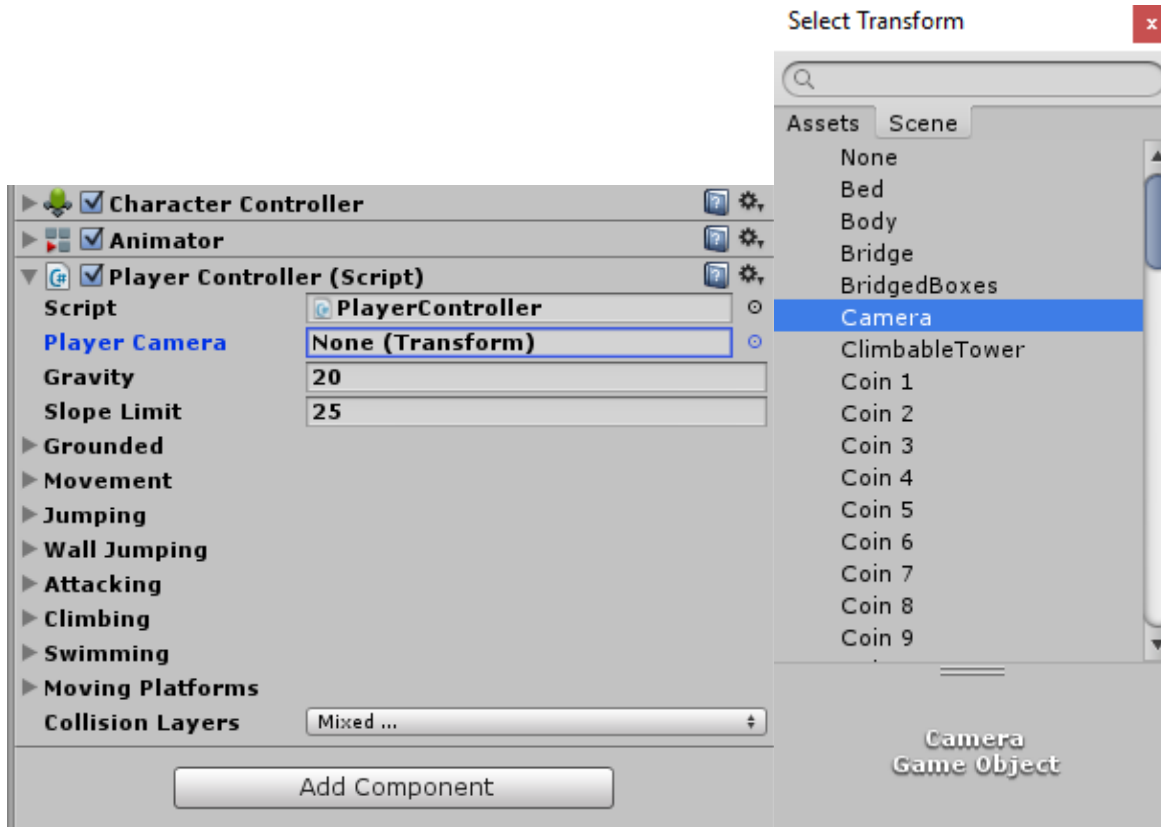
1. Select your character in the "Hierarchy" tab.



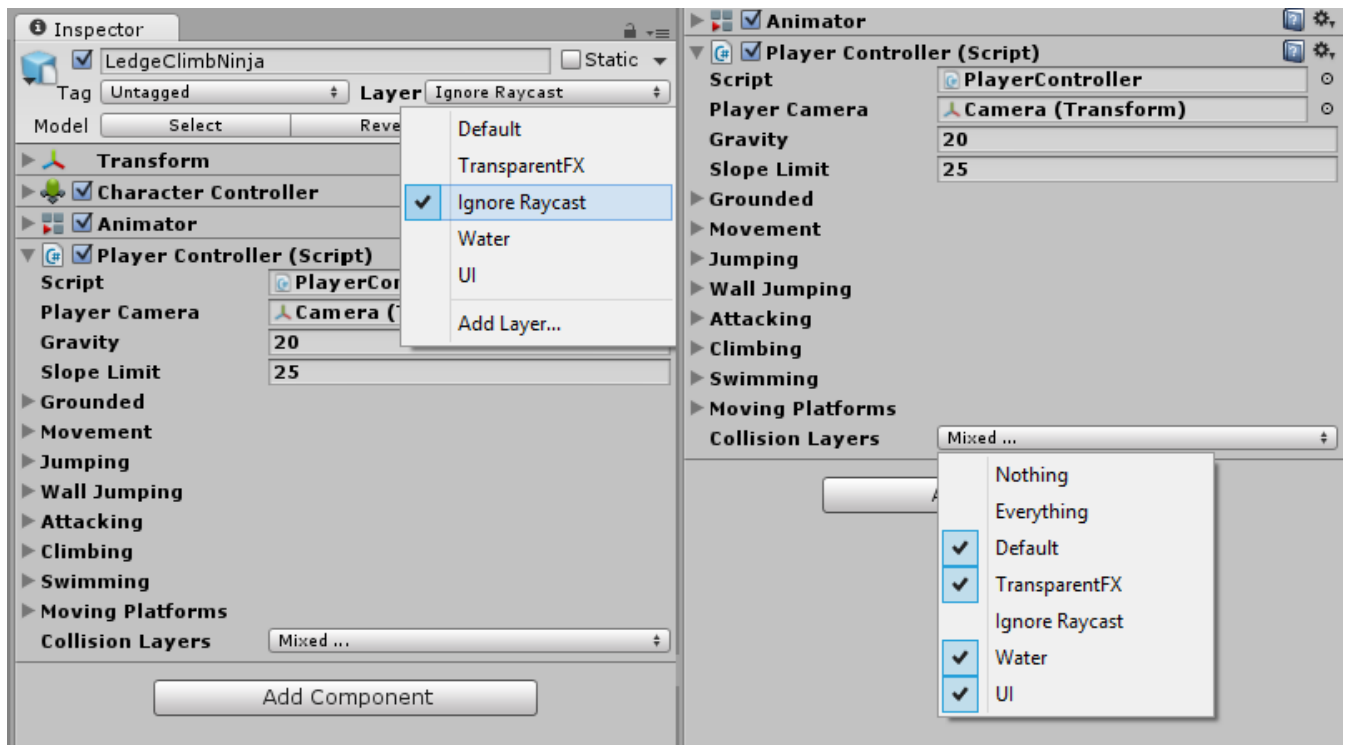
2. Add the PlayerController.cs script to your character (either by using "Add Component" in the "Inspector" tab or by dragging and dropping the script from the "Project" tab on to your player in the "Inspector" tab).



3. Set the Player Camera of the script to the camera you want to use for your player (in this case, the camera is simply named "Camera").

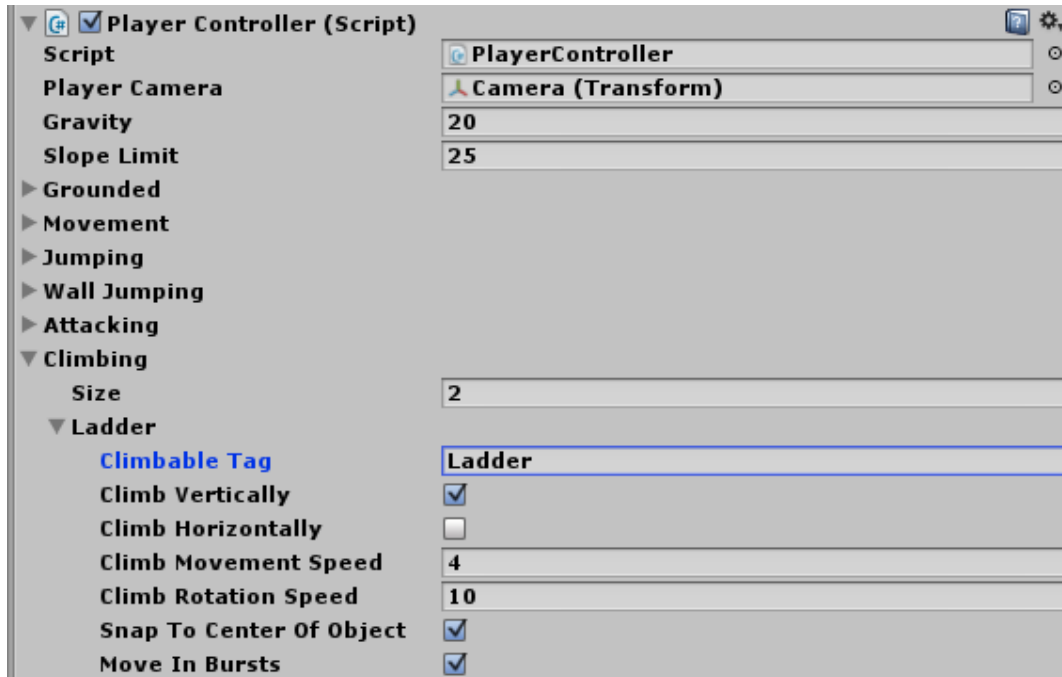


4. Set a layer for your player and uncheck it in the script's Collision Layers (to avoid having the script's linecasts and raycasts collide with the player himself).

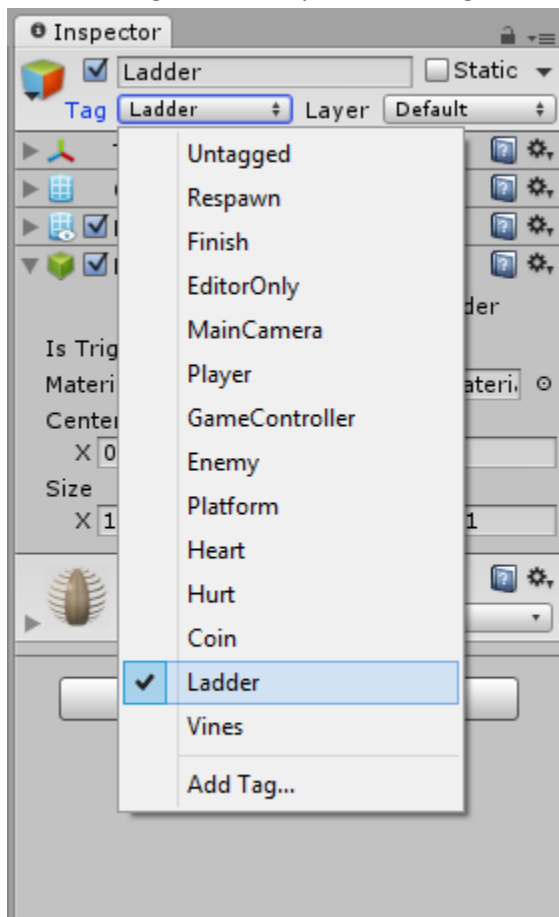


## Defining which objects are climbable

1. In order for the player to know which objects are climbable and which are not, the user must define a tag in the “Climbable” section of the player controller.

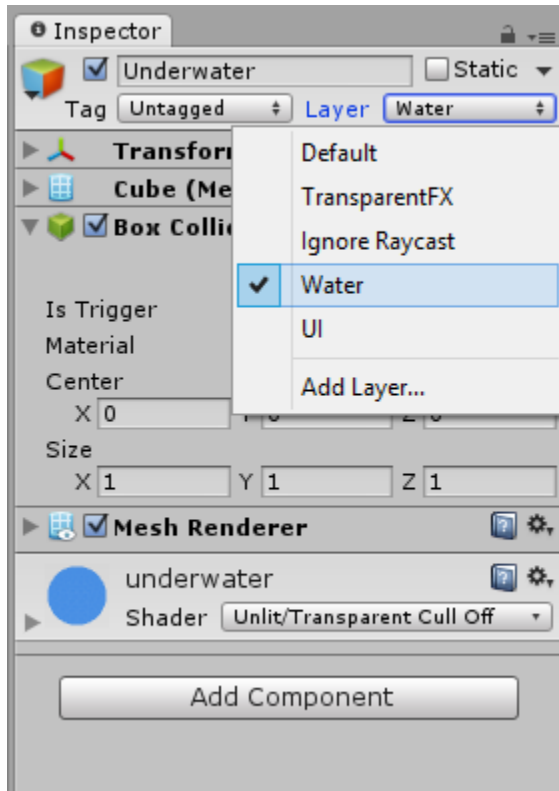


2. Once this tag is defined, you must assign this tag to whichever objects you wish to be climbable.

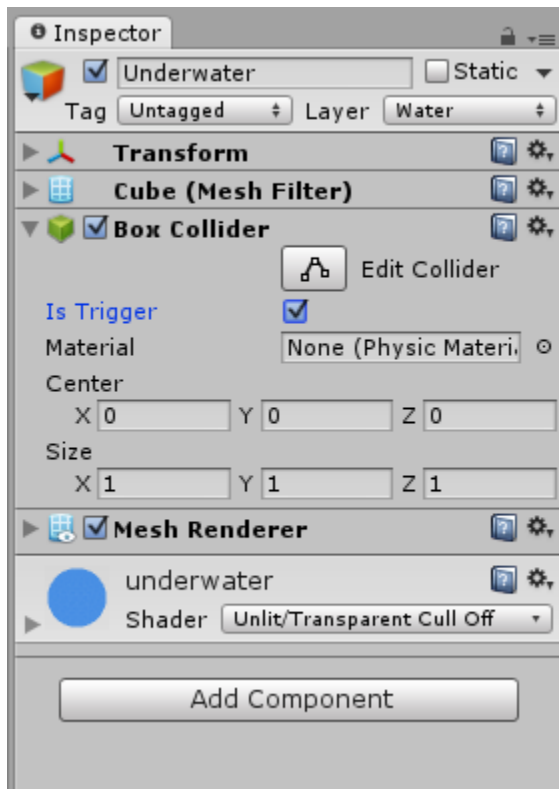


Defining which objects are water / can be swam in

1. In order for the player to know which objects are water or able to be swam in, the objects must have the layer “Water”, and a trigger collider. To do this, simply assign the layer of your object to “Water”.

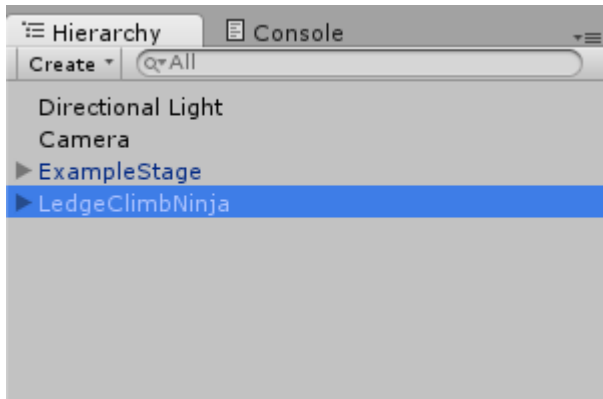


2. Then, in the collider component of your object, enable the option named “Is Trigger”.

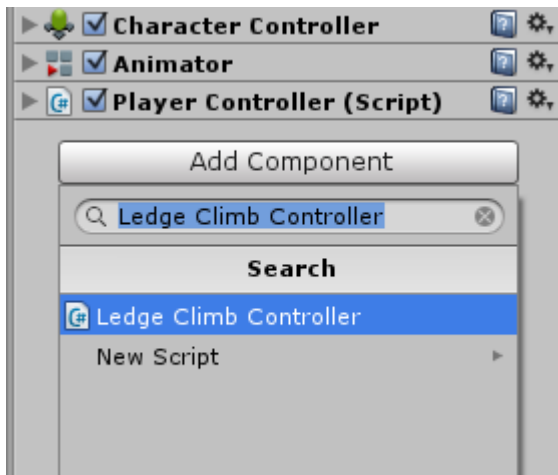


Setting up LedgeClimbController.cs with your character

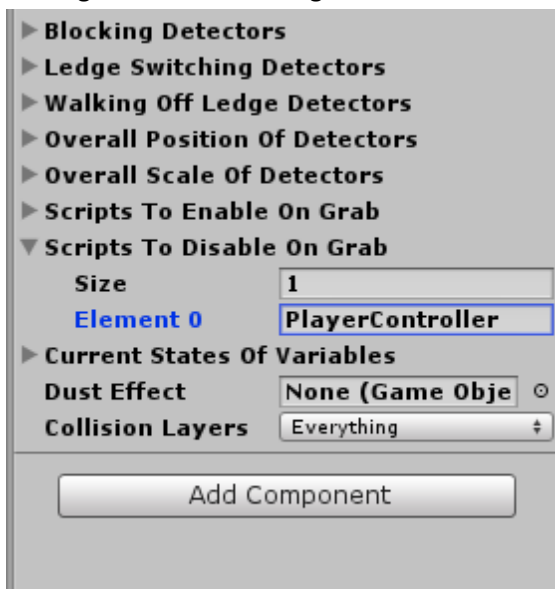
1. Select your character in the “Hierarchy” tab.



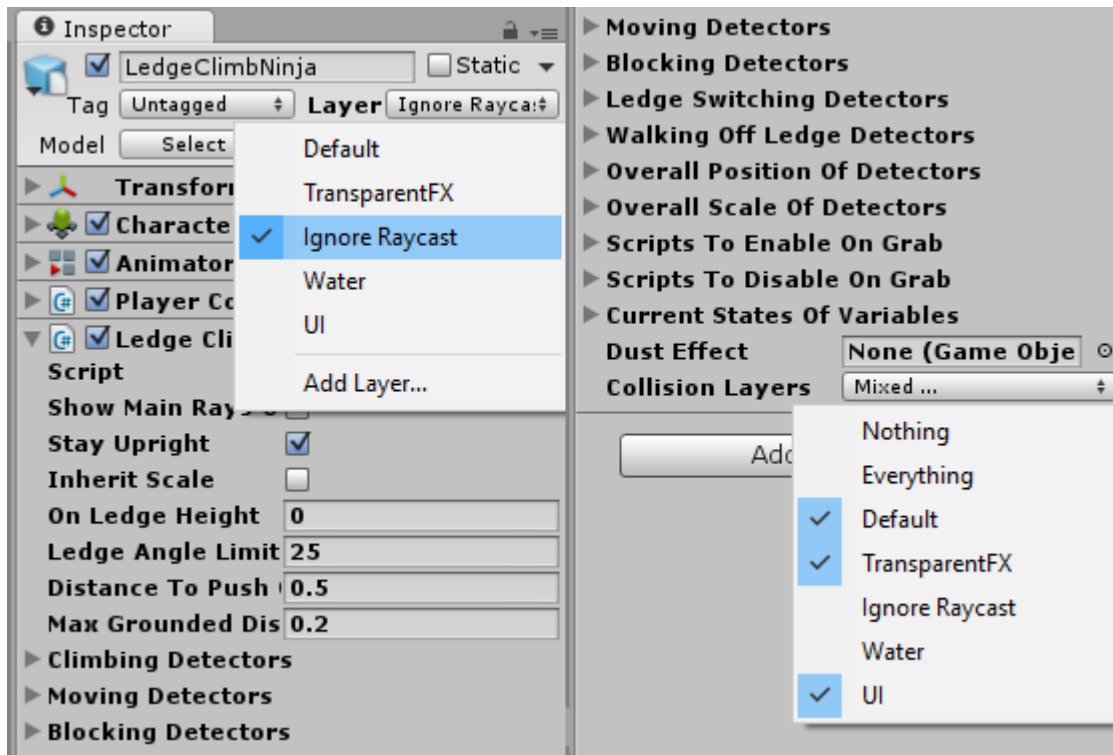
2. Add the LedgeClimbController.cs script to your character (either by using “Add Component” in the “Inspector” tab or by dragging and dropping the script from the “Project” tab on to your player in the “Inspector” tab).



3. If your character is using any other scripts that affect his movement or rotation, enter their names into the “Scripts To Disable On Grab” section so that they do not interfere with the movement and rotation of the player while grabbed on to a ledge.

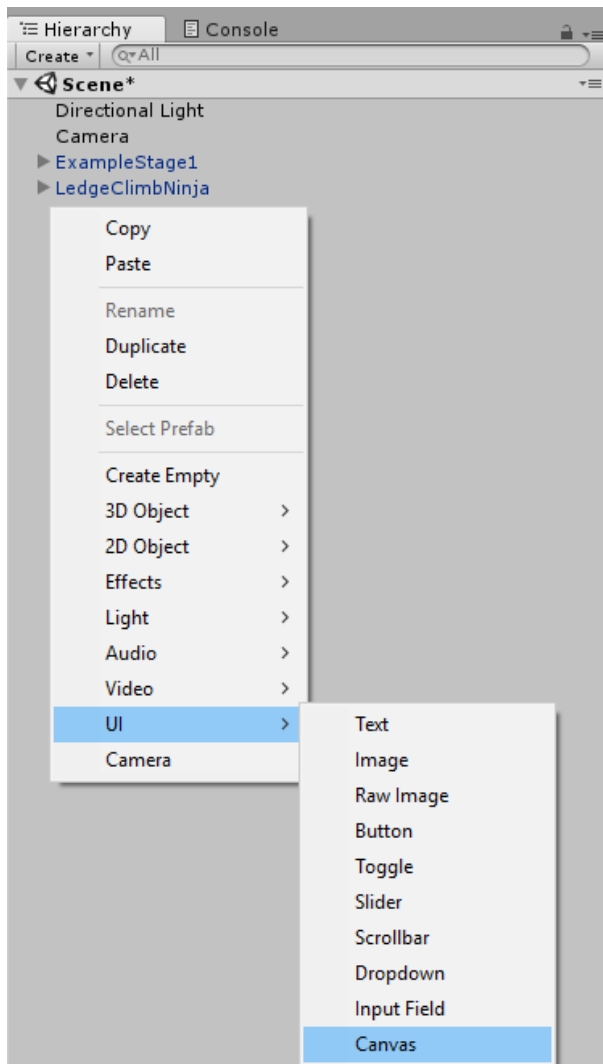


4. Set a layer for your player and uncheck it in the script’s Collision Layers (to avoid having the script’s linecasts and raycasts collide with the player himself).

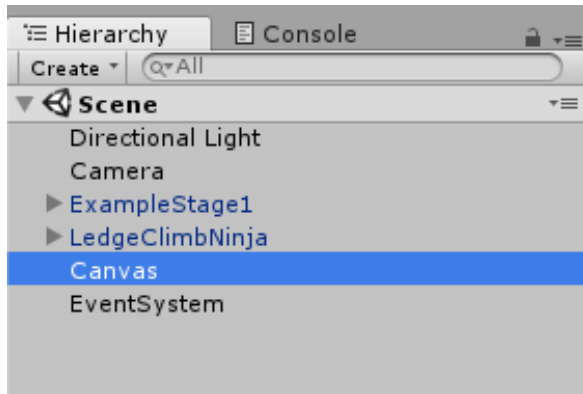


## Making the health and item UI display on the screen

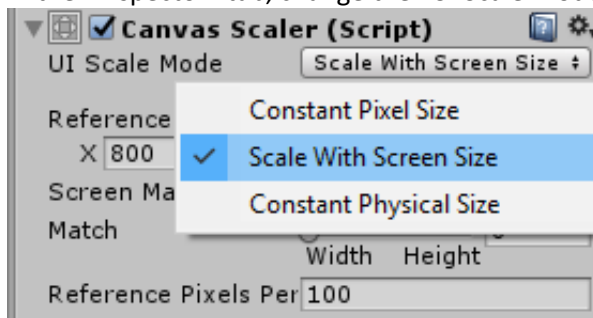
1. Right-click in the "Hierarchy" tab then add a Canvas (UI > Canvas) to the scene.



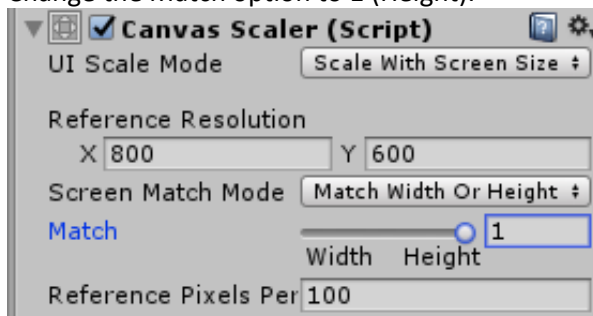
2. Select the Canvas that was created.



3. In the "Inspector" tab, change the "UI Scale Mode" of the Canvas Scaler script to "Scale With Screen Size".

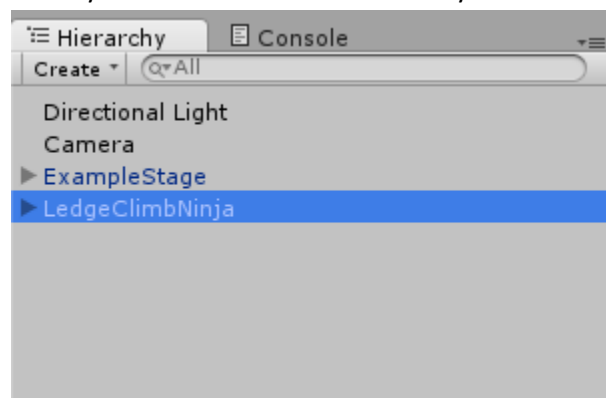


4. Change the Match option to 1 (Height).

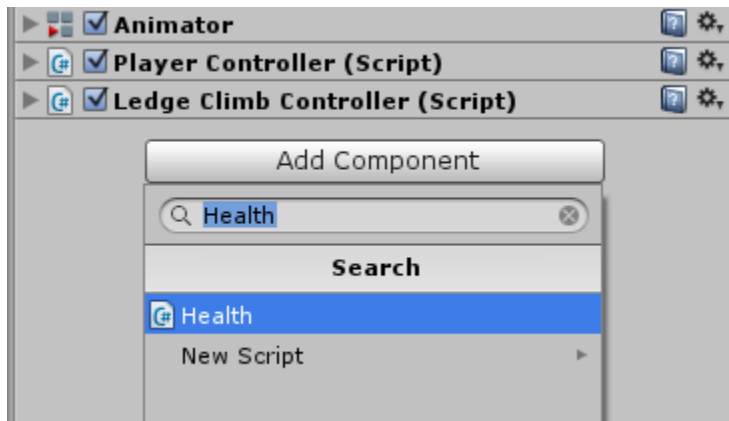


### Setting up Health.cs with your character

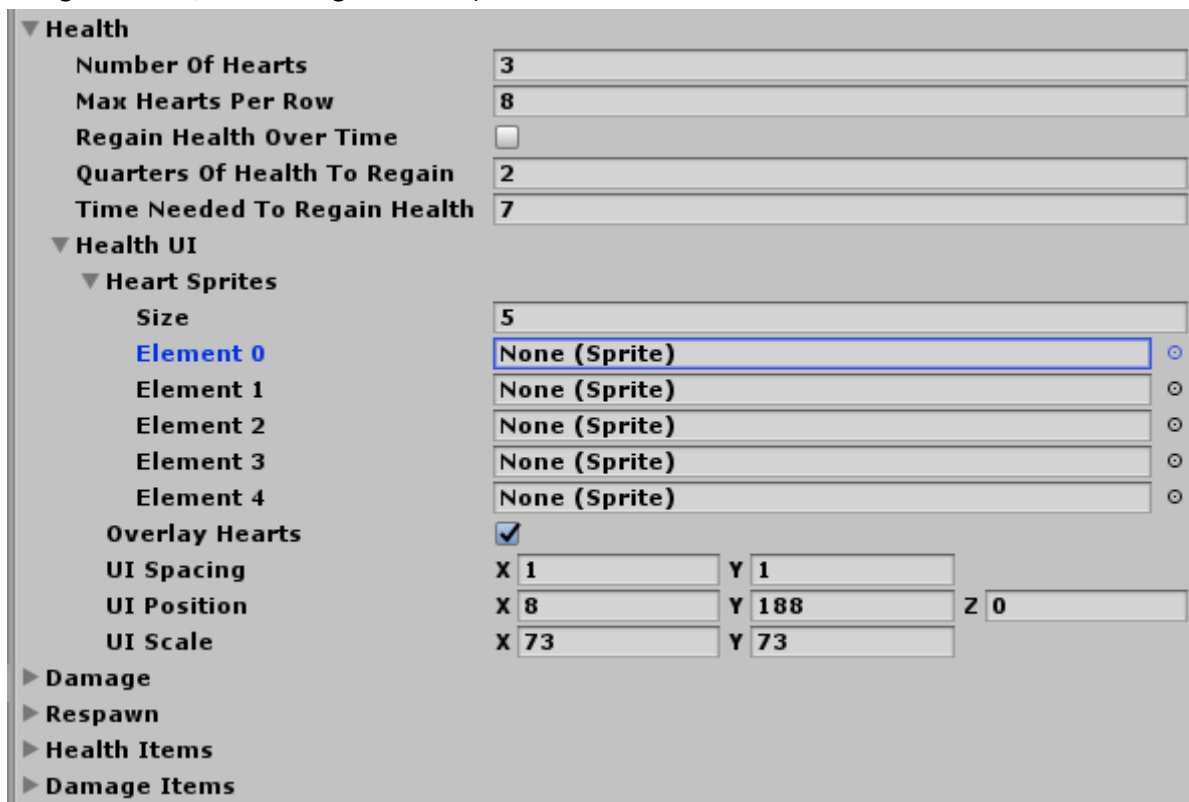
1. Select your character in the "Hierarchy" tab.



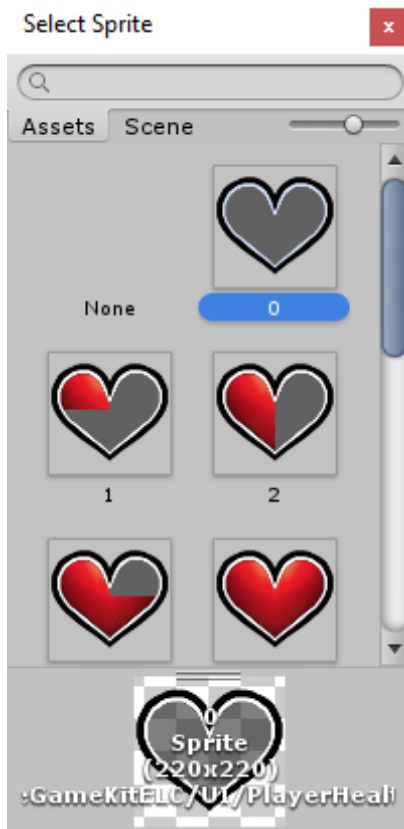
2. Add the Health.cs script to your character (either by using "Add Component" in the "Inspector" tab or by dragging and dropping the script from the "Project" tab on to your player in the "Inspector" tab).



3. To set the UI images for the health, expand the “Health” section of the Health.cs script, followed by the “Health UI” section then the “Heart Sprites” section. Now, set each heart sprite to its corresponding number (0 being no health, and 4 being full health).







▼ **Health**

Number Of Hearts

Max Hearts Per Row

Regain Health Over Time ☐

Quarters Of Health To Regain

Time Needed To Regain Health

▼ **Health UI**

▼ **Heart Sprites**

Size

**Element 0**  ○

Element 1  ○

Element 2  ○

Element 3  ○

Element 4  ○

**Overlay Hearts** ☒

UI Spacing X  Y

UI Position X  Y  Z

UI Scale X  Y

► **Damage**

► **Respawn**

► **Health Items**

► **Damage Items**

- Repeat step 3 for every "Element," until every heart sprite has been set.

▼ **Health**

Number Of Hearts

Max Hearts Per Row

Regain Health Over Time ☐

Quarters Of Health To Regain

Time Needed To Regain Health

▼ **Health UI**

▼ **Heart Sprites**

Size

Element 0  ○

Element 1  ○

Element 2  ○

Element 3  ○

Element 4  ○

Overlay Hearts ☒

UI Spacing X  Y

UI Position X  Y  Z

UI Scale X  Y

► **Damage**

► **Respawn**

► **Health Items**

► **Damage Items**

### Defining which objects give health

1. In order for the player to know which objects give health, the user must define a tag in the “Health Items” section of the health script.

► **Health**

► **Damage**

► **Respawn**

▼ **Health Items**

Size

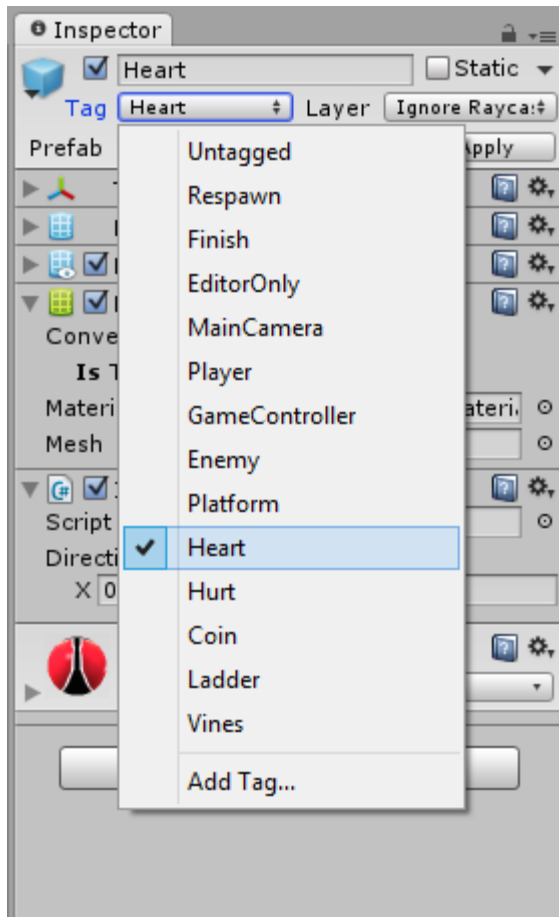
▼ **Heart**

Health Item Tag

Quarters Of Health To Regain

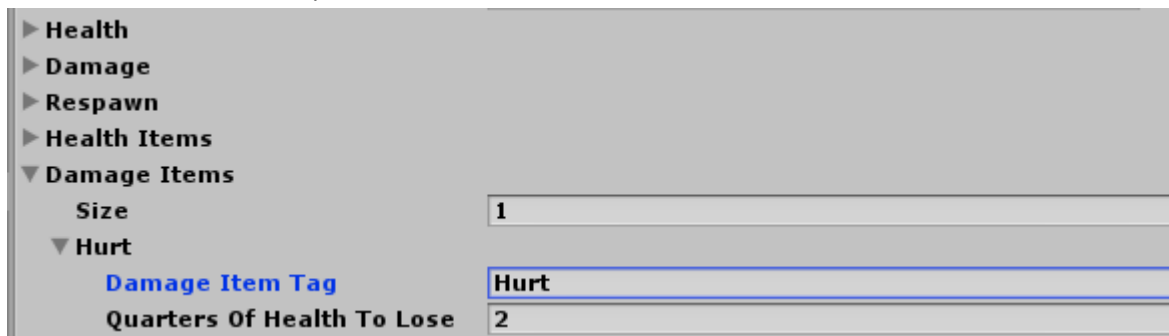
► **Damage Items**

2. Once this tag is defined, you must assign this tag to whichever objects you wish to heal the player.

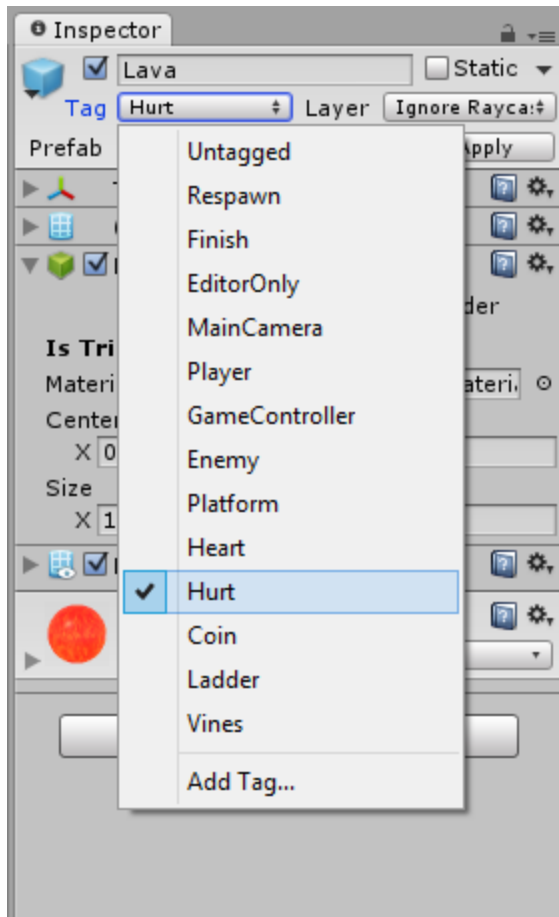


### Defining which objects deal damage

1. In order for the player to know which objects deal damage, the user must define a tag in the “Damage Items” section of the health script.

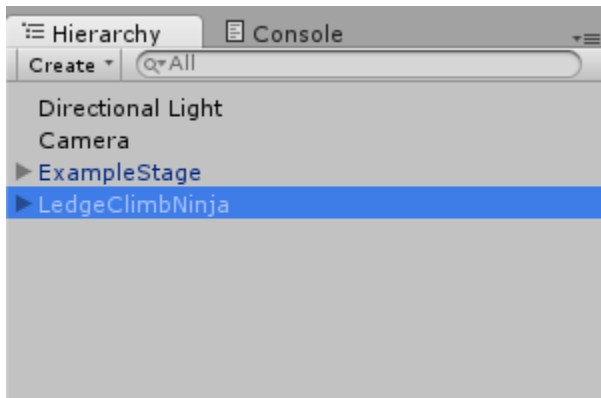


2. Once this tag is defined, you must assign this tag to whichever objects you wish to damage the player.

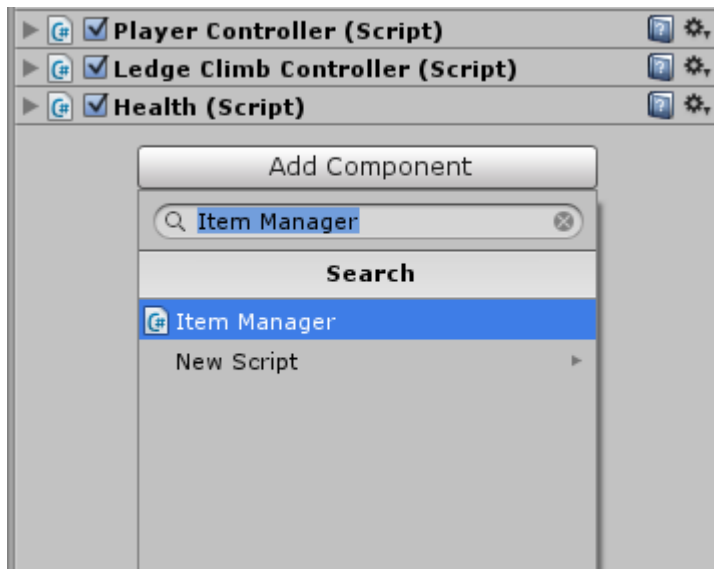


### Setting up ItemManager.cs with your character

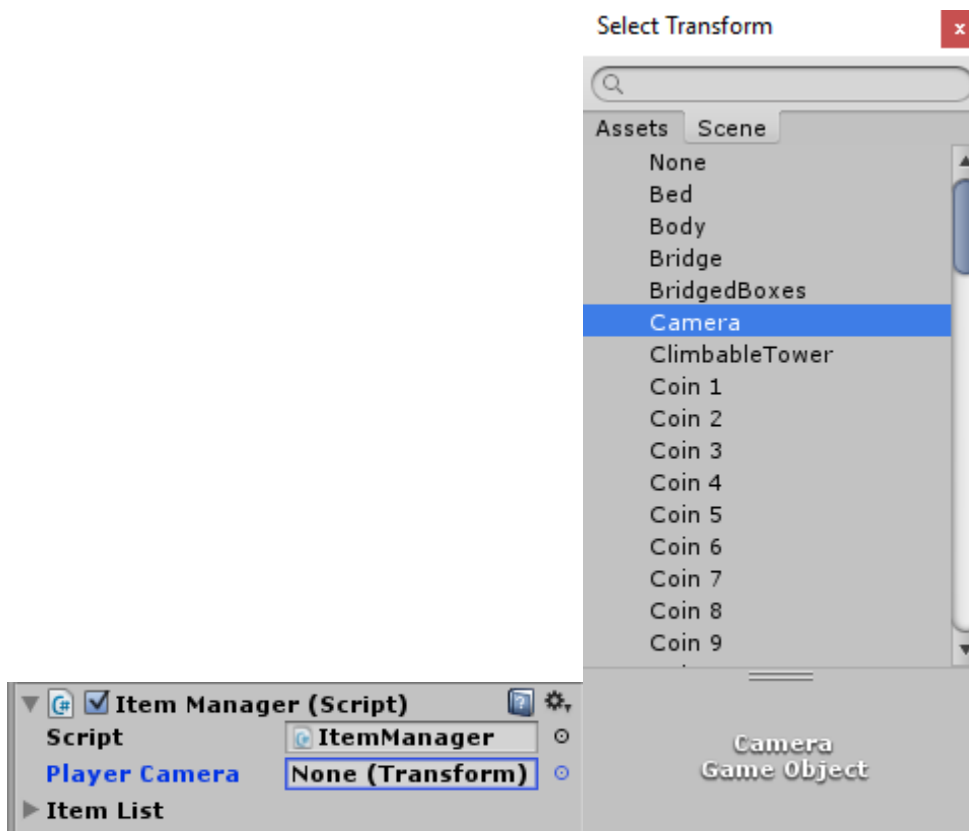
1. Select your character in the “Hierarchy” tab.



2. Add the ItemManager.cs script to your character (either by using “Add Component” in the “Inspector” tab or by dragging and dropping the script from the “Project” tab on to your player in the “Inspector” tab).



3. Set the Player Camera of the script to the camera you want to use for your player.



4. Set the tag, UI image, and font for your items (in this case, we will be using coins as the item).

▼ Item List

Size 1

▼ Coin

Item Tag Coin

Item UI None (Sprite) ○


UI Position X 7 Y 163 Z 1


UI Scale X 60 Y 60

Font None (Font) ○

Font Size 72

Outline Size 19

Font Color 

Outline Color 

Item Count Prefix

Item Count Suffix

Use Item Limit ☒

Maximum Item Limit 99

Add Zeros Before Item Count ☒

UI Text Position X 82 Y -3

▼ Item List

Size 1

▼ Coin

Item Tag Coin

Item UI None (Sprite) ○


UI Position X 7 Y 163 Z 1


UI Scale X 60 Y 60

Font None (Font) ○

Font Size 72

Outline Size 19

Font Color 

Outline Color 

Item Count Prefix

Item Count Suffix

Use Item Limit ☒

Maximum Item Limit 99

Add Zeros Before Item Count ☒

UI Text Position X 82 Y -3

## Select Sprite



### ▼ Item List

Size

1

#### ▼ Coin

Item Tag

Coin

Item UI

CoinUI

UI Position

X 7

Y 163

Z 1

UI Scale

X 60

Y 60

Font

None (Font)

Font Size

72

Outline Size

19

Font Color

Outline Color

Item Count Prefix

Item Count Suffix

Use Item Limit

☒

Maximum Item Limit

99

Add Zeros Before Item Count

☒

UI Text Position

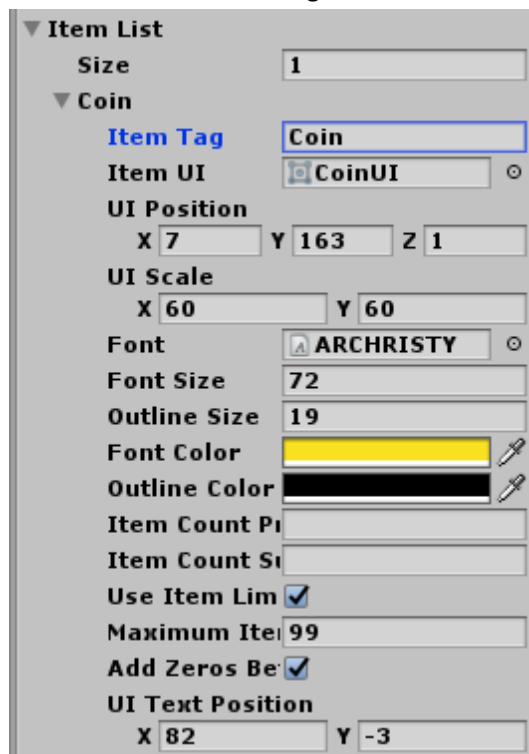
X 82

Y -3



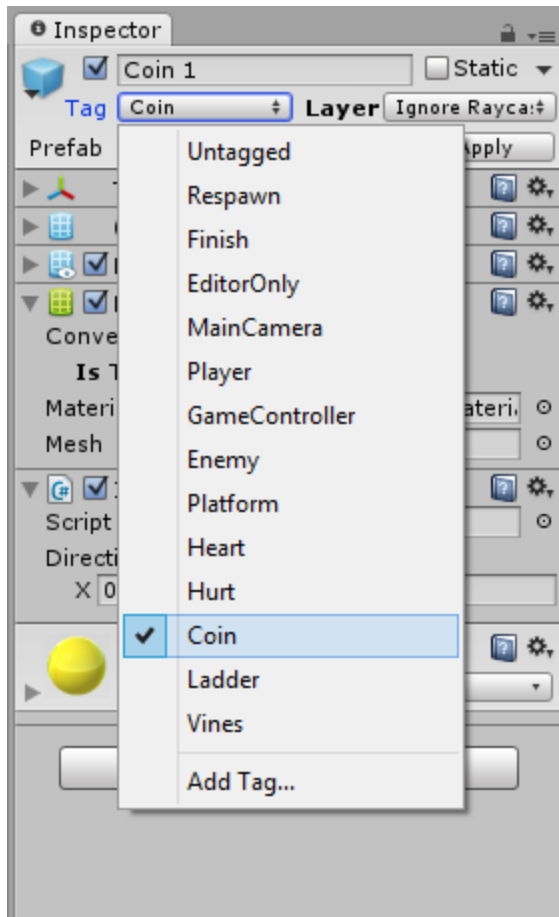
### Defining which objects are items

1. In order for the player to know which objects are your items, the user must define a tag in the “Item List” section of the item manager.



2. Once this tag is defined, you must assign this tag to whichever objects you wish to use as items.

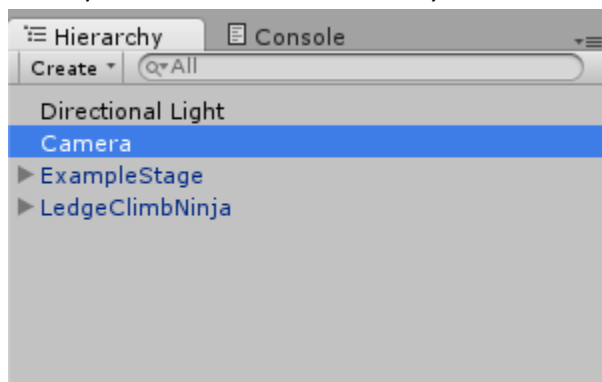




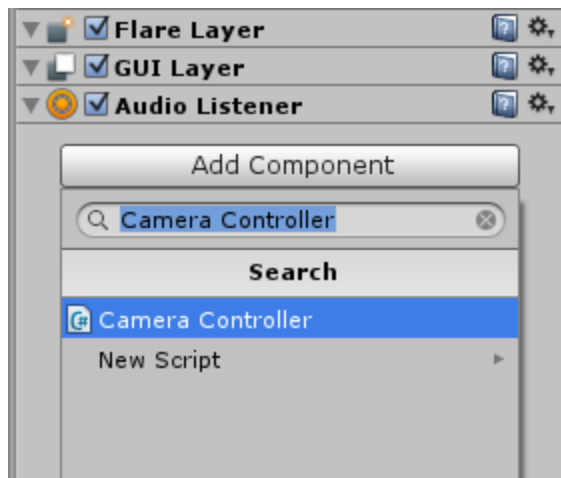
## Setting Up the All in One Game Kit - ELC Character System with a Camera

### Adding CameraController.cs to your camera

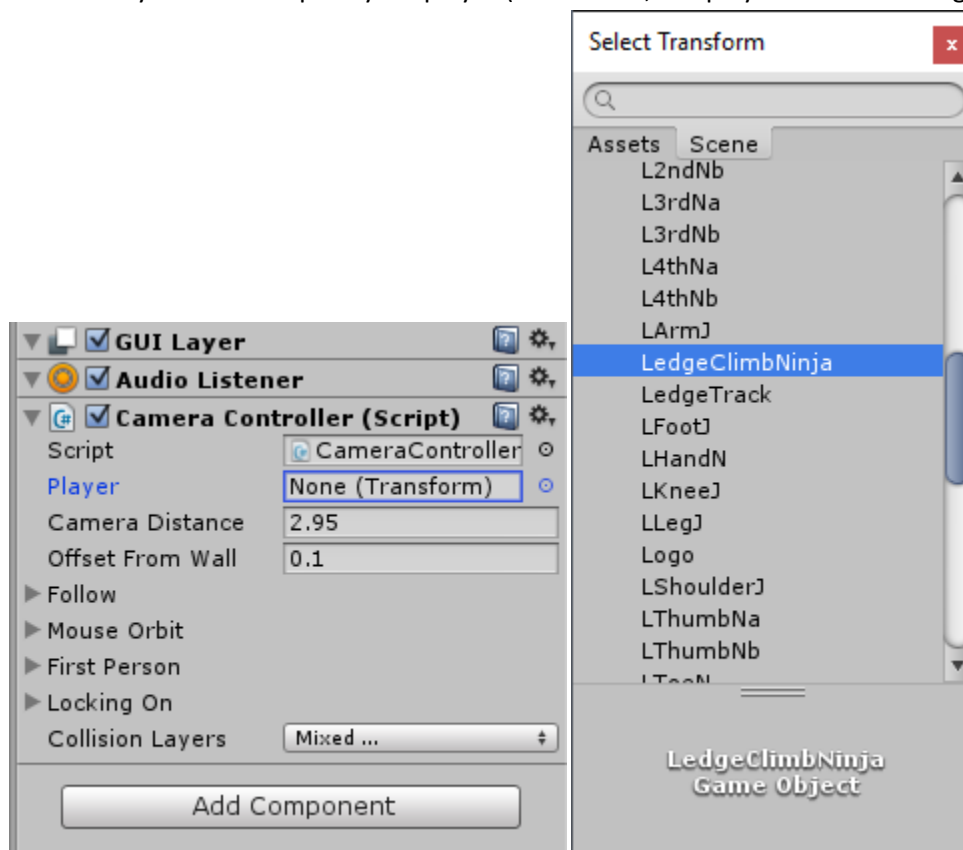
1. Select your camera in the “Hierarchy” tab.



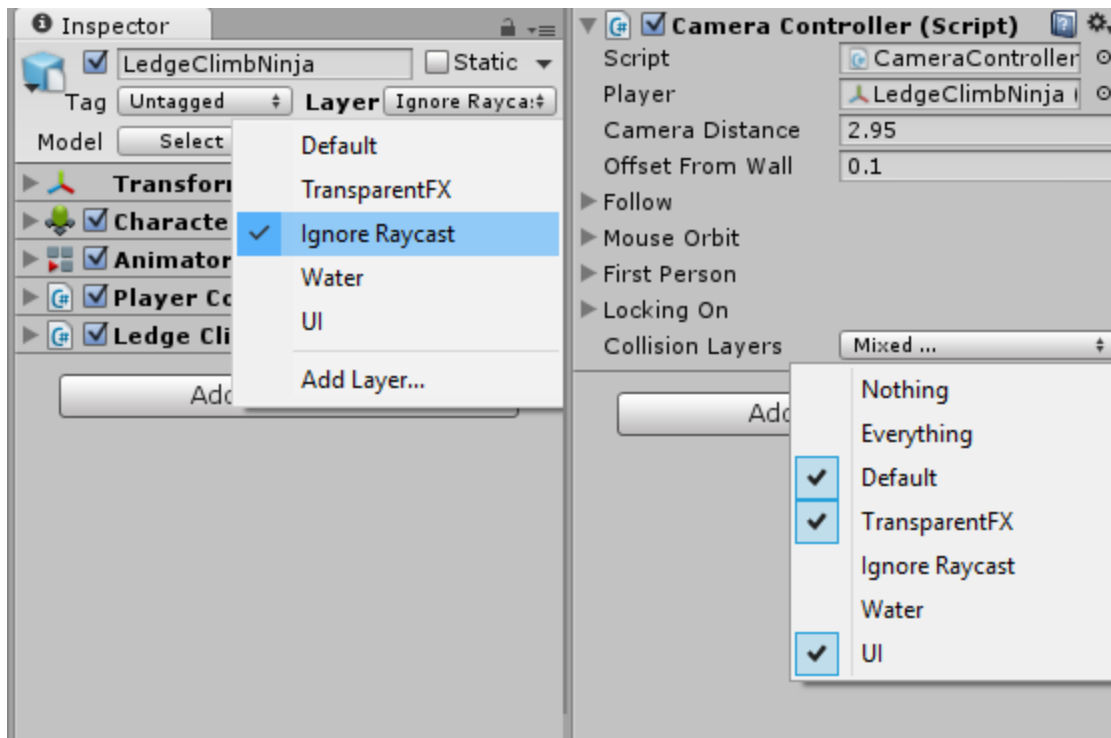
2. Add the CameraController.cs script to the camera (either by using “Add Component” in the “Inspector” tab or by dragging and dropping the script from the “Project” tab on to your camera in the “Inspector” tab).



3. Set the Player of the script to your player (in this case, the player is named "LedgeClimbNinja").

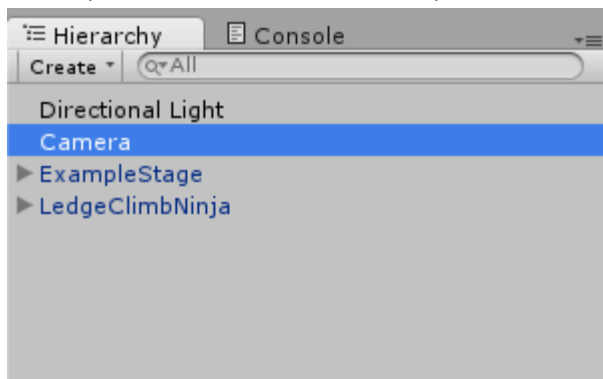


4. Set a layer for your player and uncheck it in the script's Collision Layers (to avoid having the script's linecasts and raycasts collide with the player himself).

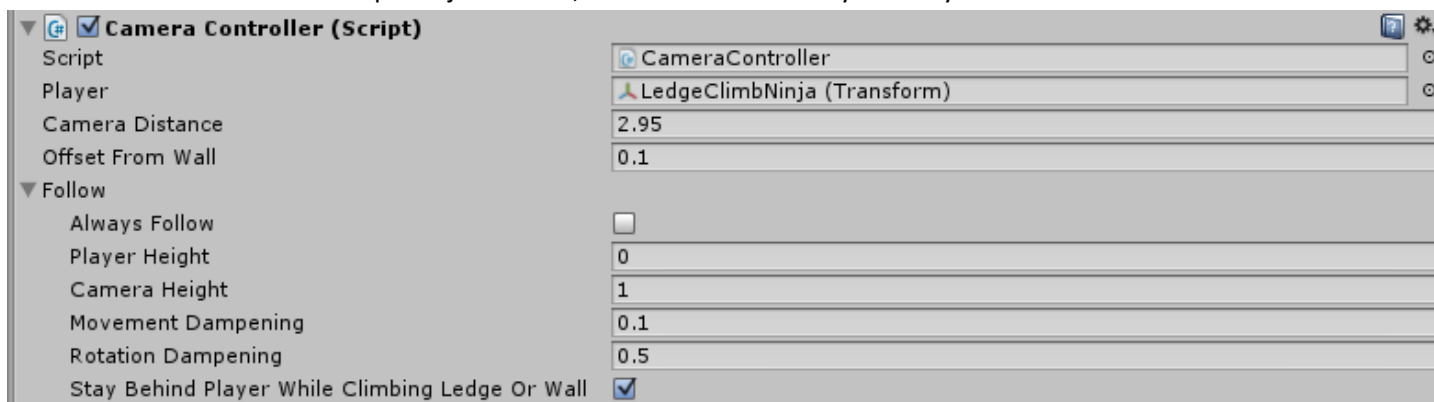


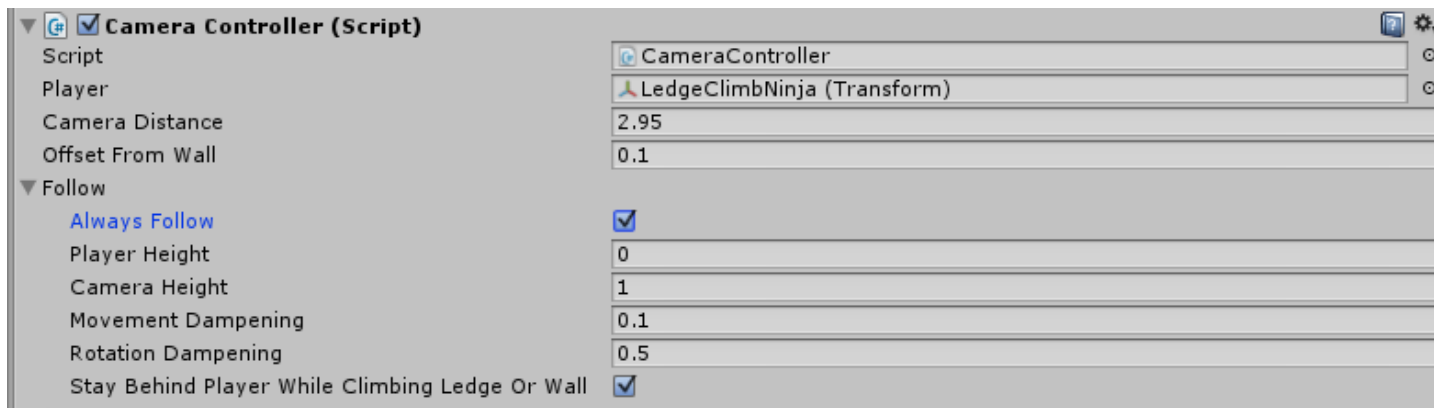
## Setting up a following camera

1. Select your camera in the “Hierarchy” tab.



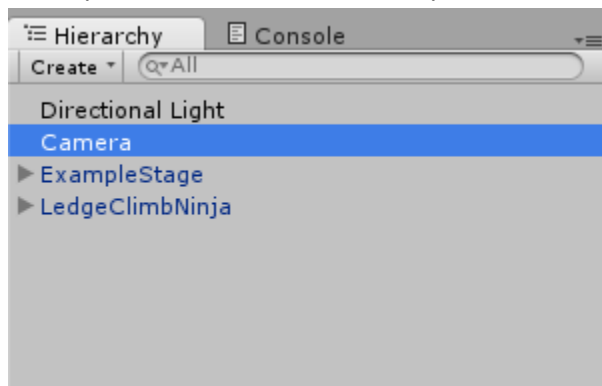
2. In the “Camera Controller” script we just added, check the box that says “Always Follow.”



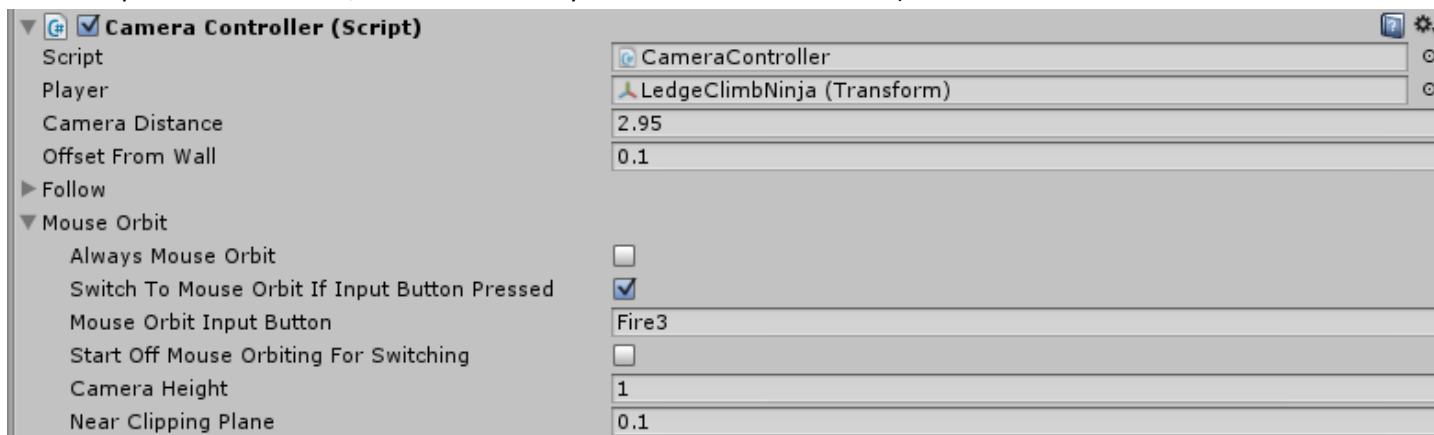


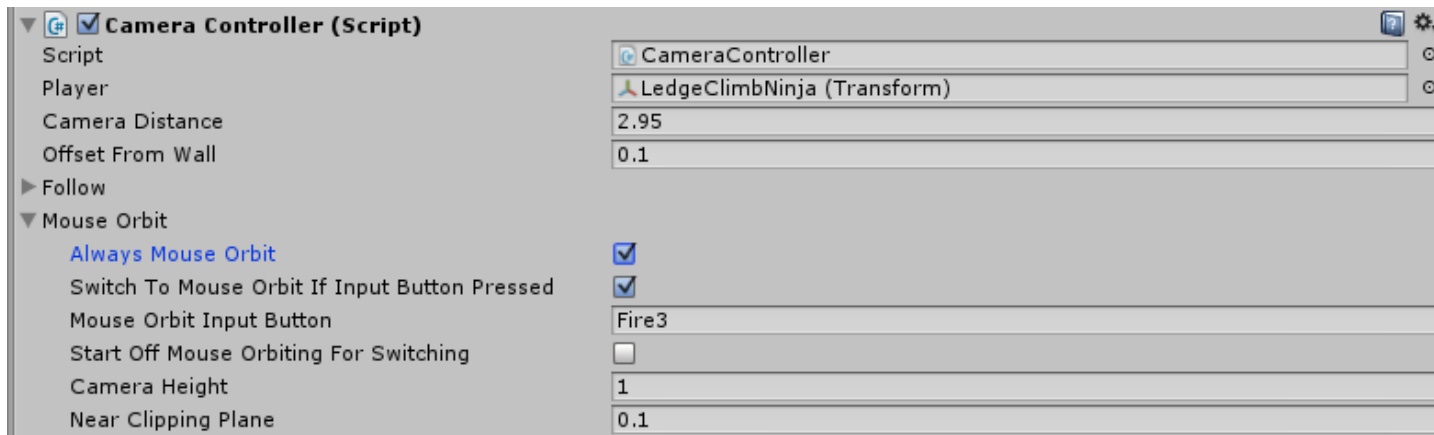
## Setting up a mouse orbiting camera

1. Select your camera in the “Hierarchy” tab.



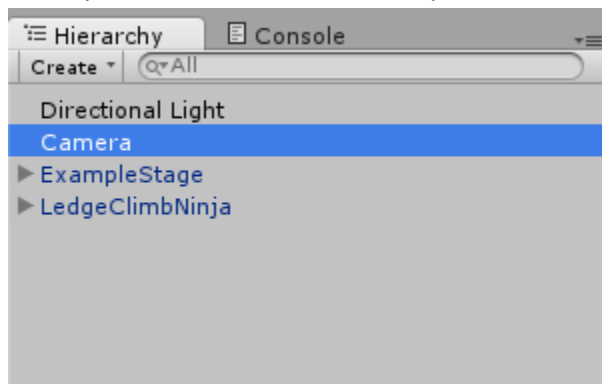
2. In the “Camera Controller” script we just added, check the box that says “Always Mouse Orbit” (or, if you would like to switch to mouse orbiting by pressing a button instead of always mouse orbiting, check “Switch To Mouse Orbit If Input Button Pressed,” and leave “Always Mouse Orbit” unchecked).



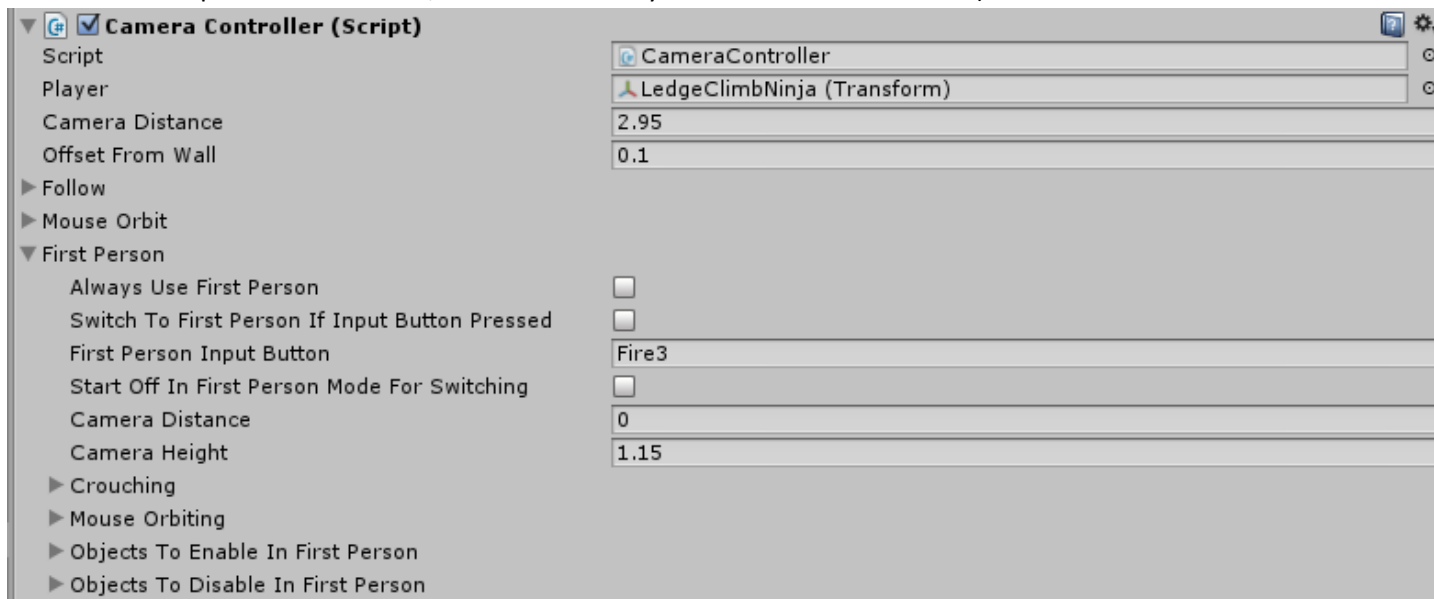


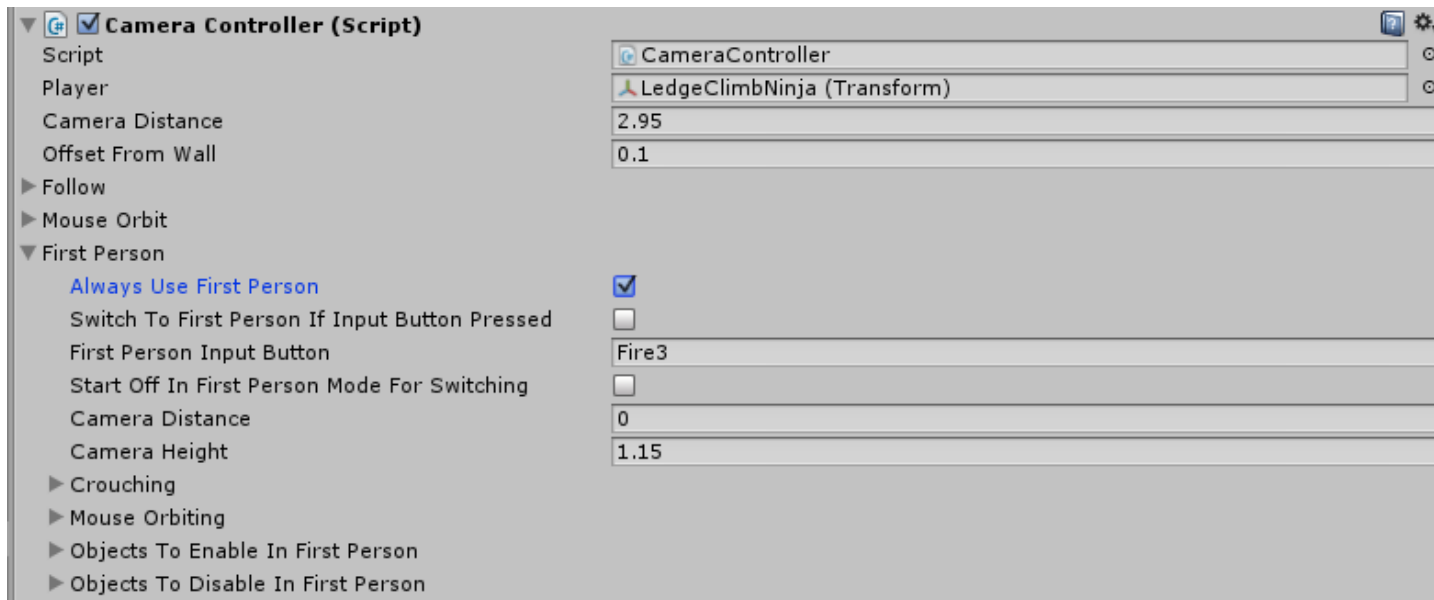
## Setting up a first person camera

1. Select your camera in the “Hierarchy” tab.



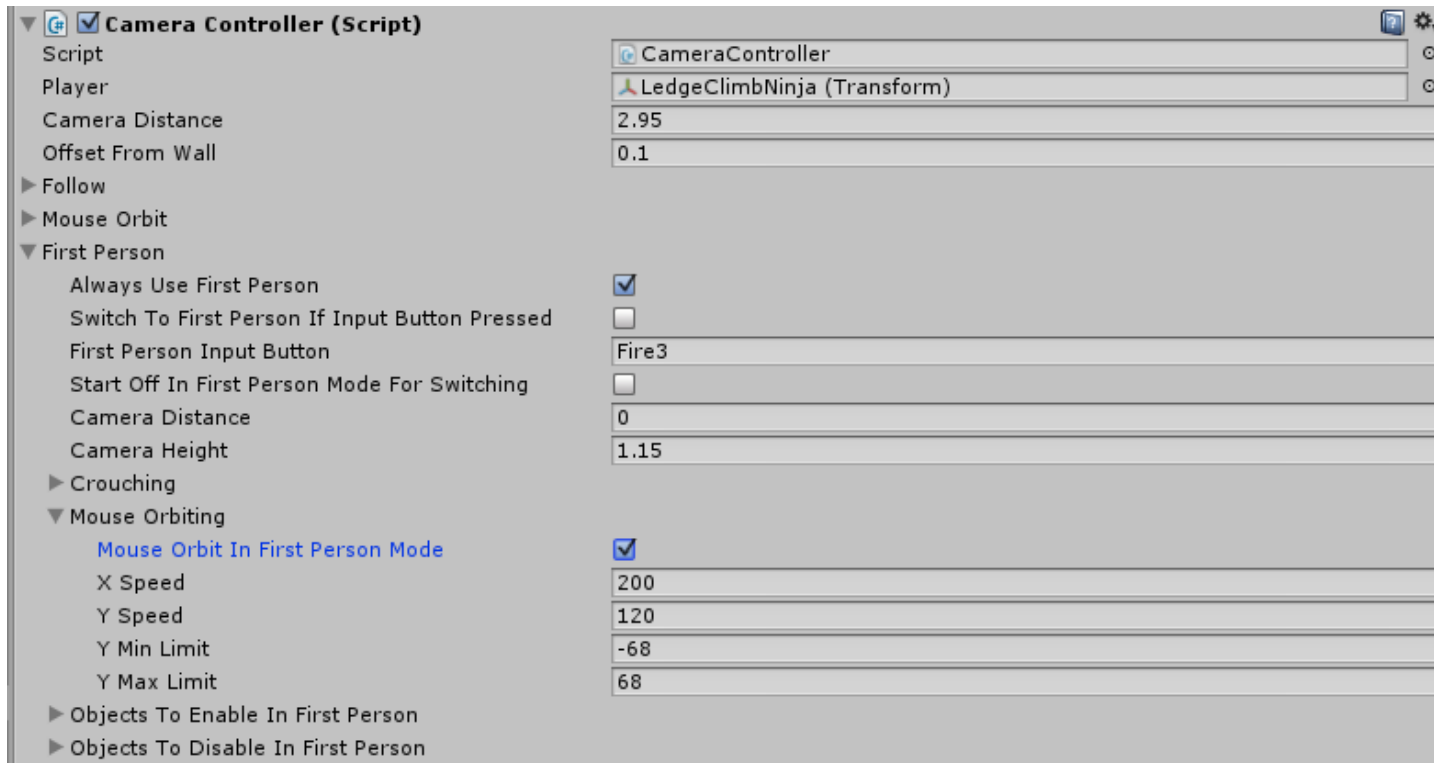
2. In the “Camera Controller” script we just added, check the box that says “Always Use First Person” (or, if you would like to switch to mouse orbiting by pressing a button instead of always mouse orbiting, check “Switch To First Person If Input Button Pressed,” and leave “Always Mouse Orbit” unchecked).





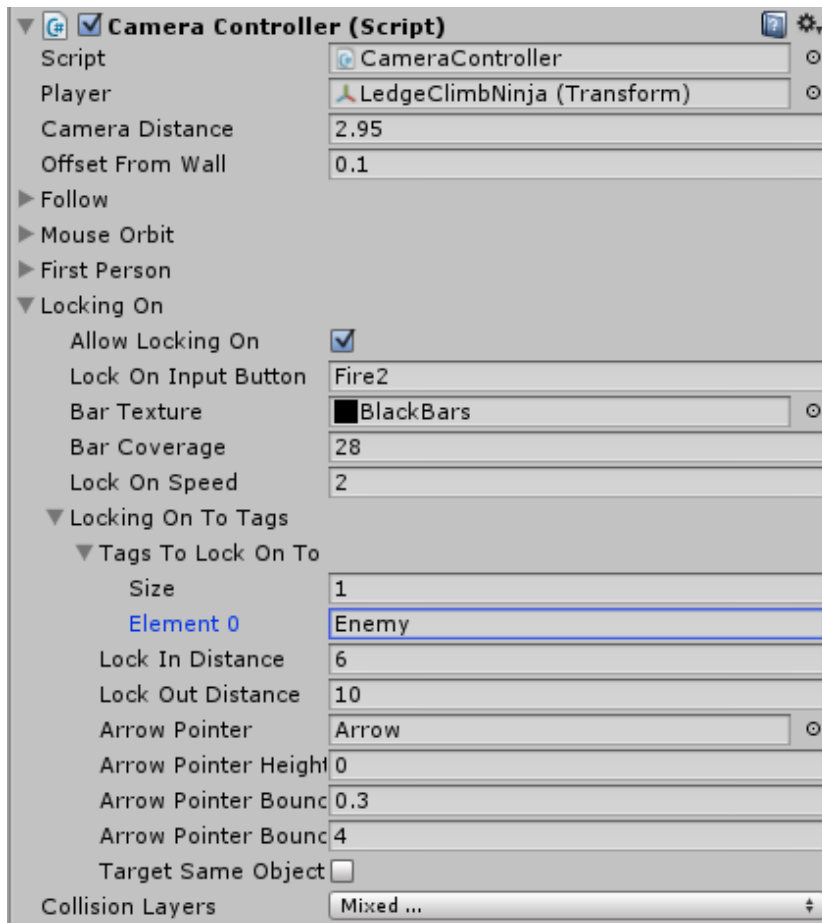
### 3. (OPTIONAL)

If you would like camera to mouse orbit in first person mode, expand the “Mouse Orbiting” section of the “First Person” category, then make sure that “Mouse Orbit In First Person Mode” is checked.

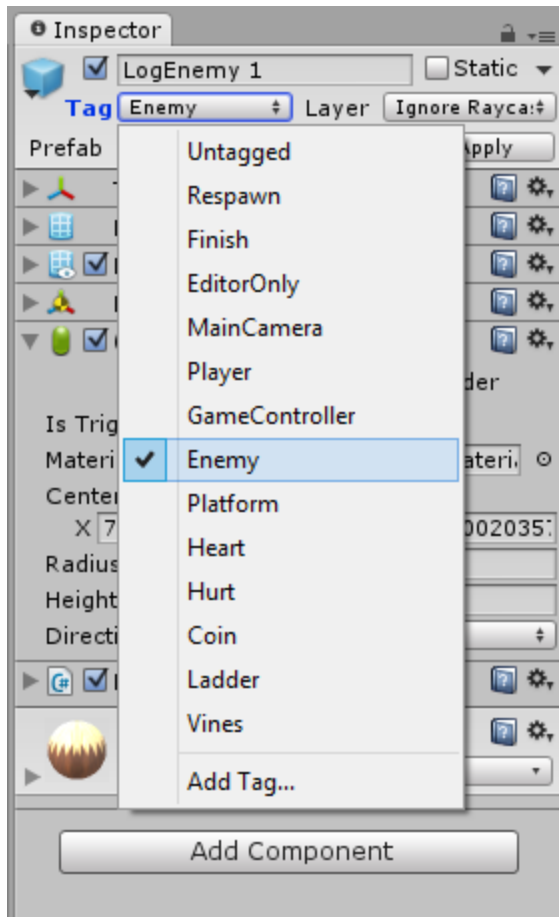


### Defining which objects can be locked on to

1. In order for the camera to know which objects can be locked on to, the user must define a tag in the “Locking On” section of the camera controller.



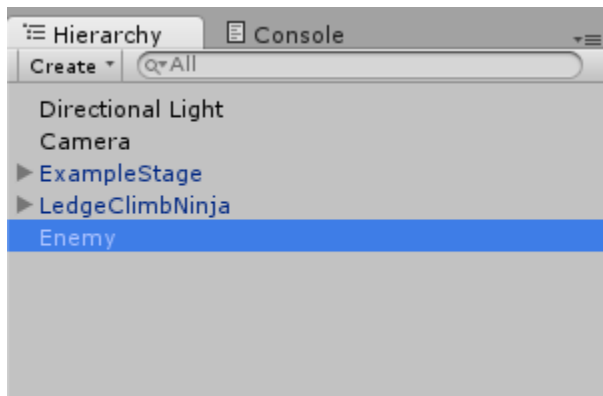
2. Once this tag is defined, you must assign this tag to whichever objects you wish to lock on to.



## Setting Up the All in One Game Kit - ELC Character System with a New Enemy

### Making the Enemy AI script work with your enemy

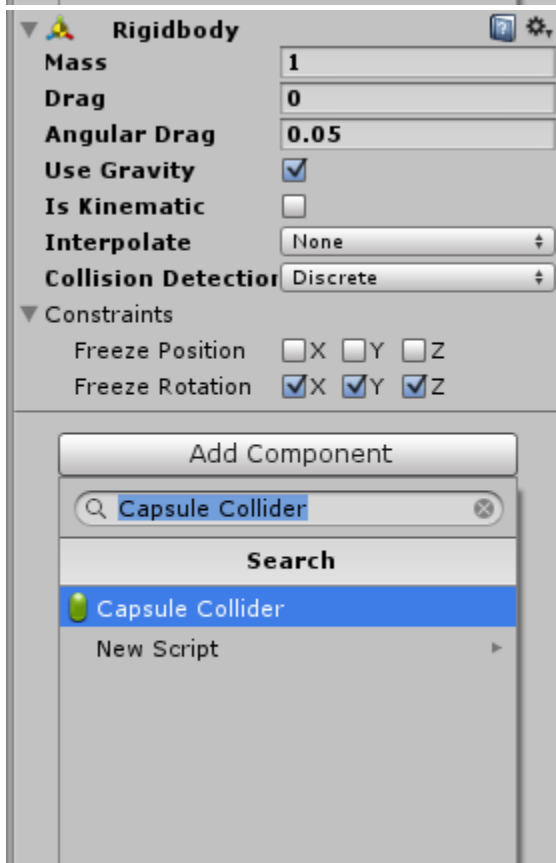
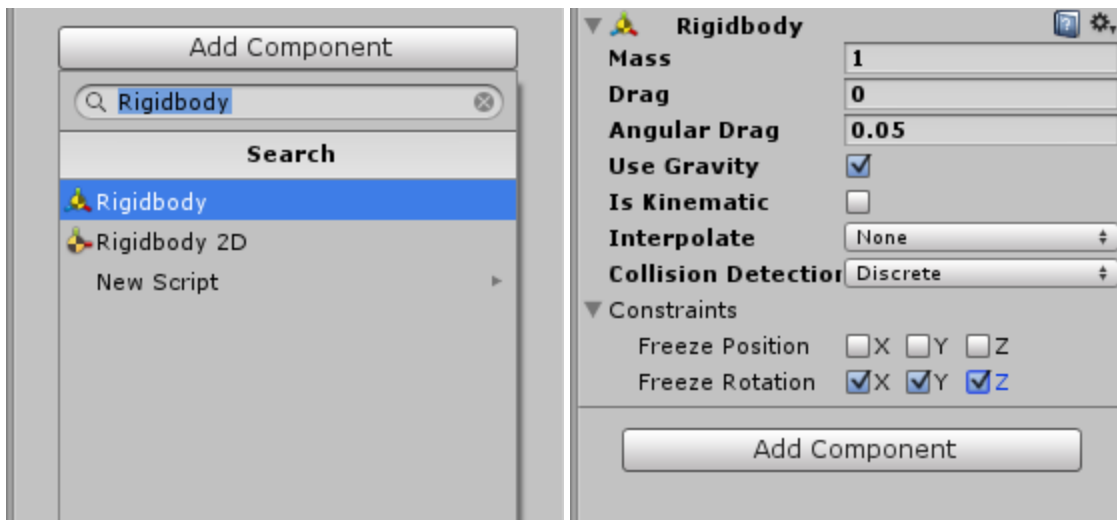
1. Select your enemy in the "Hierarchy" tab.



2. If your enemy does not already have one, add a Rigidbody **OR** CharacterController component to your enemy (I recommend using a Rigidbody for enemies) from the "Inspector" tab (if you use a Rigidbody, you must freeze your enemy's rotation and add a collider component as well).

**Rigidbody:**



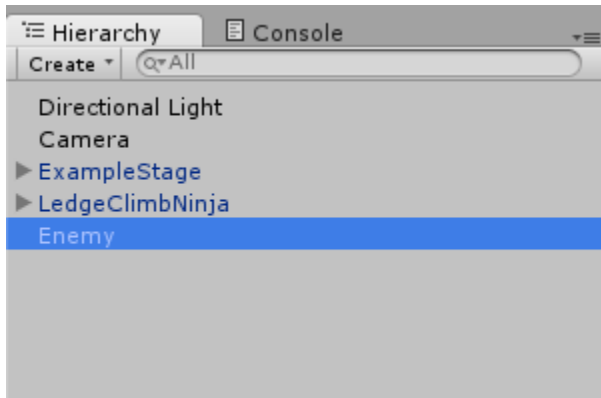


### Character Controller:

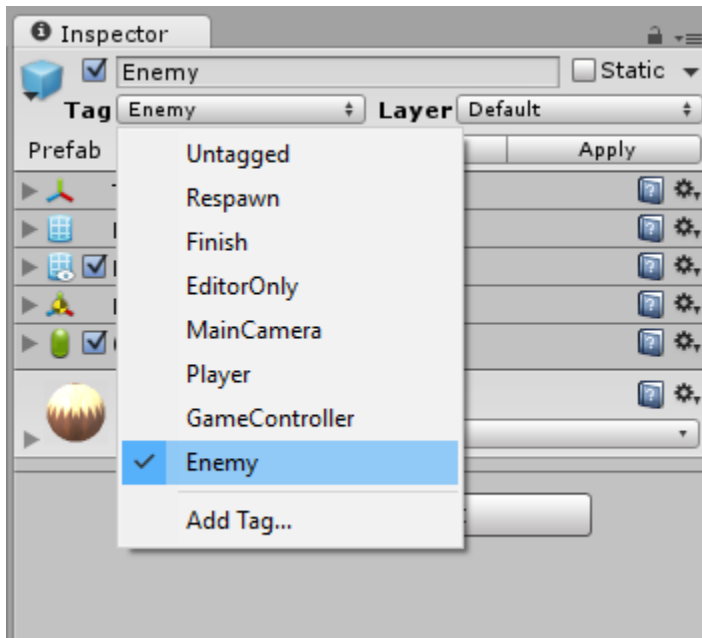


## Setting the enemy's tag (so that it works with the player's Health.cs script)

1. Select your enemy in the "Hierarchy" tab.

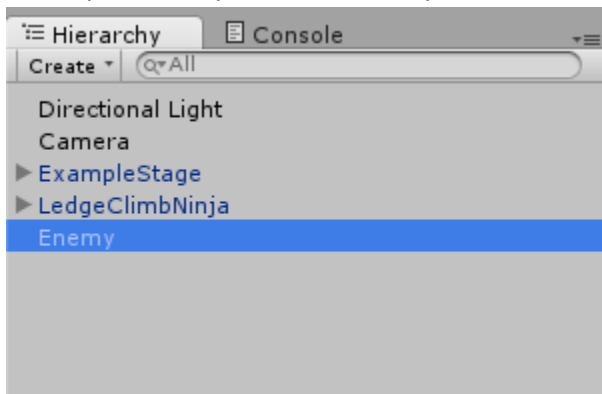


2. Set the tag of your enemy to "Enemy" (by default, this is the tag that the player's Health.cs script recognizes as an enemy. However, if you would like to change this tag, you can do so by changing the "Enemy Tag" (located in the Damage category of the Health.cs script) in the Health.cs script from "Enemy" to your new tag).

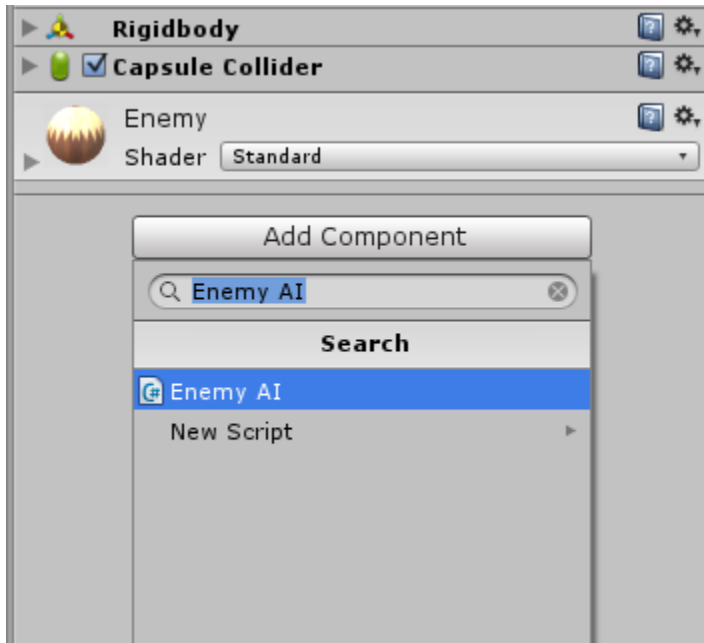


## Setting up EnemyAI.cs with your enemy

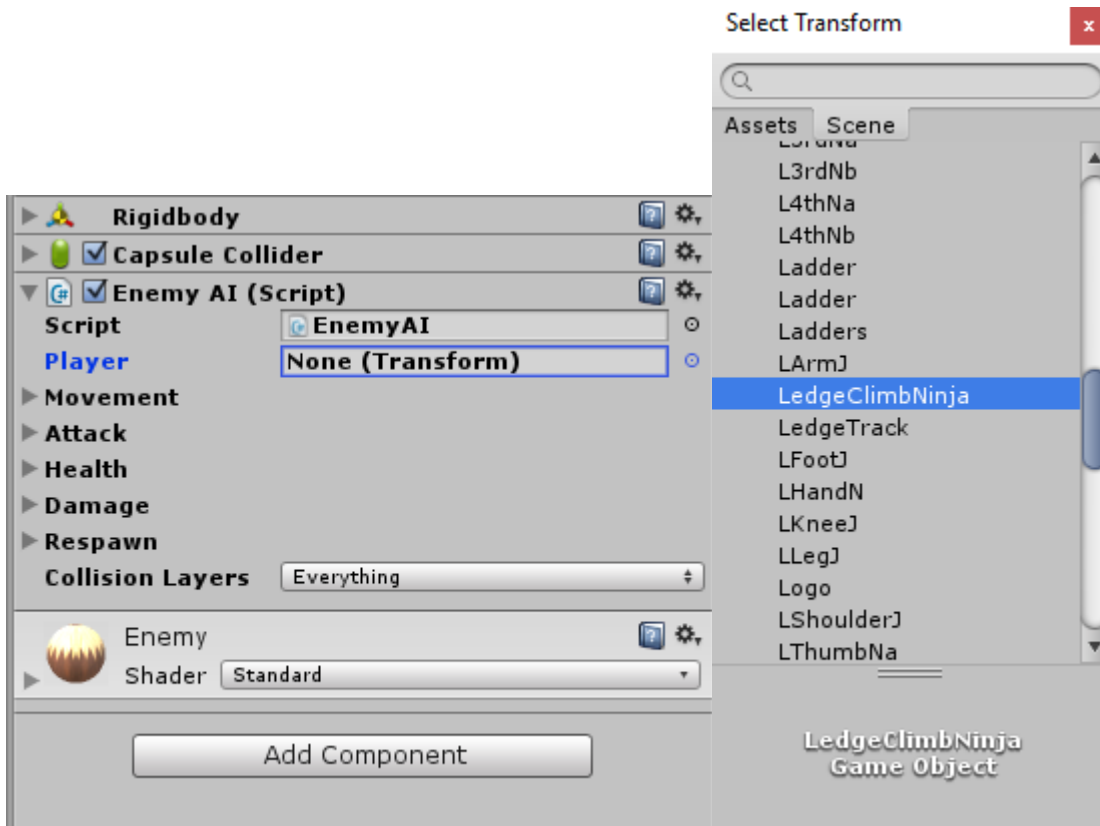
1. Select your enemy in the "Hierarchy" tab.



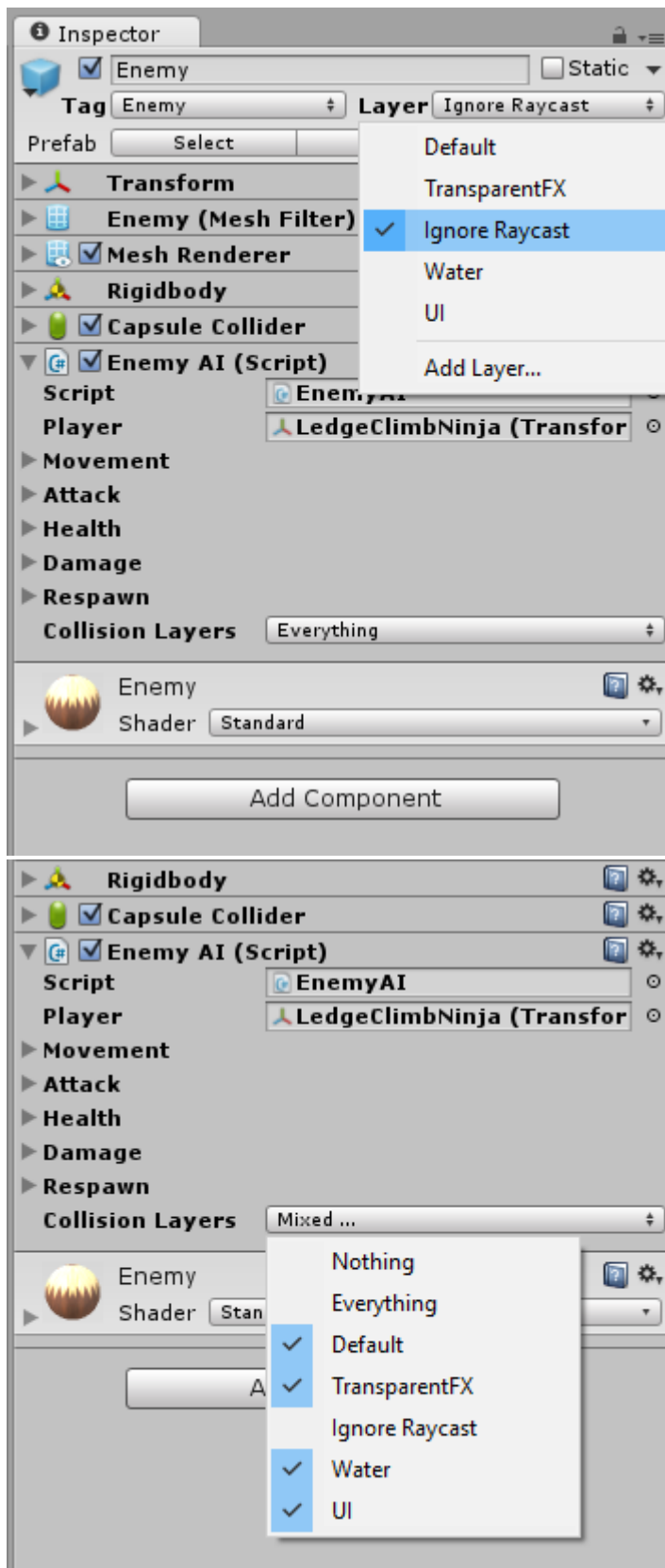
2. Add the EnemyAI.cs script to your enemy (either by using “Add Component” in the “Inspector” tab or by dragging and dropping the script from the “Project” tab on to your enemy in the “Inspector” tab).



3. Set the Player of the script to your player (in this case, we will set it to LedgeClimbNinja).



4. Set a layer for your enemy and uncheck it in the script's Collision Layers (to avoid having the script's linecasts and raycasts collide with the enemy itself).

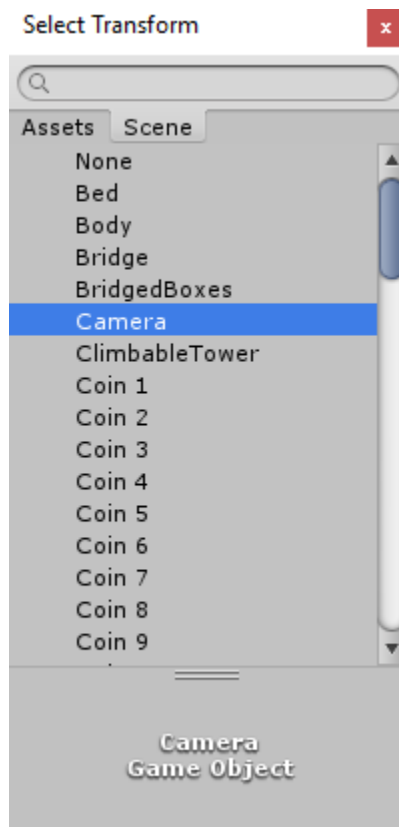


##### 5. (OPTIONAL)

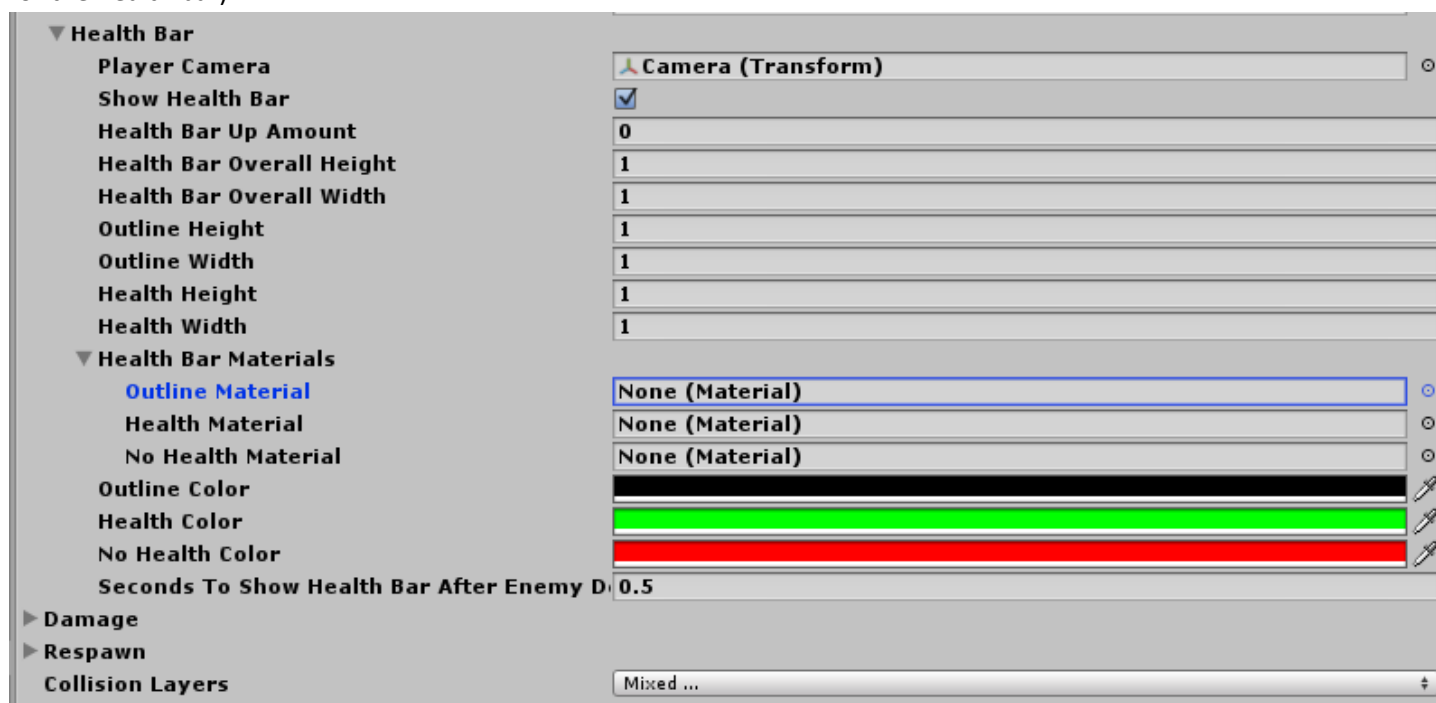
If you would like the enemy to have a health bar float over his head, expand the “Health Bar” section of the “Health” category, then make sure that “Show Health Bar” is checked, and that the “Player Camera” is set.

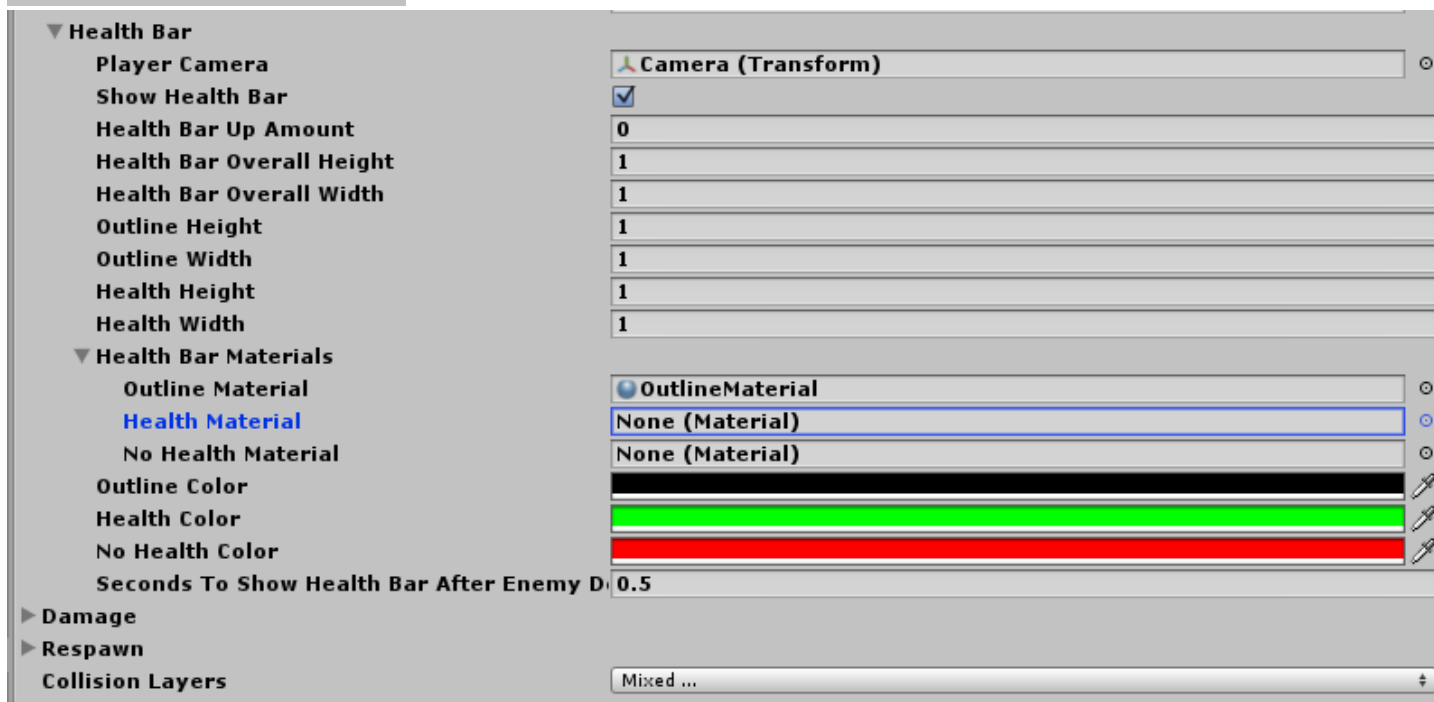
▼ <b>Enemy AI (Script)</b>	<b>EnemyAI</b>
Script	
Player	<b>LedgeClimbNinja (Transform)</b>
► Movement	
► Attack	
▼ Health	
Maximum Health	3
Regain Health Over Time	<input checked="" type="checkbox"/>
Health To Regain	3
Time Needed To Regain Health	7
Minimum Distance From Player To Regain Health	0
Hurt Effect	None (Game Object)
Death Effect	None (Game Object)
▼ Health Bar	
Player Camera	None (Transform)
Show Health Bar	<input checked="" type="checkbox"/>
Health Bar Up Amount	0
Health Bar Overall Height	1
Health Bar Overall Width	1
Outline Height	1
Outline Width	1
Health Height	1
Health Width	1
▼ Health Bar Materials	
Outline Material	None (Material)
Health Material	None (Material)
No Health Material	None (Material)
Outline Color	
Health Color	
No Health Color	
Seconds To Show Health Bar After Enemy Death	0.5
► Damage	
► Respawn	
Collision Layers	Mixed ...

▼ <b>Enemy AI (Script)</b>	<b>EnemyAI</b>
Script	
Player	<b>LedgeClimbNinja (Transform)</b>
► Movement	
► Attack	
▼ Health	
Maximum Health	3
Regain Health Over Time	<input checked="" type="checkbox"/>
Health To Regain	3
Time Needed To Regain Health	7
Minimum Distance From Player To Regain Health	0
Hurt Effect	None (Game Object)
Death Effect	None (Game Object)
▼ Health Bar	
Player Camera	None (Transform)
Show Health Bar	<input checked="" type="checkbox"/>
Health Bar Up Amount	0
Health Bar Overall Height	1
Health Bar Overall Width	1
Outline Height	1
Outline Width	1
Health Height	1
Health Width	1
▼ Health Bar Materials	
Outline Material	None (Material)
Health Material	None (Material)
No Health Material	None (Material)
Outline Color	
Health Color	
No Health Color	
Seconds To Show Health Bar After Enemy D	0.5
► Damage	
► Respawn	
Collision Layers	Mixed ...

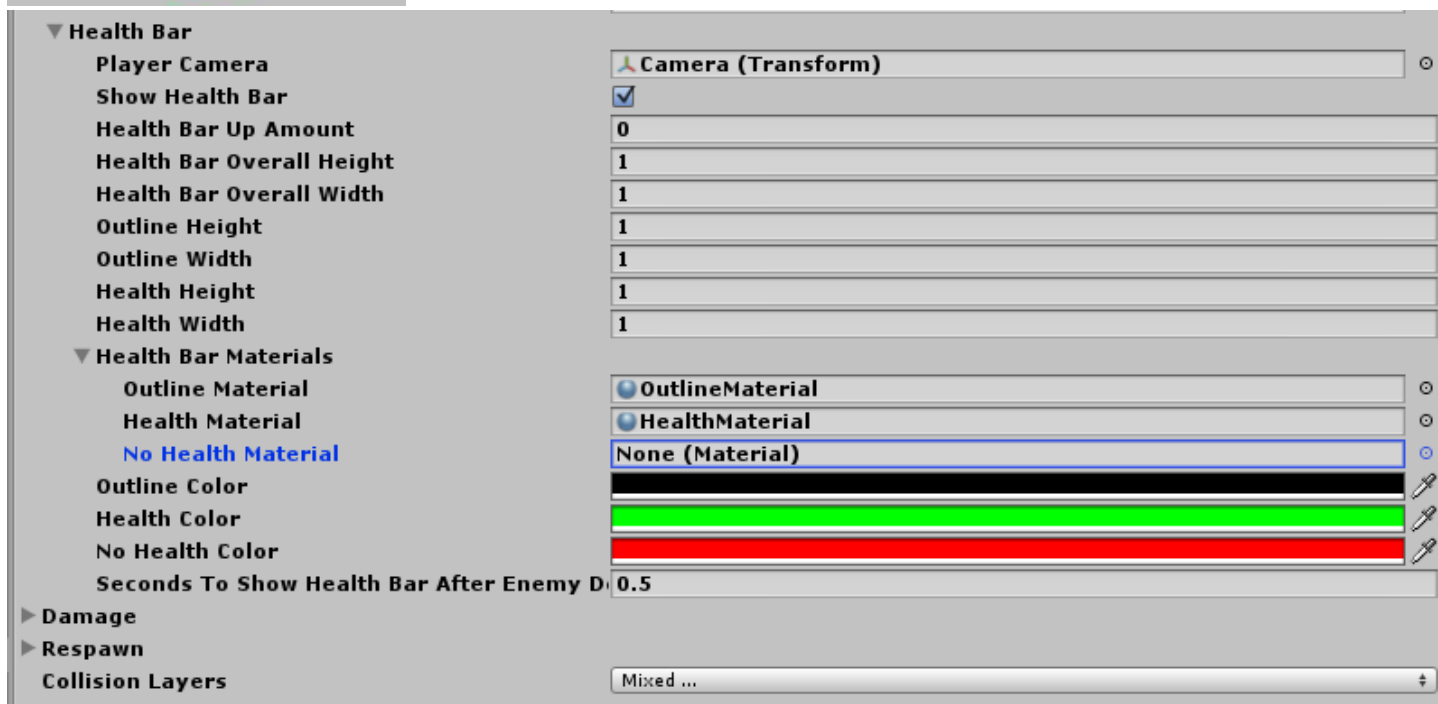
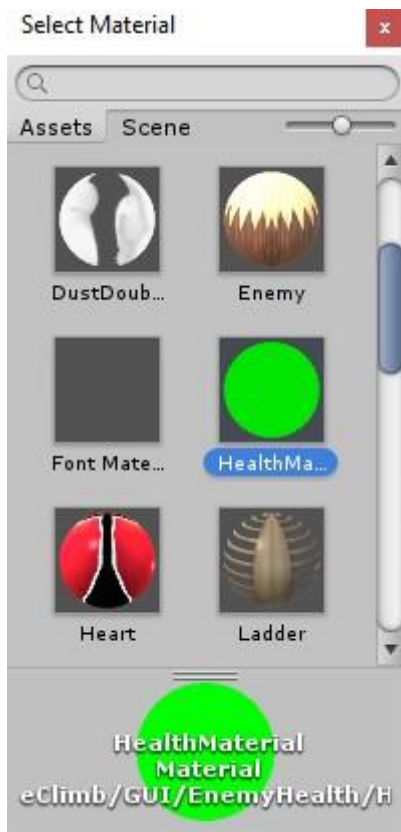


You must also make sure that the “Health Bar Materials” are set (so that the script knows which materials to use for the health bar).









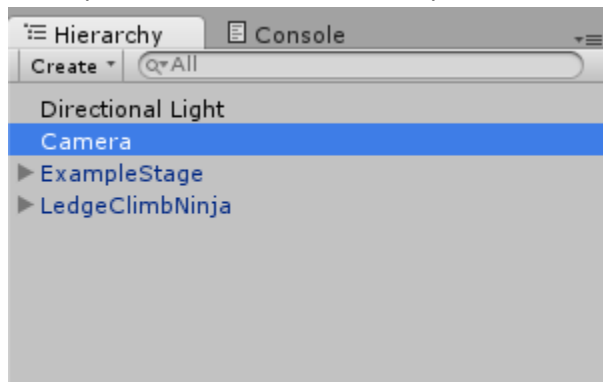


## Setting Up the All in One Game Kit - ELC Character System with Different Perspectives

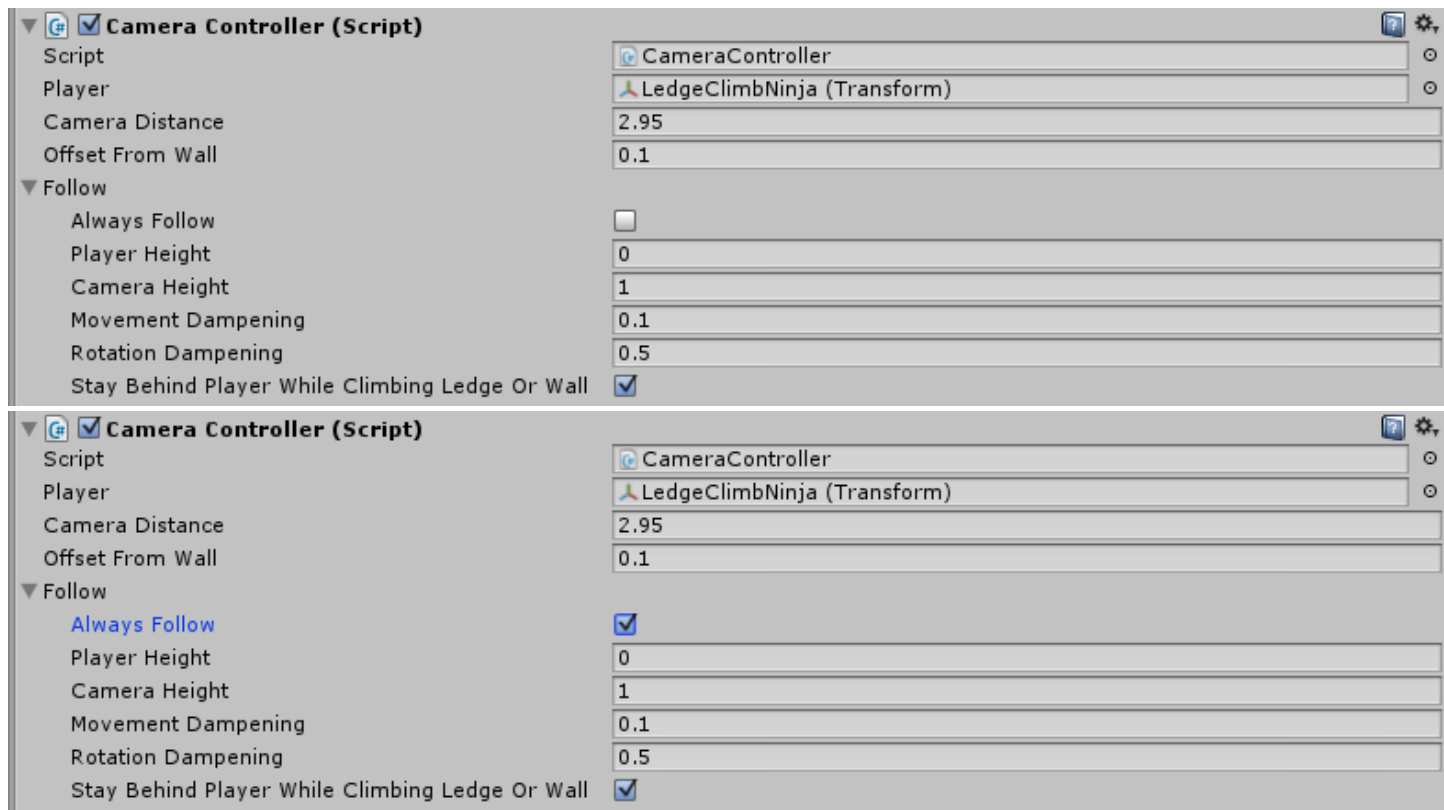
### Third Person Mode

- Third person mode with a following camera:

1. Select your camera in the "Hierarchy" tab.

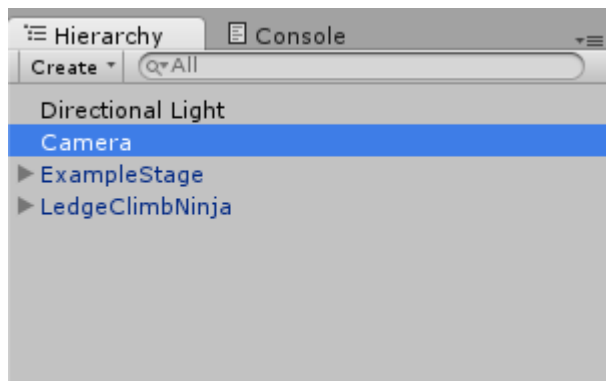


2. In the "Camera Controller" script we just added, check the box that says "Always Follow."

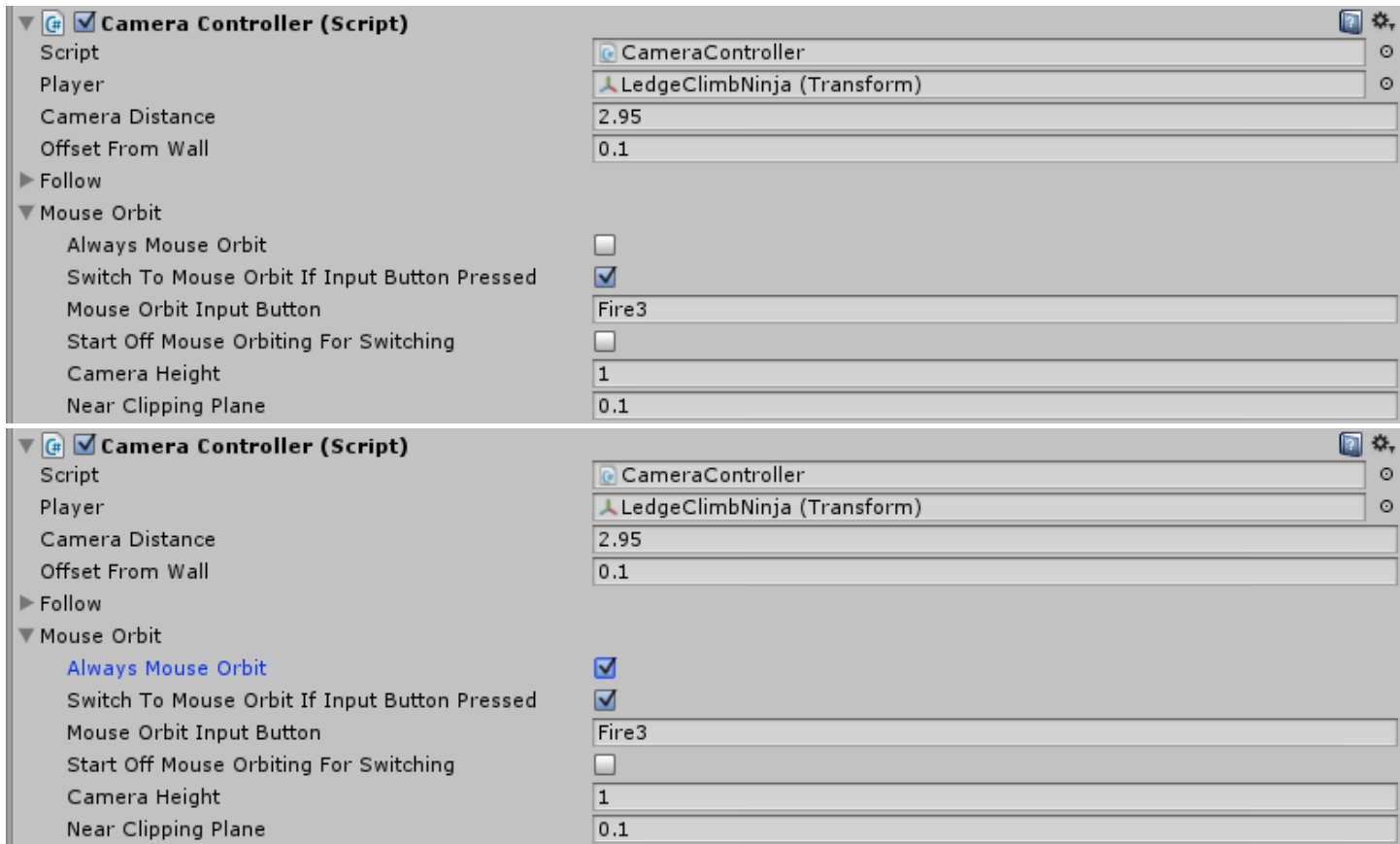


### - Third person mode with a mouse orbiting camera:

1. Select your camera in the "Hierarchy" tab.

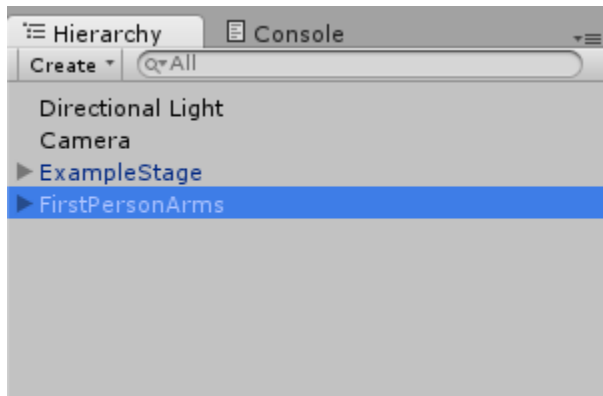


2. In the "Camera Controller" script, check the box that says "Always Mouse Orbit" (or, if you would like to switch to mouse orbiting by pressing a button instead of always mouse orbiting, check "Switch To Mouse Orbit If Input Button Pressed," and leave "Always Mouse Orbit" unchecked).

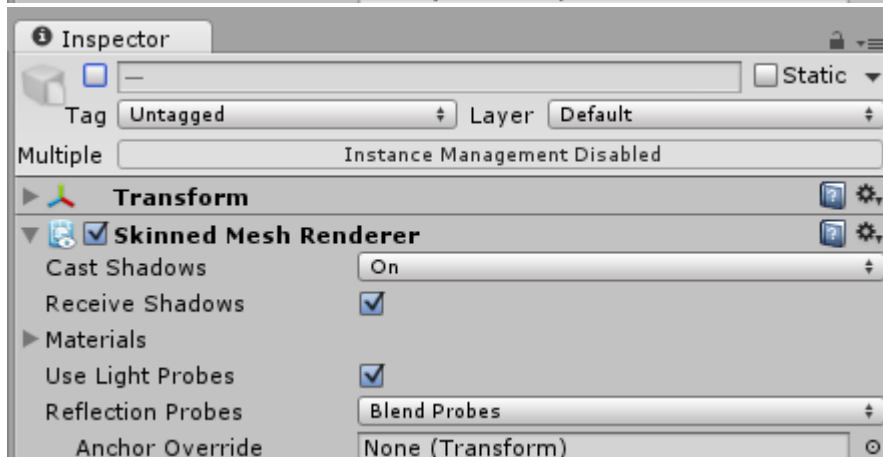
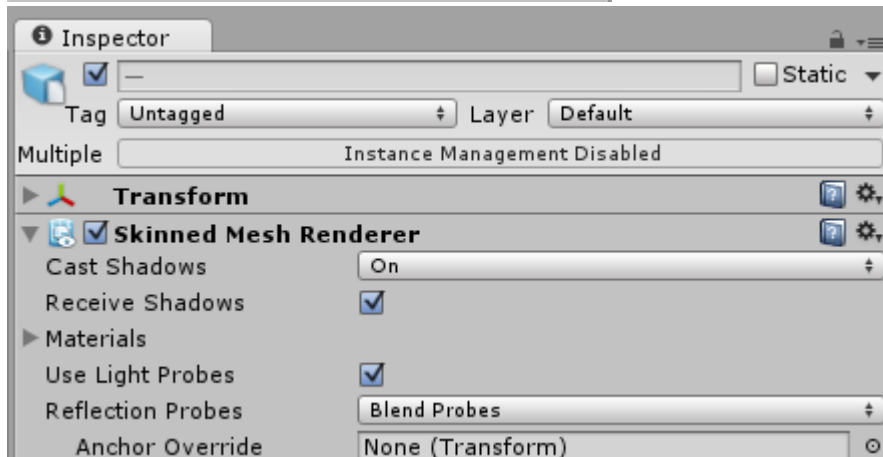
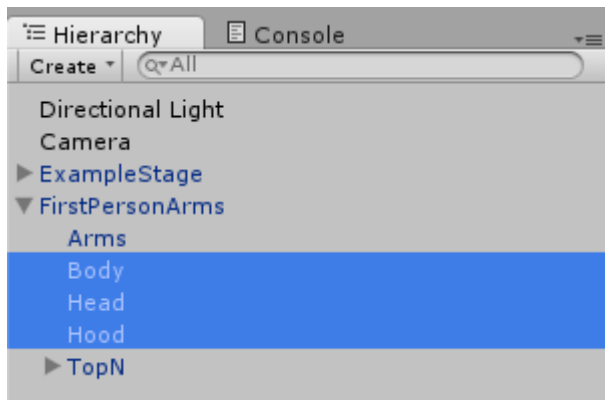


## First Person Mode

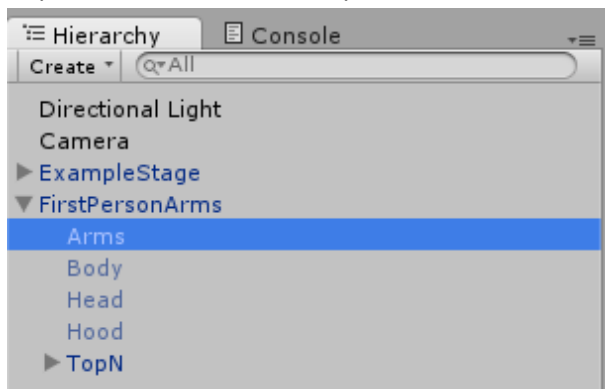
1. Select your player in the "Hierarchy" tab (since we are setting up the First Person game mode, we will be using "FirstPersonArms" as the player).

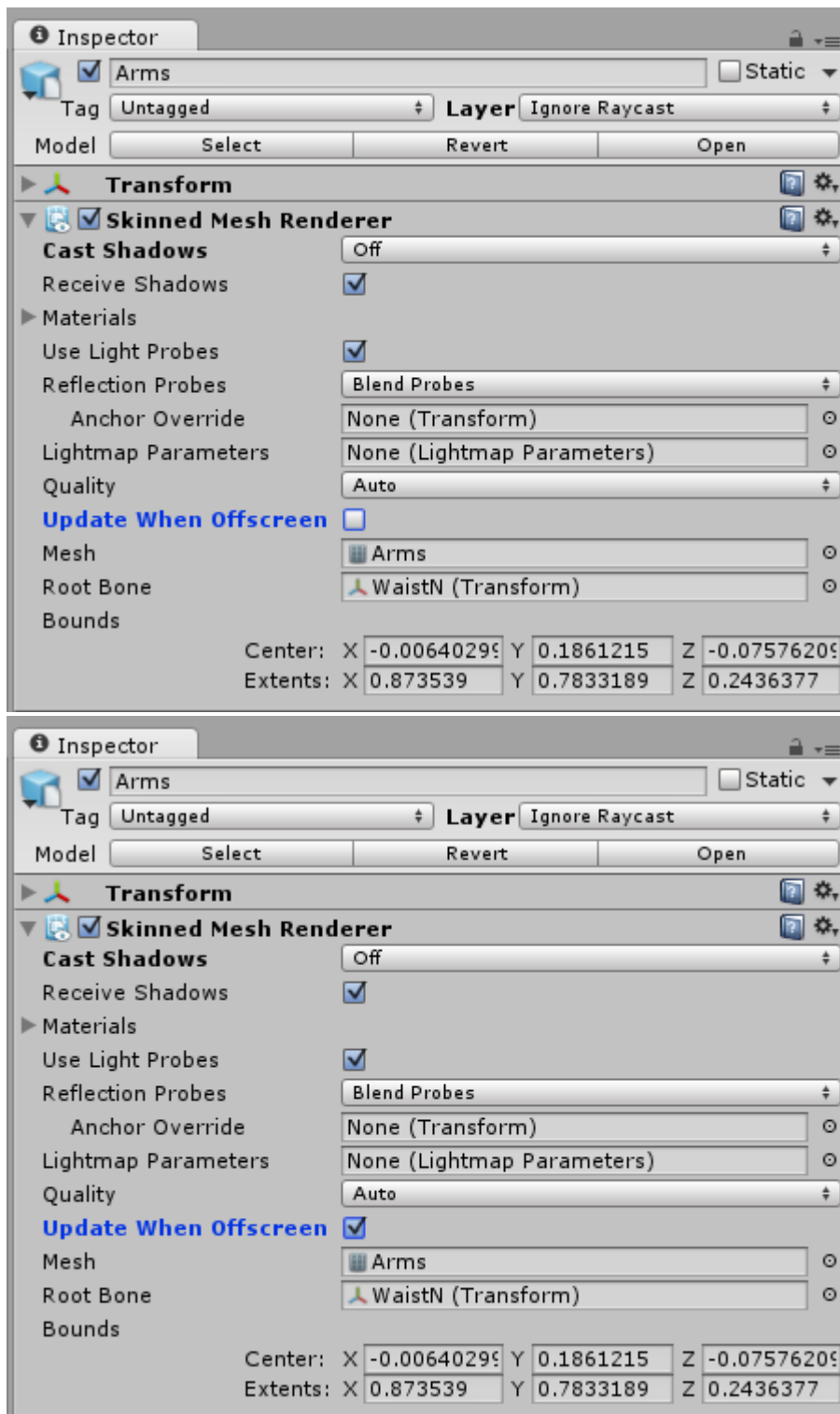


2. Disable/hide whichever parts of the player model you do not want to be seen while in First Person Mode.

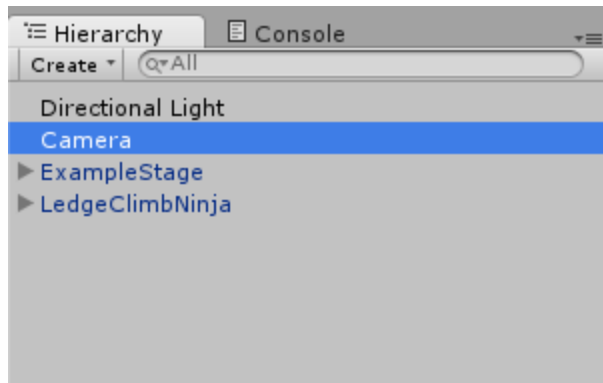


3. Select whichever parts of the player model you do want to be seen while in First Person Mode, and enable the “Update When Offscreen” option inside of their Mesh Renderer component.

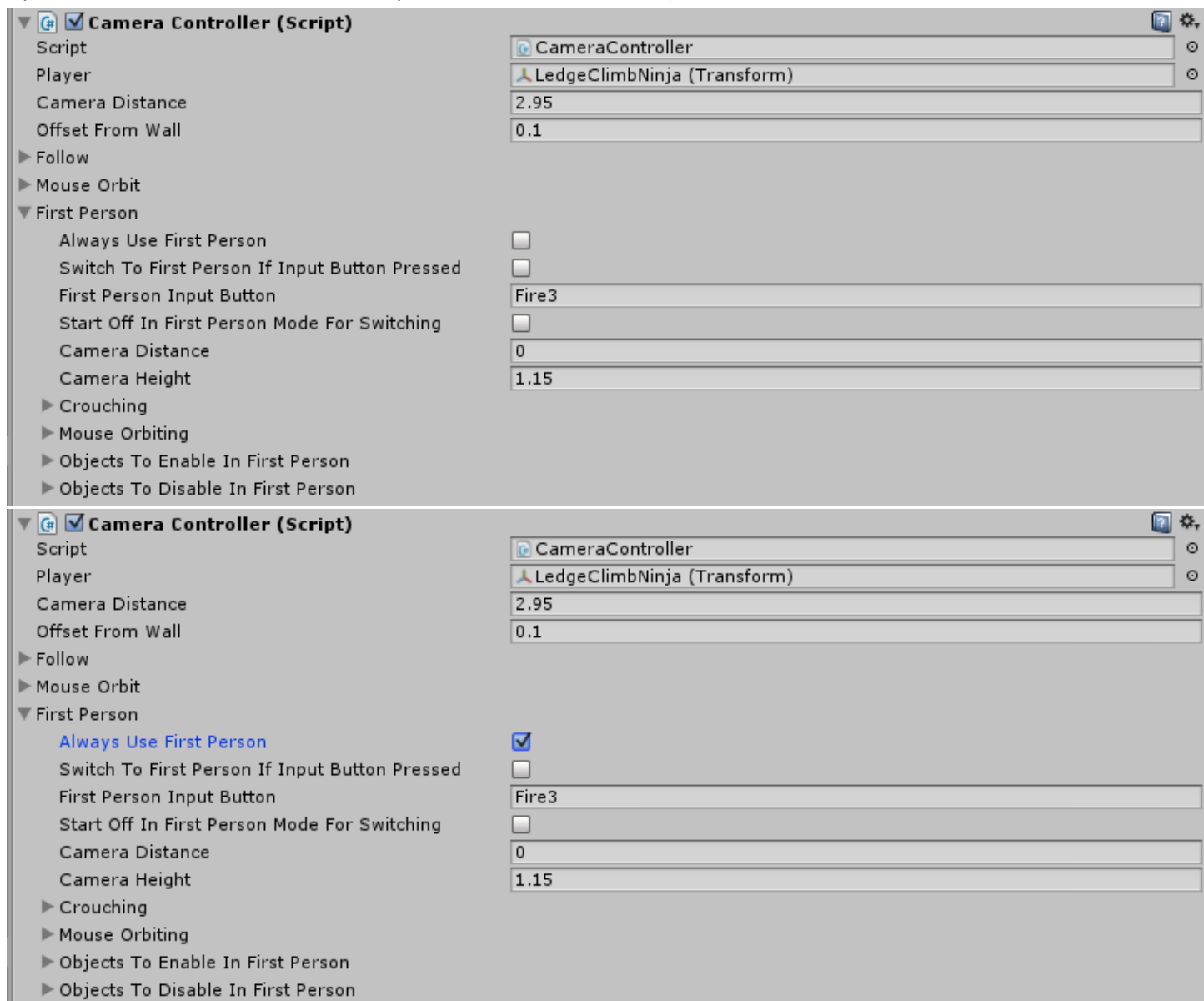




4. Select your camera in the "Hierarchy" tab.

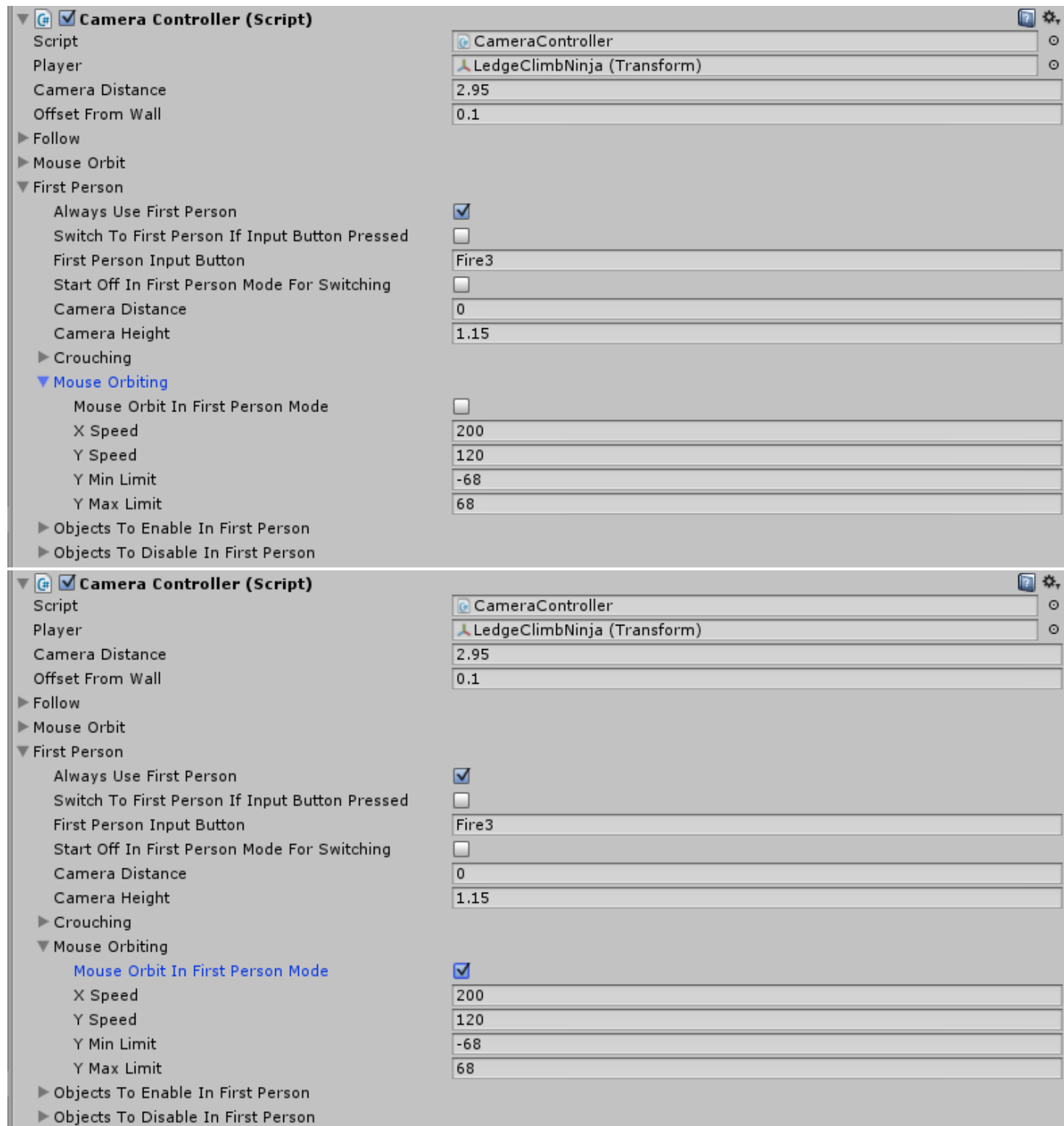


5. In the “Camera Controller” script, check the box that says “Always Use First Person” (or, if you would like to switch to mouse orbiting by pressing a button instead of always mouse orbiting, check “Switch To First Person If Input Button Pressed,” and leave “Always Mouse Orbit” unchecked).



6. (OPTIONAL)

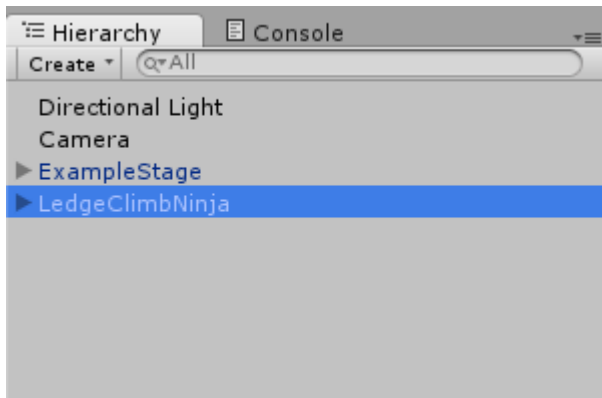
If you would like camera to mouse orbit in first person mode, expand the “Mouse Orbiting” section of the “First Person” category, then check “Mouse Orbit In First Person Mode.”



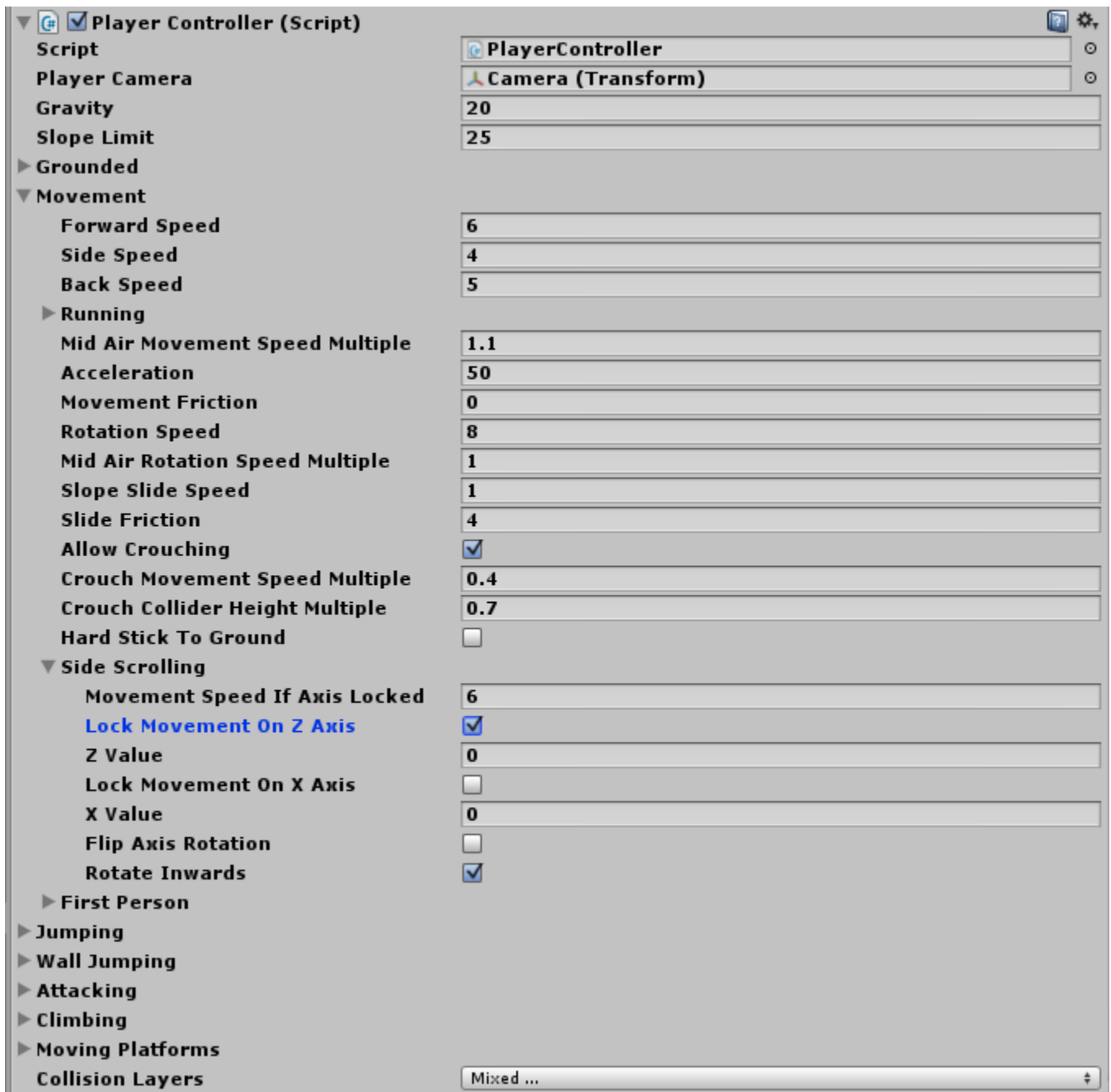
## Side-Scrolling / 2.5D Mode

1. Select your player in the “Hierarchy” tab.

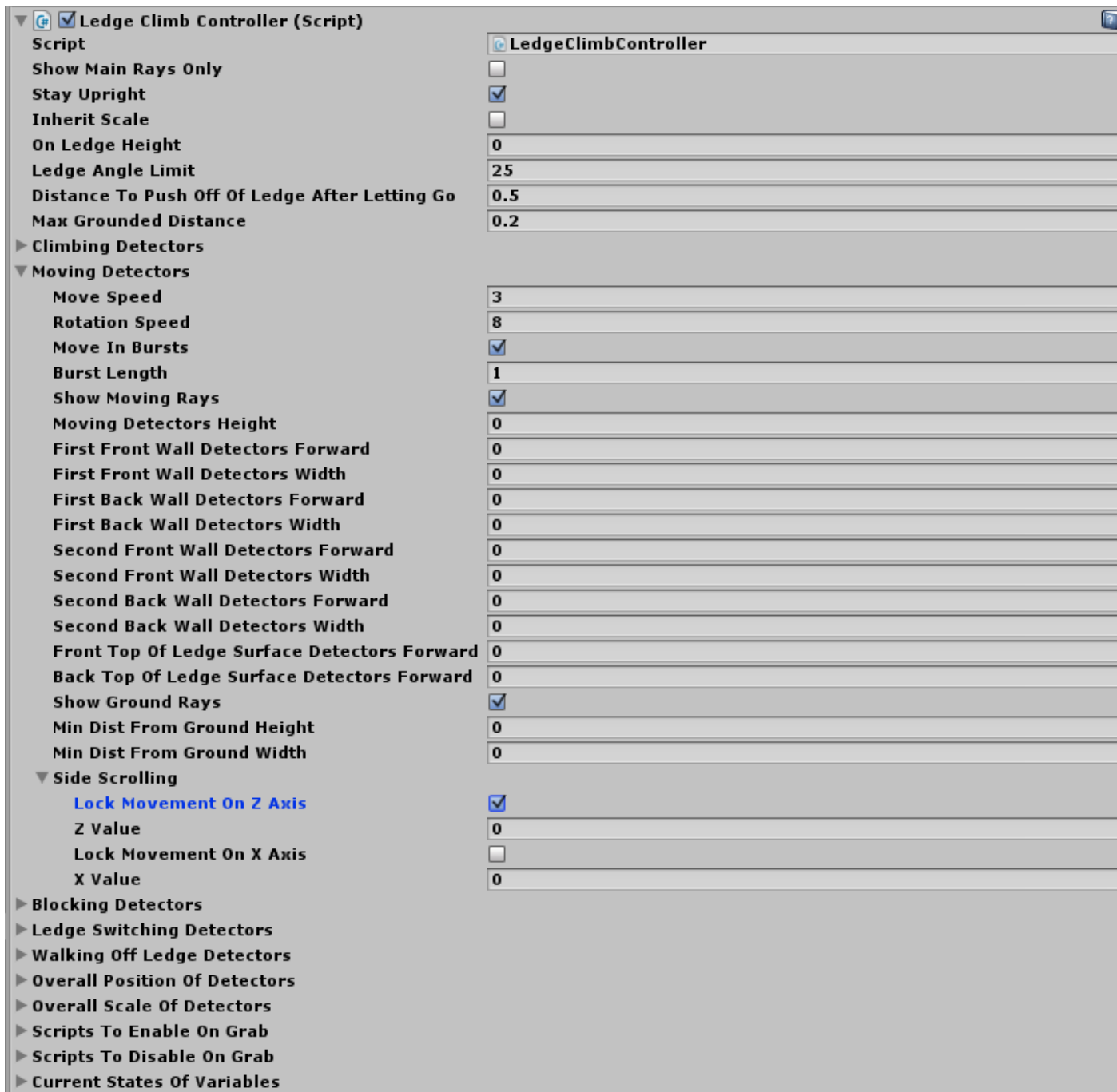




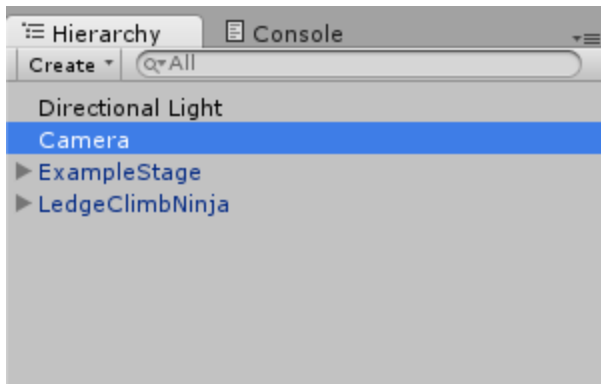
2. In the “Player Controller” script, check the box that says “Lock Movement On Z Axis” (or if you would like to lock the x-axis and only move on the z-axis instead, check the box that says “Lock Movement On X Axis” instead).



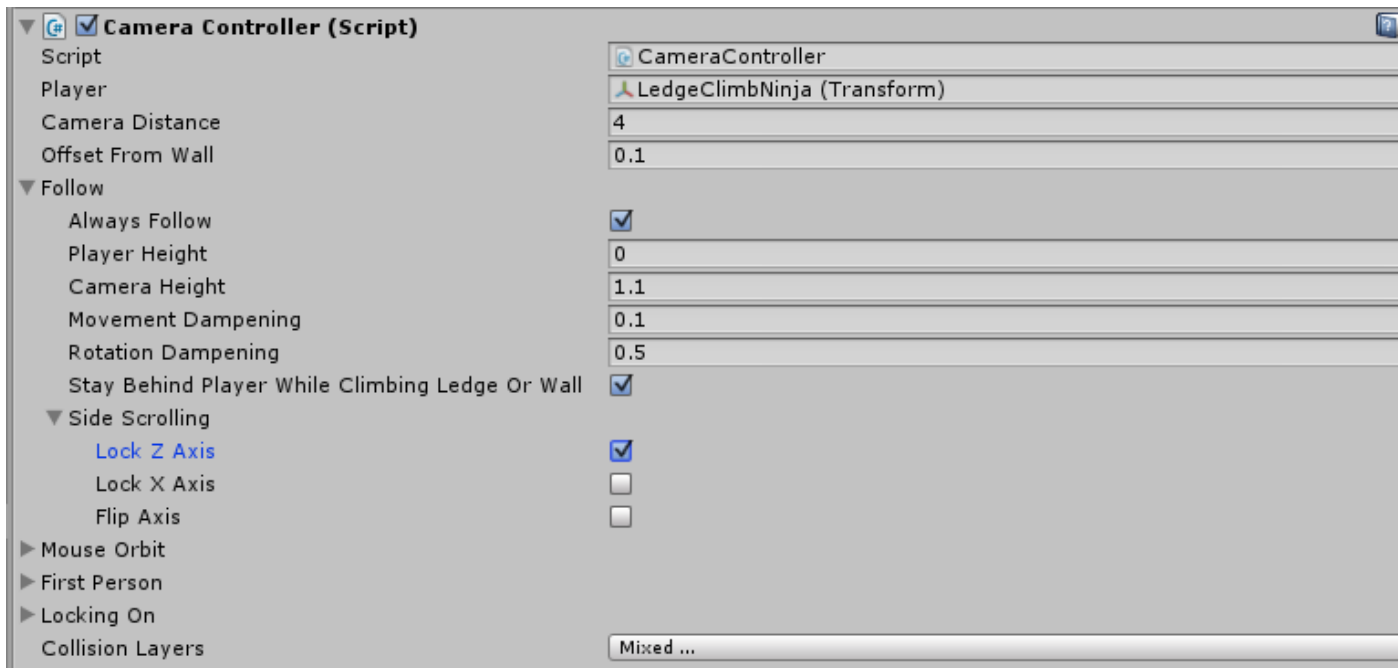
3. In the “Ledge Climb Controller” script, check the box that says “Lock Movement On Z Axis” (or if you would like to lock the x-axis and only move on the z-axis instead, check the box that says “Lock Movement On X Axis” instead).



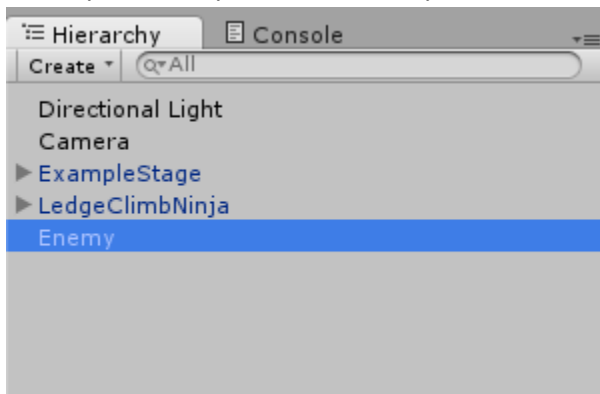
4. Select your camera in the “Hierarchy” tab.



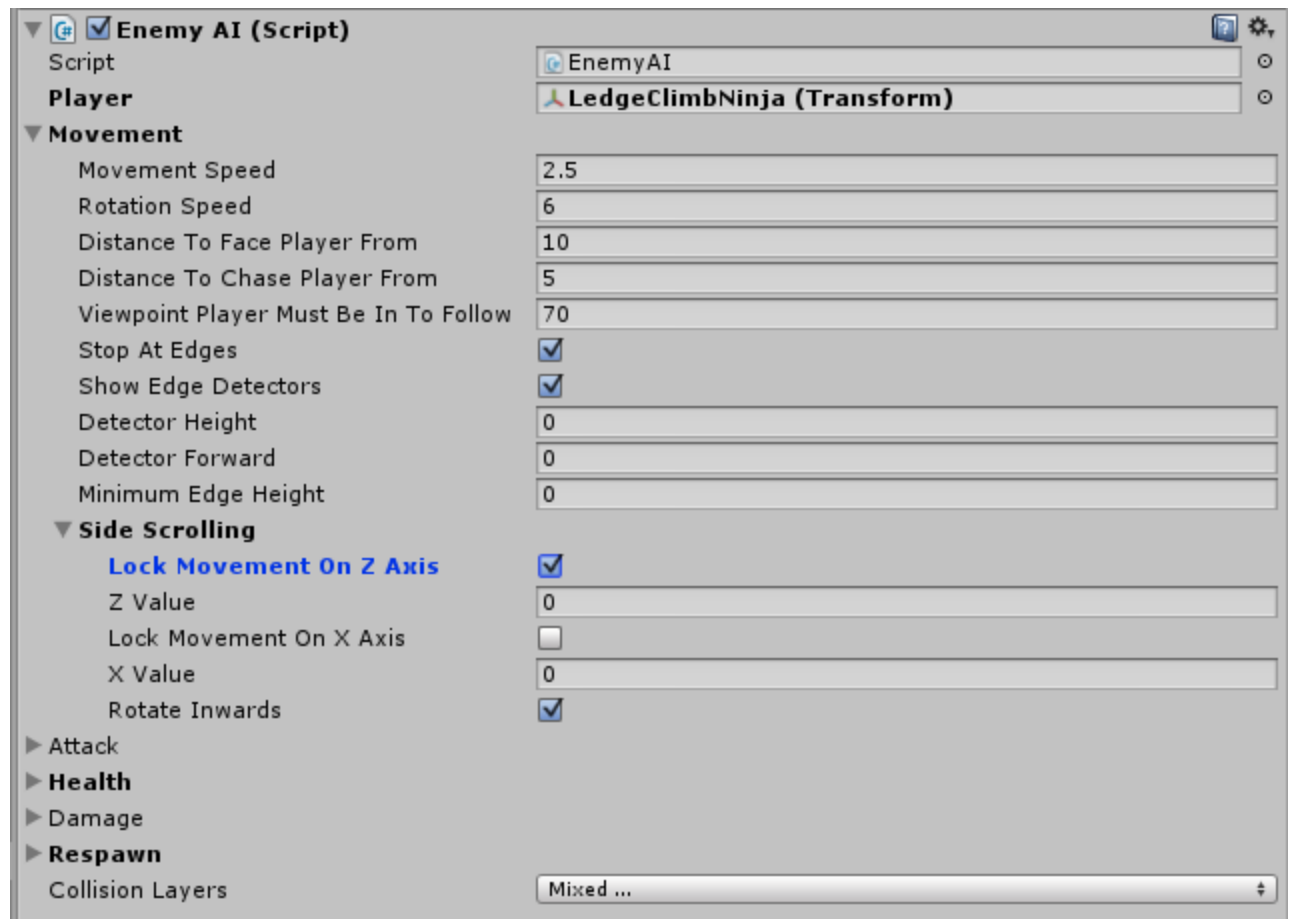
5. In the “Camera Controller” script, check the box that says “Lock Z Axis” (or if you would like to lock the x-axis and only move on the z-axis instead, check the box that says “Lock X Axis” instead).



6. Select your enemy in the “Hierarchy” tab.

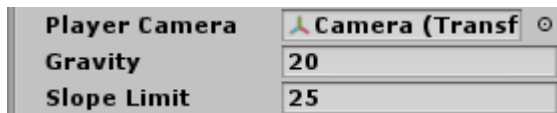


7. In the “Enemy AI” script, check the box that says “Lock Movement On Z Axis” (or if you would like to lock the x-axis and only move on the z-axis instead, check the box that says “Lock Movement On X Axis” instead).



## All in One Game Kit - ELC Character System Variables and Features

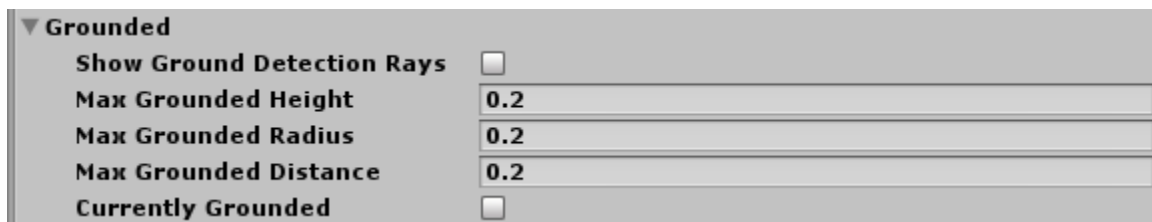
### PlayerController.cs



Player Camera – the camera set to follow the player

Gravity – the amount of downward force, or "gravity," that is constantly being applied to the player

Slope Limit – the maximum angle of a slope you can stand on without sliding down



Grounded – detectors that determine whether the player is grounded or not

Show Ground Detectors – shows the rays that detect whether the player is grounded or not

Max Grounded Height – the maximum height of the ground the ground detectors can hit to be considered grounded

Max Grounded Radius – the maximum radius of the area ground detectors can hit to be considered grounded

Max Grounded Distance – the maximum distance you can be from the ground to be considered grounded

Currently Grounded – determines if the player is currently grounded/on the ground

▼ Movement	
Forward Speed	6
Side Speed	4
Back Speed	5
▼ Running	
Use Running Button	<input type="checkbox"/>
Run Input Button	Fire3
Run Speed Multiple	1.3
▼ Crouching	
Allow Crouching	<input checked="" type="checkbox"/>
Crouch Movement Speed Multiple	0.4
Crouch Collider Height Multiple	0.7
Mid Air Movement Speed Multiple	1.1
Acceleration	50
Movement Friction	0
Rotation Speed	8
Mid Air Rotation Speed Multiple	1
Slope Slide Speed	1
Slide Friction	4
Hard Stick To Ground	<input type="checkbox"/>

Movement – variables that affect the player's movement

Forward Speed – player's speed when running forward

Side Speed – player's speed when running sideways

Back Speed – player's speed when running backwards

Running – variables that determine whether or not the player uses a running button to run

Use Running Button – allows the player to multiply his movement speed when the run button is pressed

Run Input Button – the button (found in "Edit > Project Settings > Input") that is used to make the player run

Run Speed Multiple – player's movement speed while the player is running/the run button is held down (multiplied by move speed)

Crouching – variables that determine whether or not the player can crouch

Allow Crouching – determines whether or not the player is allowed to crouch

Crouch Movement Speed Multiple – player's movement speed while crouching (multiplied by move speed)

Crouch Collider Height Multiple – what to multiply the player's collider height while crouching by

Mid Air Movement Speed Multiple – player's movement speed in mid-air (multiplied by the player's current movement speed)

Acceleration – how fast the player will reach their maximum speed

Movement Friction – the amount of friction applied to the player's movement

Rotation Speed – player's rotation speed

Mid Air Rotation Speed Multiple – player's rotation speed in mid-air (multiplied by Rotation Speed)

Slope Slide Speed – how quickly you slide down slopes

Slide Friction – the amount of friction applied to the player from sliding down a slope

Hard Stick to Ground – by using a raycast, this option sets the position of the player to the position of the ground under him

▼ Side Scrolling	
Movement Speed If Axis Locked	6
Lock Movement On Z Axis	<input type="checkbox"/>
Z Value	0
Lock Movement On X Axis	<input type="checkbox"/>
X Value	0
Flip Axis Rotation	<input type="checkbox"/>
Rotate Inwards	<input checked="" type="checkbox"/>
▼ First Person	
Use Camera Controller Settings If Possible	<input checked="" type="checkbox"/>
Always Use First Person	<input type="checkbox"/>
Switch To First Person If Input Button Pressed	<input type="checkbox"/>
First Person Input Button	Fire3
Start Off In First Person Mode For Switching	<input type="checkbox"/>
Walk Backwards When Down Key Is Pressed	<input checked="" type="checkbox"/>
Only Rotate With Camera	<input checked="" type="checkbox"/>

Side Scrolling – variables that determine whether or not the player uses 2.5D side-scrolling

Movement Speed If Axis Is Locked – the move speed of the player if one of the axis are locked

Lock Movement On Z Axis – locks the movement of the player on the z-axis

Z Value – the permanent z-value of the player if his movement on the z-axis is locked

Lock Movement On X Axis – locks the movement of the player on the x-axis

X Value – the permanent x-value of the player if his movement on the x-axis is locked

Flip Axis Rotation – flips the player's rotation on the non-locked axis (it adds 180 degrees to the player's rotation)

Rotate Inwards – when the player rotates from side to side, he rotates inward (so that you see his front side while he is rotating)

First Person – variables that determine whether or not the player uses first person mode

Use Camera Controller Settings If Possible – if the player camera has the script:

"CameraController.cs" attached to it, the player will use the same first person settings as the camera

Always Use First Person – allows the player to always stay in first person mode

Switch To First Person If Input Button Pressed – switches to first person mode and back when the "firstPersonInputButton" is pressed

First Person Input Button – the button (found in "Edit > Project Settings > Input") that is used to enter first person mode

Start Off In First Person Mode For Switching – if the player is allowed to switch to first person mode, start off in first person mode instead of having to switch to it first

Walk Backwards When Down Key Is Pressed – allows the player to walk backwards (instead of turn around) when the down key is pressed

Only Rotate With Camera – does not allow the arrow keys to change the player's direction; only allows the player to rotate to the direction that the camera is facing

▼ Jumping	
► Number And Height Of Jumps	
Time Limit Between Jumps	1
Allow Jump When Sliding Facing Uphill	<input type="checkbox"/>
Allow Jump When Sliding Facing Downhill	<input checked="" type="checkbox"/>
Do Not Increase Jump Number When Sliding	<input checked="" type="checkbox"/>
Jump Landing Effect	DustCloud
Allow Double Jump	<input checked="" type="checkbox"/>
Double Jump Performable Out Of Wall Jump	<input checked="" type="checkbox"/>
Double Jump Performable If In Mid Air In General	<input checked="" type="checkbox"/>
Double Jump Height	6
Double Jump Effect	DustDoubleJump
Max Falling Speed	90

Jumping – variables that affect the player's jumps

Number And Height Of Jumps – the number of jumps the player can do and the height of the jumps (the elements)

Time Limit Between Jumps – the amount of time you have between each jump to continue the jump combo

Allow Jump When Sliding Facing Uphill – determines whether or not you are allowed to jump when you are facing uphill and sliding down a slope

Allow Jump When Sliding Facing Downhill – determines whether or not you are allowed to jump when you are facing downhill and sliding down a slope

Do Not Increase Jump Number When Sliding – only allows the player to perform their first jump when sliding down a slope

Jump Landing Effect – optional dust effect to appear after landing jump

Allow Double Jump – determines whether or not you are allowed to double jump

Double Jump Performable Out Of Wall Jump – (if “Allow Double Jump” is true) determines whether or not the player can perform their double jump if they are in mid-air as a result of wall jumping

Double Jump Performable If In Mid Air In General – (if “Allow Double Jump” is true) determines whether or not the player can perform their double jump simply because they are in mid-air (instead of having to be in mid-air as a result of jumping)

Double Jump Height – height of double jump

Double Jump Effect – optional effect to appear when performing a double jump

Max Falling Speed – the maximum speed you can fall

▼ Wall Jumping	
Allow Wall Jumping	<input checked="" type="checkbox"/>
Minimum Wall Angle	80
Wall Jump Distance	6
Wall Jump Height	10
Wall Jump Deceleration Rate	2
Overall Movement Speed	2
Forward Movement Speed Multiple	0.85
Side Movement Speed Multiple	0.85
Back Movement Speed Multiple	0.75
Rotation Speed Multiple	0
Distance To Keep From Wall When On Wall	1
Use Wall Jump Time Limit	<input checked="" type="checkbox"/>
Wall Jump Time Limit	2
Slide Down Walls	<input checked="" type="checkbox"/>
Slide Down Speed	8
Rotation To Wall Speed	6
Input Percentage Needed To Wall Jump	50
Show Wall Jump Detectors	<input type="checkbox"/>
Space On Wall Needed To Wall Jump Up Amount	0
Space On Wall Needed To Wall Jump Height	0
Space On Wall Needed To Wall Jump Length	0
Space On Wall Needed To Wall Jump Width	0
Space Below Needed To Wall Jump	0

Wall Jumping – variables that affect the player's wall jumps

Allow Wall Jumping – determines whether or not the player is allowed to wall jump

Minimum Wall Angle – the minimum angle a wall can be to wall jump off of it

Wall Jump Distance – distance of wall jump

Wall Jump Height – height of wall jump

Wall Jump Deceleration Rate – how quickly the momentum from the wall jump stops

Overall Movement Speed – player's movement speed in mid-air

Forward Movement Speed Multiple – player's speed when moving forward in mid air (multiplied by Overall Movement Speed)

Side Movement Speed Multiple – player's speed when moving sideways in mid air (multiplied by Overall Movement Speed)

Back Movement Speed Multiple – player's speed when moving backwards in mid air (multiplied by Overall Movement Speed)

Rotation Speed Multiple – player's rotation speed in mid-air (multiplied by Rotation Speed)

Distance To Keep From Wall When On Wall – the distance the player keeps from the wall he is currently stuck to

Use Wall Jump Time Limit – allows the use of a time limit to wall jump when on walls

Wall Jump Time Limit – the amount of time you can stay on a wall before falling

Slide Down Walls – allows player to slide down if on a wall

Slide Down Speed – the speed at which the player slides down walls

Rotation To Wall Speed – how quickly the player rotates onto a wall for a wall jump

Input Percentage Needed To Wall Jump – the amount of input needed to be applied to the joystick or key in order to stick to a wall for a wall jump

Show Wall Jump Detectors – determines whether to show or hide the detectors that allow wall jumping

Space On Wall Needed To Wall Jump Up Amount – moves the rays that detect the amount of open space on a wall up and down

Space On Wall Needed To Wall Jump Height – changes the height of the rays that detect the amount of open space on a wall



Space On Wall Needed To Wall Jump Length – changes the length of the rays that detect the amount of open space on a wall

Space On Wall Needed To Wall Jump Width – changes the width of the rays that detect the amount of open space on a wall

Space Below Needed To Wall Jump – changes the minimum distance from the ground you must be in order to wall jump

▼ **Attacking**

▼ **Ground**

▶ **Number And Strength Of Attacks**

**Combo Time Limit** 0.5

**Remember Attack Button Presses** ☐

▼ **Waiting Before Attacking Again**

**Waiting Time** 0.2

**Wait For Animation To Finish** ☐

Attacking – variables that control the player's attacks

Ground – variables for the player's ground attacks

Number And Strength Of Attacks – the number of attacks the player can perform and the strength of each one (the elements)

Combo Time Limit – the amount of time you have to wait between each attack to continue the ground attack combo

Remember Attack Button Presses – allows the player to press the attack button multiple times, then continue the combo based on the number of times the button was pressed (before the combo resets)

Waiting Before Attacking Again – variables that determine how long the player must wait before attacking again

Waiting Time – the amount of time you have to wait (after each attack) before you can continue the attack combo

Wait For Animation To Finish – waits for the current attack animation to finish before continuing the combo

▼ **Crouch**

**Allow Crouch Attack** ☒

**Crouch Attack Strength** 1

**Time Limit Between Crouch Attacks** 0.5

Crouch – variables for the player's crouch attacks

Allow Crouch Attack – allows the player to attack while crouching

Crouch Attack Strength – the strength of the player's crouch attack

Time Limit Between Crouch Attacks – the amount of time you have to wait between each attack to crouch attack again

▼ **Air**

▶ **Number And Strength Of Mid Air Attacks**

**Only Allow Attack Once In Mid Air** ☒

**Combo Time Limit**

**Remember Attack Button Presses** ☐

▼ **Waiting Before Attacking Again**

**Waiting Time**

**Wait For Animation To Finish** ☐

Air – variables for the player's mid air attacks

Number And Strength Of Mid Air Attacks – the number of maximum attacks the player can perform and the strength of each one (the elements)

Only Allow Mid Air Attack Once In Mid Air – only allows the player to use his mid-air attack once while in the air

Combo Time Limit – the amount of time you have to wait between each attack to continue the mid air attack combo

Remember Attack Button Presses – allows the player to press the attack button multiple times, then continue the combo based on the number of times the button was pressed (before the combo resets)

Waiting Before Attacking Again – variables that determine how long the player must wait before attacking again

Waiting Time – the amount of time you have to wait (after each attack) before you can continue the attack combo

Wait For Animation To Finish – waits for the current attack animation to finish before continuing the combo

<b>Attack Input Button</b>	<b>Fire1</b>
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Attack Input Button – the button (found in "Edit > Project Settings > Input") that is used to attack

▼ Climbing	
Size	1
▼ Ladder	
Climbable Tag	Ladder
Climb Vertically	<input checked="" type="checkbox"/>
Climb Horizontally	<input type="checkbox"/>
Climb Movement Speed	4
Climb Rotation Speed	10
Snap To Center Of Object	<input checked="" type="checkbox"/>
Move In Bursts	<input checked="" type="checkbox"/>
Burst Length	1
Stay Upright	<input type="checkbox"/>
Distance To Push Off After Letting Go	0.5
Rotation To Climbable Object Speed	6
Show Climbing Detectors	<input type="checkbox"/>
Climbing Surface Detectors Up Amount	0
Climbing Surface Detectors Height	0
Climbing Surface Detectors Length	0
Show Edge Of Object Detectors	<input type="checkbox"/>
Top No Surface Detector Height	0
Bottom No Surface Detector Height	0
Top And Bottom No Surface Detectors Width	0
Side No Surface Detectors Height	0
Side No Surface Detectors Width	0
Stop At Sides	<input checked="" type="checkbox"/>
Drop Off At Bottom	<input type="checkbox"/>
Drop Off At Floor	<input checked="" type="checkbox"/>
Pull Up At Top	<input checked="" type="checkbox"/>
Pull Up Speed	4
Show Pull Up Detector	<input type="checkbox"/>
Pull Up Location Forward	0

Climbing – variables that control the player's ladder and wall climbing

Climbable Tag – the tag of a climbable object

Climb Vertically – determines whether or not the player is allowed to climb vertically

Climb Horizontally – determines whether or not the player is allowed to climb horizontally

Climb Movement Speed – how quickly the player climbs on walls

Climb Rotation Speed – how quickly the player rotates on walls

Snap To Center Of Object – snaps the player to the middle (along the x and z-axis) of the climbable object (most useful for ladders)

Move In Bursts – move in bursts (while on a climbable object)

Burst Length – the amount of time a movement burst lasts

Stay Upright – determines whether or not the player can rotate up and down

Distance To Push Off After Letting Go – the distance the player pushes off of a ladder/wall after letting go

Rotation To Climbable Object Speed – how quickly the player rotates onto a wall to climb

Show Climbing Detectors – determines whether to show or hide the detectors that allow climbing

Climbing Surface Detectors Up Amount – moves the rays that detect the surface of a wall up and down

Climbing Surface Detectors Height – changes the height of the rays that detect the surface of a wall

Climbing Surface Detectors Length – changes the length of the rays that detect the surface of a wall

Show Edge Of Object Detectors – determines whether or not to show the detectors that determine where the top and bottom of a climbable object is

Top No Surface Detector Height – the height of the detector that determines if there is no surface detected at the top of the climbable object, so that the player can pull up or stop before climbing any higher

Bottom No Surface Detector Height – the height of the detector that determines if there is no surface detected at the bottom of the climbable object, so that the player can drop off or stop before climbing any lower

Top And Bottom No Surface Detectors Width – the width of the detectors that determines if there is no surface detected at the top and bottom of the climbable object

Side No Surface Detectors Height – the height of the detectors that determines if there is no surface detected at the sides of the climbable object

Side No Surface Detectors Width – the width of the detectors that determines if there is no surface detected at the sides of the climbable object

Stop At Sides – keeps player from climbing any further sideways once he has reached the side \_\_

Drop Off At Bottom – allows player to drop off of a climbable object once he has reached the bottom

Drop Off At Floor – allows player to drop off of a climbable object once he has reached the floor\_\_

Pull Up At Top – allows player to pull up and over a climbable object once he has reached the top

Pull Up Speed – the speed the player pulls up and over ledges once he has reached the top of a climbable object

Show Pull Up Detector – determines whether or not to show the detector that determines where the player pulls up to

Pull Up Location Forward – the forward distance of the detector that determines where the player pulls up to

<b>▼ Swimming</b>			
Allow Swimming	<input checked="" type="checkbox"/>		
Swim Movement Speed	6		
Acceleration Rate	6		
Deceleration Rate	4		
Swim Rotation Speed	6		
Y Swimming Rotation Max Limit	70		
Y Swimming Rotation Min Limit	-80		
Y Idle Rotation Max Limit	40		
Y Idle Rotation Min Limit	-50		
Idle Floating Direction	X 0	Y 0	Z 0
Invert X Rotation	<input type="checkbox"/>		
Invert Y Rotation	<input type="checkbox"/>		
Angle Needed To Jump Out	39		
Jump In Height	0		
Jump Out Height	0		
Walk Out Height	0		
Allow Collider Rotation By Using Rigidbody	<input checked="" type="checkbox"/>		
<b>▼ First Person</b>			
Allow Movement	<input checked="" type="checkbox"/>		
Allow Shifting With Joystick	<input checked="" type="checkbox"/>		
Joystick Movement Speed	4		
Joystick Deceleration Speed	3		
Camera Angle Offset	0		
<b>▼ Rotation Limits If Movement Is Not Allowed</b>			
Y Min Limit	-68		
Y Max Limit	68		
X Min Limit	-68		
X Max Limit	68		
<b>► Scripts To Enable On Enter</b>			
<b>► Scripts To Disable On Enter</b>			
Splash Effect	Splash		

Swimming – variables that control the player's swimming

Allow Swimming – determines whether or not the player is allowed to swim\_\_

Swim Movement Speed – the player's movement speed while swimming

Acceleration Rate – how fast the player will reach their maximum swimming speed

Deceleration Rate – how fast the player will reach their minimum swimming speed (0 speed)

Swim Rotation Speed – the player's rotation speed while swimming

Y Swimming Rotation Max Limit – the maximum y value the player can rotate to while swimming vertically

Y Swimming Rotation Min Limit – the minimum y value the player can rotate to while swimming vertically

Y Idle Rotation Max Limit – the maximum y value the player can rotate to while not swimming vertically

Y Idle Rotation Min Limit – the minimum y value the player can rotate to while not swimming vertically

Idle Floating Direction – the direction the player floats in while he is not swimming

Invert X Rotation – inverts the player's left and right swimming rotation

Invert Y Rotation – inverts the player's up and down swimming rotation

Angle Needed To Jump Out – the minimum angle the player must be rotated to jump out of the water

Jump In Height – the height the player must sink before entering the water

Jump Out Height – the height the player must swim before jumping out of the water (the player cannot swim any higher once he reaches this point)

Walk Out Height – the height the player must swim before walking out of the water, and on to the surface (note: the player cannot swim any higher than the jump out height)

Allow Collider Rotation By Using Rigidbody – allows the collider of the player to rotate while swimming (by adding a Rigidbody+CapsuleCollider, and disabling the CharacterController temporarily, since CharacterController colliders can only stay upright)

First Person – variables that determine how the player swims in first person mode

Allow Movement – allows the player to move while in first person mode

Allow Shifting With Joystick – allows the player to rotate with the camera, and move left, right, up, or down with the joystick, while mouse orbiting in first person mode

Joystick Movement Speed – the speed the player moves left, right, up, or down (with the joystick) while mouse orbiting in first person mode

Joystick Deceleration Speed – the speed the player stops moving left, right, up, or down (with the joystick) while mouse orbiting in first person mode

Camera Angle Offset – the angle of the player's head upon entering first person mode

Rotation Limits If Movement Is Not Allowed – variables that limit the camera's (and in turn, the player's) first person rotation while swimming

Y Min Limit – the minimum y value the camera can orbit to

Y Max Limit – the maximum y value the camera can orbit to

X Min Limit – the minimum x value the camera can orbit to

X Max Limit – the maximum x value the camera can orbit to

Scripts To Enable On Enter – scripts to enable when the player enters the water (scripts disable when the player exits the water)

Scripts To Disable On Enter – scripts to disable when the player enters the water (scripts enable when the player exits the water)

Splash Effect – optional splash effect to appear after landing in water

▼ Walking Off Of Climbable Surface	
Allow Grabbing On After Walking Off Ledge	<input checked="" type="checkbox"/>
Show Walking Off Ledge Rays	<input type="checkbox"/>
Space In Front Needed To Grab Back On	0
Space Below Needed To Grab Back On Height	0
Space Below Needed To Grab Back On Forward	0
First Side Ledge Detectors Height	0
Second Side Ledge Detectors Height	0
Third Side Ledge Detectors Height	0
Side Ledge Detectors Width	0
Side Ledge Detectors Length	0
Grab Back On Location Height	0
Grab Back On Location Width	0
Grab Back On Location Forward	0

Walking Off Of Climbable Surface – variables that detect whether the player has walked off a ledge and can grab on to a ladder

Allow Grabbing On After Walking Off Ledge –allows the player to grab on to a climbable surface under the ledge that he is walking off of

Show Walking Off Ledge Rays – shows the rays that detect if the player is walking off of a ledge

Space In Front Needed To Grab Back On – the amount of space in front of the player needed to grab on to a climbable object under a ledge

Space Below Needed To Grab Back On Height – the height of the detectors that determine the amount of space below the player needed to grab on to a climbable object under a ledge

Space Below Needed To Grab Back On Forward – the forward distance of the detectors that determine the amount of space below the player needed to grab on to a climbable object under a ledge

First Side Ledge Detectors Height – the height of the first set of detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Second Side Ledge Detectors Height – the height of the second set of detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Third Side Ledge Detectors Height – the height of the third set of detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Side Ledge Detectors Width – the width of the detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Side Ledge Detectors Length – the length of the detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Grab Back On Location Height – the height of the detectors that determine where the player will grab on to

Grab Back On Location Width – the height of the detectors that determine where the player will grab on to

Grab Back On Location Forward – the forward distance of the detectors that determine where the player will grab on to

► **Scripts To Enable On Grab**  
► **Scripts To Disable On Grab**  
**Push Against Wall If Player Is Stuck** ☒

Scripts To Enable On Grab – scripts to enable when the player grabs on to a wall (scripts disable when the player lets go of a wall)

Scripts To Disable On Grab – scripts to disable when the player grabs on to a wall (scripts enable when the player lets go of a wall)

Push Against Wall If Player Is Stuck – if the script considers the player stuck, the player pushes himself away from the wall until he is free

#### ▼ **Moving Platforms**

**Allow Moving Platform Support** ☒

**Moving Platform Tag**

Platform

Moving Platforms – variables that determine whether the player moves with moving platforms or not

Allow Moving Platform Support – determines whether or not the player can move with moving platforms

Moving Platform Tag – the tag of the moving platform objects

**Collision Layers**

Mixed ...

Collision Layers – the layers that the detectors (raycasts/linecasts) will collide with

## LedgeClimbController.cs

Show Main Rays Only	<input type="checkbox"/>
Stay Upright	<input checked="" type="checkbox"/>
Inherit Scale	<input type="checkbox"/>
On Ledge Height	0
Ledge Angle Limit	25
Distance To Push Off Of Ledge After Letting Go	0.5
Max Grounded Distance	0.2

Show Main Rays Only – show only the main detector rays

Stay Upright – only rotate to the left and right, not up and down

Inherit Scale – set the scale of the rays to the scale of the script holder

On Ledge Height – determines the player's up distance/height while grabbed on to a ledge

Ledge Angle Limit – the maximum angle of a ledge you can grab on to

Distance To Push Off Of Ledge After Letting Go – the distance the player pushes off of a ledge after letting go

Max Grounded Distance – the maximum distance you can be from the ground to be considered grounded

▼ Climbing Detectors	
Pull Up Speed	4
Allow Climbing Over Ledges If In Air	<input checked="" type="checkbox"/>
Allow Climbing Over Ledges If On Ground	<input checked="" type="checkbox"/>
Automatically Climb Over Ground Ledge If Colliding	<input checked="" type="checkbox"/>
Show Climb Detection Rays	<input checked="" type="checkbox"/>
Space Above Head Needed To Grab On	0
Space Above Head Needed To Climb Up	0
Rod Holding Ledge Detector Height	0
Rod Holding Ledge Detector Forward	0
Ledge Detector Height	0
Ledge Detector Forward	0
Top Of Ledge Surface Detector Height	0
Show Surface Level Rays	<input type="checkbox"/>
Max Surface Level Height	0
Under Platform Max Surface Level Height	0
Show Non Ledge Surface Detection Rays	<input type="checkbox"/>
Non Ledge Surface Detectors Height	0
Non Ledge Surface Detectors Forward	0

Climbing Detectors – detectors that determine if climbing on to or grabbing on to a ledge is possible

Pull Up Speed – the speed the player pulls up and over ledges

Allow Climbing Over Ledges If In Air – allows player to climb over a ledge that he is currently grabbed on to in mid-air

Allow Climbing Over Ledges If On Ground – allows player to climb over a ledge if he is on the ground

Automatically Climb Over Ground Ledge If Colliding – (if “Allow Climbing Over Ledges If On Ground” is true) allows player to automatically climb over a ledge on the ground if he is colliding with and moving toward it (as opposed to having to stop and move again if colliding)

Show Climb Detection Rays – shows the rays that detect whether a ledge can be climbed or not

Space Above Head Needed To Grab On – the amount of space above the player's head needed to grab on to a ledge

Space Above Head Needed To Climb Up – the amount of space above the player's head needed to climb up and over a ledge

Rod Holding Ledge Detector Height – the height of the rod that holds the ledge detector

Rod Holding Ledge Detector Forward – the forward distance of the rod that holds the ledge detector



Ledge Detector Height – the height of the ledge detector (the ray that detects ledges)

Ledge Detector Forward – the forward distance of the ledge detector (the ray that detects ledges)

Top Of Ledge Surface Detector Height – the height of the detector that determines where the top (surface) of a ledge is

Show Surface Level Rays – shows the rays that detect whether a ledge is low enough to be climbed or not

Max Surface Level Height – the maximum height (or level) of a surface that the player can grab on to

Under Platform Max Surface Level Height – the maximum height (or level) of a surface that the player can grab on to when that surface is under a platform/another collider

Show Non Ledge Surface Detection Rays – shows the rays that detect whether a surface is actually a ledge or not (instead of something else such as a slope/hillside)

Non Ledge Surface Detectors Height – the height of the detectors that determine whether a surface is actually a ledge or not (instead of something else such as a slope/hillside)

Non Ledge Surface Detectors Forward – the forward distance of the detectors that determine whether a surface is actually a ledge or not (instead of something else such as a slope/hillside)

▼ Moving Detectors	
Move Speed	3
Rotation Speed	8
Move In Bursts	<input checked="" type="checkbox"/>
Burst Length	1
Show Moving Rays	<input checked="" type="checkbox"/>
Moving Detectors Height	0
First Front Wall Detectors Forward	0
First Front Wall Detectors Width	0
First Back Wall Detectors Forward	0
First Back Wall Detectors Width	0
Second Front Wall Detectors Forward	0
Second Front Wall Detectors Width	0
Second Back Wall Detectors Forward	0
Second Back Wall Detectors Width	0
Front Top Of Ledge Surface Detectors Forward	0
Back Top Of Ledge Surface Detectors Forward	0
Show Ground Rays	<input checked="" type="checkbox"/>
Min Dist From Ground Height	0
Min Dist From Ground Width	0
▼ Side Scrolling	
Lock Movement On Z Axis	<input type="checkbox"/>
Z Value	0
Lock Movement On X Axis	<input type="checkbox"/>
X Value	0

Moving Detectors – detectors that determine where and how the player will move when on a ledge

Move Speed – the speed the player moves left and right (while grabbed on to a ledge)

Rotation Speed – the speed the player rotates (while grabbed on to a ledge)

Move In Bursts – move left and right in bursts (while grabbed on to a ledge)

Burst Length – the amount of time a movement burst lasts

Show Moving Rays – shows the rays that detect where and how the player will move when on a ledge

Moving Detectors Height – the height of the rays that detect where and how the player will move when on a ledge

First Front Wall Detectors Forward – the forward distance of the first set of detectors that detect walls in front of the player

First Front Wall Detectors Width – the width of the first set of detectors that detect walls in front of the player

First Back Wall Detectors Forward – the forward distance of the first set of detectors that detect walls behind the player

First Back Wall Detectors Width – the width of the first set of detectors that detect walls behind the player

Second Front Wall Detectors Forward – the forward distance of the second set of detectors that detect walls in front of the player

Second Front Wall Detectors Width – the width of the second set of detectors that detect walls in front of the player

Second Back Wall Detectors Forward – the forward distance of the second set of detectors that detect walls behind the player

Second Back Wall Detectors Width – the width of the second set of detectors that detect walls behind the player

Front Top Of Ledge Surface Detectors Forward – the forward distance of the detectors that determine where the top (surface) of a ledge in front of the player is

Back Top Of Ledge Surface Detectors Forward – the forward distance of the detectors that determine where the top (surface) of a ledge behind the player is

Show Ground Rays – shows the rays that detect whether the player is too close to the ground to move or not

Min Dist From Ground Height – the minimum distance (or height) the player must be from the ground in order to grab on to or move on a ledge

Min Dist From Ground Width – the width of the rays that determine the minimum distance (or height) the player must be from the ground in order to grab on to or move on a ledge

Side Scrolling – variables that determine whether or not the player uses 2.5D side-scrolling

Lock Movement On Z Axis – locks the movement of the player on the z-axis

Z Value – the permanent z-value of the player if his movement on the z-axis is locked

Lock Movement On X Axis – locks the movement of the player on the x-axis

X Value – the permanent x-value of the player if his movement on the x-axis is locked

<b>▼ Blocking Detectors</b>	
Show Rotation Blocking Rays	<input type="checkbox"/>
Prevent Rotating To Side Wall Height	0
Prevent Rotating To Side Wall Width	0
First Allow Rotating If Ledge Hit Width	0
Second Allow Rotating If Ledge Hit Width	0
Show Movement Blocking Rays	<input type="checkbox"/>
Mid Side Wall Detectors Forward	0
Mid Side Wall Detectors Width	0
Side Wall Detectors Width	0
Front Side Blockage Detectors Height	0
Front Side Blockage Detectors Width	0
Front Side Blockage Detectors Forward	0
Above Head Platform Detectors Height	0
Above Head Platform Detectors Forward	0
Show Angle Detection Rays	<input type="checkbox"/>
Ledge Angle Detectors Height	0
Ledge Angle Detectors Width	0

Blocking Detectors – detectors that determine whether the player is blocked from moving on a ledge or not

Show Rotation Blocking Rays – shows the rays that detect whether the player is blocked from rotating on a ledge or not

Prevent Rotating To Side Wall Height – the height of the detectors that determine if something to the side of the player (such as a wall) cannot be rotated to

Prevent Rotating To Side Wall Width – the width of the detectors that determine if something to the side of the player (such as a wall) cannot be rotated to

First Allow Rotating If Ledge Hit Width – the width of the first set of detectors that determine if something to the side of the player (such as a ledge) can be rotated to

Second Allow Rotating If Ledge Hit Width – the width of the second set of detectors that determine if something to the side of the player (such as a ledge) can be rotated to

Show Movement Blocking Rays – shows the rays that detect whether the player is blocked from moving on a ledge or not

Mid Side Wall Detectors Forward – the forward distance of the detectors that determine whether a wall in front of and to the side of the player is blocking the player's movement

Mid Side Wall Detectors Width – the width of the detectors that determine whether a wall in front of and to the side of the player is blocking the player's movement

Side Wall Detectors Width – the width of the detectors that determine whether a wall to the side of the player is blocking the player's movement

Front Side Blockage Detectors Height – the height of the detectors that determine if there is something (a collider) in front of the player blocking his movement

Front Side Blockage Detectors Width – the width of the detectors that determine if there is something (a collider) in front of the player blocking his movement

Front Side Blockage Detectors Forward – the forward distance of the detectors that determine if there is something (a collider) in front of the player blocking his movement

Above Head Platform Detectors Height – the height of the detectors that determine if there is a platform/collider above (and slightly in front of) the player's head blocking his movement

Above Head Platform Detectors Forward – the forward distance of the detectors that determine if there is a platform/collider above (and slightly in front of) the player's head blocking his movement

Show Angle Detection Rays – shows the rays that detect whether a ledge's angle is too high to be climbed/moved on or not

Ledge Angle Detectors Height – the height of the detectors that determine the angle of a ledge

Ledge Angle Detectors Width – the width of the detectors that determine the angle of a ledge

▼ Ledge Switching Detectors	
Allow Ledge Switching	<input checked="" type="checkbox"/>
Switch Jump Height	5
Switch Jump Speed	4
Input Percentage Needed To Switch	95
Show First Ledge Switching Rays	<input type="checkbox"/>
First Surface Detector Width	0
First No Surface Detector Length	0
First No Surface Detector Width	0
Show Second Ledge Switching Rays	<input type="checkbox"/>
Second Surface Detector Width	0
Second No Surface Detector Length	0
Second No Surface Detector Width	0
Show Third Ledge Switching Rays	<input type="checkbox"/>
Third Surface Detector Width	0
Third No Surface Detector Length	0
Third No Surface Detector Width	0
Surface Detector Forward Amount	0
Surface Detector Height	0
Surface Detector Length	0
Surface Detector Width	0
Switch Point Detector Width	0
No Surface Detector Height	0
No Surface Detector Width	0
Wall In Front Detector Up Amount	0
Wall In Front Detector Height	0

Ledge Switching Detectors – detectors that determine whether switching from one ledge to another is possible or not

Allow Ledge Switching – allows the player to switch between ledges (jump from one ledge to another)

Switch Jump Height – the height the player jumps when switching ledges

Switch Jump Speed – the speed the player jumps between ledges

Input Percentage Needed To Switch – the amount of input needed to be applied to the joystick or key in order to switch ledges

Show First Ledge Switching Rays – shows the first set of rays that detect whether switching from one ledge to another is possible or not

First Surface Detector Width – the width of the first set of detectors that determine how large of a surface a ledge must be in order for the player to switch to it

First No Surface Detector Length – the length of the first set of detectors that determine if there is no surface blocking the player from switching ledges

First No Surface Detector Width – the width of the first set of detectors that determine if there is no surface blocking the player from switching ledges

Show Second Ledge Switching Rays – shows the second set of rays that detect whether switching from one ledge to another is possible or not

Second Surface Detector Width – the width of the second set of detectors that determine how large of a surface a ledge must be in order for the player to switch to it

Second No Surface Detector Length – the length of the second set of detectors that determine if there is no surface blocking the player from switching ledges

Second No Surface Detector Width – the width of the second set of detectors that determine if there is no surface blocking the player from switching ledges

Show Third Ledge Switching Rays – shows the third set of rays that detect whether switching from one ledge to another is possible or not

Third Surface Detector Width – the width of the third set of detectors that determine how large of a surface a ledge must be in order for the player to switch to it

Third No Surface Detector Length – the length of the third set of detectors that determine if there is no surface blocking the player from switching ledges

Third No Surface Detector Width – the width of the third set of detectors that determine if there is no surface blocking the player from switching ledges

Surface Detector Forward – the forward distance of the detectors that determine how large of a surface a ledge must be in order for the player to switch to it

Surface Detector Height – the height of the detectors that determine how large of a surface a ledge must be in order for the player to switch to it

Surface Detector Length – the length of the detectors that determine how large of a surface a ledge must be in order for the player to switch to it

Surface Detector Width – the width of the detectors that determine how large of a surface a ledge must be in order for the player to switch to it

Switch Point Detector Width – the width of the detectors that determine where the player will switch to

No Surface Detector Height – the height of the detectors that determine if there is no surface blocking the player from switching ledges

No Surface Detector Width – the width of the detectors that determine if there is no surface blocking the player from switching ledges

Wall In Front Detector Up Amount – the up distance of the detectors that determine if there is a wall in front of the player keeping him from switching ledges

Wall In Front Detector Height – the height of the detectors that determine if there is a wall in front of the player keeping him from switching ledges

<b>▼ Walking Off Ledge Detectors</b>	
<b>Allow Grabbing Back On To Ledges</b>	<input checked="" type="checkbox"/>
<b>Show Grab Back On To Ledges Rays</b>	<input checked="" type="checkbox"/>
<b>Space In Front Needed To Grab Back On</b>	<input type="text" value="0"/>
<b>Space Below Needed To Grab Back On Height</b>	<input type="text" value="0"/>
<b>Space Below Needed To Grab Back On Forward</b>	<input type="text" value="0"/>
<b>First Side Ledge Detectors Height</b>	<input type="text" value="0"/>
<b>Second Side Ledge Detectors Height</b>	<input type="text" value="0"/>
<b>Third Side Ledge Detectors Height</b>	<input type="text" value="0"/>
<b>Side Ledge Detectors Width</b>	<input type="text" value="0"/>
<b>Side Ledge Detectors Length</b>	<input type="text" value="0"/>
<b>Grab Back On Location Height</b>	<input type="text" value="0"/>
<b>Grab Back On Location Width</b>	<input type="text" value="0"/>
<b>Grab Back On Location Forward</b>	<input type="text" value="0"/>
<b>Allow Jumping Off Ledges</b>	<input type="checkbox"/>
<b>Show Jump Off Ledges Rays</b>	<input type="checkbox"/>
<b>Space Below Needed To Jump</b>	<input type="text" value="0"/>
<b>Jump Height</b>	<input type="text" value="7"/>
<b>Jump Distance</b>	<input type="text" value="2"/>
<b>Jump Deceleration Rate</b>	<input type="text" value="4"/>
<b>Use Gravity</b>	<input type="checkbox"/>
<b>Gravity</b>	<input type="text" value="20"/>
<b>Input Percentage Needed To Jump</b>	<input type="text" value="95"/>
<b>Disable Scripts While Jumping</b>	<input type="checkbox"/>
<b>Jump Landing Effect</b>	<input type="text" value="DustCloud"/>

Walking Off Ledge Detectors – detectors that determine if and what to do when the player walks off of a ledge

Allow Grabbing Back On To Ledges – allows the player to grab back on to a ledge that he is walking off of

Show Grab Back On To Ledges Rays – shows the rays that detect if the player is walking off of a ledge

Space In Front Needed To Grab Back On – the amount of space in front of the player needed to grab back on to a ledge

Space Below Needed To Grab Back On Height – the height of the detectors that determine the amount of space below the player needed to grab back on to a ledge

Space Below Needed To Grab Back On Forward – the forward distance of the detectors that determine the amount of space below the player needed to grab back on to a ledge

First Side Ledge Detectors Height – the height of the first set of detectors that determine if there are ledges to the side of the player keeping him from grabbing back on

Second Side Ledge Detectors Height – the height of the second set of detectors that determine if there are ledges to the side of the player keeping him from grabbing back on

Third Side Ledge Detectors Height – the height of the third set of detectors that determine if there are ledges to the side of the player keeping him from grabbing back on

Side Ledge Detectors Width – the width of the detectors that determine if there are ledges to the side of the player keeping him from grabbing back on

Side Ledge Detectors Length – the length of the detectors that determine if there are ledges to the side of the player keeping him from grabbing back on

Grab Back On To Location Height – the height of the detectors that determine where the player will grab back on to

Grab Back On To Location Width – the height of the detectors that determine where the player will grab back on to

Grab Back On To Location Forward – the forward distance of the detectors that determine where the player will grab back on to

Allow Jumping Off Ledges – allows the player to automatically jump off of a ledge that he is walking off of

Show Jump Off Ledges Rays – shows the rays that detect if the player can jump off of a ledge

Space Below Needed To Jump – the amount of space below the player needed in order to jump off of a ledge

Jump Height – the height the player will jump off of a ledge

Jump Distance – the distance the player will jump off of a ledge

Jump Deceleration Rate – the rate at which the player's jump will decelerate

Use Gravity – determines whether or not to use "gravity" while jumping

Gravity – the amount of downward force, or "gravity," that is constantly applied to the player while jumping

Input Percentage Needed To Jump – the amount of input needed to be applied to the joystick or key in order to jump off of a ledge

Disable Scripts While Jumping – determines whether or not to disable the “Scripts To Disable On Grab” scripts (and enable the “Scripts To Enable On Grab” scripts) while jumping

Jump Landing Effect – optional dust effect to appear after landing jump

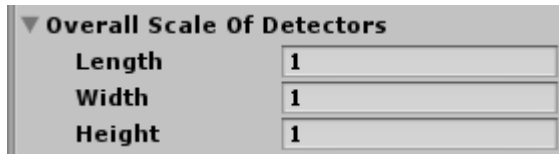
▼ Overall Position Of Detectors	
Up Distance	0
Forward Distance	0
Side Distance	0

Overall Position Of Detectors – the overall position of every detector in this script

Up Distance – the up distance (or height) of every detector

Forward Distance – the forward distance of every detector

Side Distance – the side distance of every detector

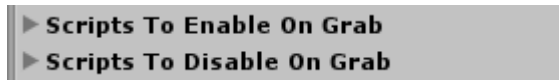


Overall Scale Of Detectors – the overall scale of every detector in this script

Length – the length of every detector

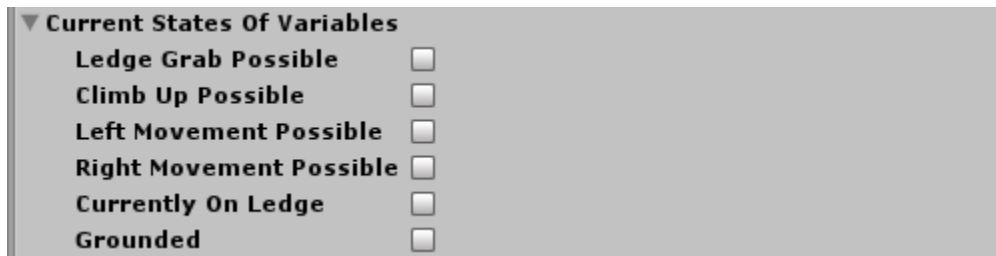
Width – the width of every detector

Height – the height of every detector



Scripts To Enable On Grab – scripts to enable when the player grabs on to a ledge (scripts disable when the player lets go of a ledge)

Scripts To Disable On Grab – scripts to disable when the player grabs on to a ledge (scripts enable when the player lets go of a ledge)



Current States Of Variables – the current states of the main variables

Ledge Grab Possible – determines if grabbing on to a ledge is currently possible

Climb Up Possible – determines if climbing up and over a ledge is currently possible

Left Movement Possible – determines if movement to the left (while grabbed on to a ledge) is currently possible

Right Movement Possible – determines if movement to the right (while grabbed on to a ledge) is currently possible

Currently On Ledge – determines if the player is currently grabbed on to a ledge or not

Grounded – determines if the player is currently grounded/on the ground or not



Dust Effect – optional dust effect to appear when finished climbing up and on to a ledge

Collision Layers – the layers that the detectors (raycasts/linecasts) will collide with

## WallClimbController\_Standalone.cs

*\*(This script is the exact same as the "Climbing" section of the PlayerController.cs script, only this is a standalone version of the section)\**

▼ Grounded	
Show Ground Detection Rays	<input type="checkbox"/>
Max Grounded Height	0.2
Max Grounded Radius	0.2
Max Grounded Distance	0.2
Currently Grounded	<input type="checkbox"/>

Grounded – detectors that determine whether the player is grounded or not

Show Ground Detectors – shows the rays that detect whether the player is grounded or not

Max Grounded Height – the maximum height of the ground the ground detectors can hit to be considered grounded

Max Grounded Radius – the maximum radius of the area ground detectors can hit to be considered grounded

Max Grounded Distance – the maximum distance you can be from the ground to be considered grounded

Currently Grounded – determines if the player is currently grounded/on the ground

▼ Climbing	
Size	1
▼ Ladder	
Climbable Tag	Ladder
Climb Vertically	<input checked="" type="checkbox"/>
Climb Horizontally	<input type="checkbox"/>
Climb Movement Speed	4
Climb Rotation Speed	10
Snap To Center Of Object	<input checked="" type="checkbox"/>
Move In Bursts	<input checked="" type="checkbox"/>
Burst Length	1
Stay Upright	<input type="checkbox"/>
Distance To Push Off After Letting Go	0.5
Rotation To Climbable Object Speed	6
Show Climbing Detectors	<input type="checkbox"/>
Climbing Surface Detectors Up Amount	0
Climbing Surface Detectors Height	0
Climbing Surface Detectors Length	0
Show Edge Of Object Detectors	<input type="checkbox"/>
Top No Surface Detector Height	0
Bottom No Surface Detector Height	0
Top And Bottom No Surface Detectors Width	0
Side No Surface Detectors Height	0
Side No Surface Detectors Width	0
Stop At Sides	<input checked="" type="checkbox"/>
Drop Off At Bottom	<input type="checkbox"/>
Drop Off At Floor	<input checked="" type="checkbox"/>
Pull Up At Top	<input checked="" type="checkbox"/>
Pull Up Speed	4
Show Pull Up Detector	<input type="checkbox"/>
Pull Up Location Forward	0

Climbing – variables that control the player's ladder and wall climbing

Climbable Tag – the tag of a climbable object

Climb Vertically – determines whether or not the player is allowed to climb vertically

Climb Horizontally – determines whether or not the player is allowed to climb horizontally

Climb Movement Speed – how quickly the player climbs on walls

Climb Rotation Speed – how quickly the player rotates on walls



Snap To Center Of Object – snaps the player to the middle (along the x and z-axis) of the climbable object (most useful for ladders)

Move In Bursts – move in bursts (while on a climbable object)

Burst Length – the amount of time a movement burst lasts

Stay Upright – determines whether or not the player can rotate up and down

Distance To Push Off After Letting Go – the distance the player pushes off of a ladder/wall after letting go

Rotation To Climbable Object Speed – how quickly the player rotates onto a wall to climb

Show Climbing Detectors – determines whether to show or hide the detectors that allow climbing

Climbing Surface Detectors Up Amount – moves the rays that detect the surface of a wall up and down

Climbing Surface Detectors Height – changes the height of the rays that detect the surface of a wall

Climbing Surface Detectors Length – changes the length of the rays that detect the surface of a wall

Show Edge Of Object Detectors – determines whether or not to show the detectors that determine where the top and bottom of a climbable object is

Top No Surface Detector Height – the height of the detector that determines if there is no surface detected at the top of the climbable object, so that the player can pull up or stop before climbing any higher

Bottom No Surface Detector Height – the height of the detector that determines if there is no surface detected at the bottom of the climbable object, so that the player can drop off or stop before climbing any lower

Top And Bottom No Surface Detectors Width – the width of the detectors that determines if there is no surface detected at the top and bottom of the climbable object

Side No Surface Detectors Height – the height of the detectors that determines if there is no surface detected at the sides of the climbable object

Side No Surface Detectors Width – the width of the detectors that determines if there is no surface detected at the sides of the climbable object

Stop At Sides – keeps player from climbing any further sideways once he has reached the side \_\_

Drop Off At Bottom – allows player to drop off of a climbable object once he has reached the bottom

Drop Off At Floor – allows player to drop off of a climbable object once he has reached the floor\_\_

Pull Up At Top – allows player to pull up and over a climbable object once he has reached the top

Pull Up Speed – the speed the player pulls up and over ledges once he has reached the top of a climbable object

Show Pull Up Detector – determines whether or not to show the detector that determines where the player pulls up to

Pull Up Location Forward – the forward distance of the detector that determines where the player pulls up to

<b>▼ Walking Off Of Climbable Surface</b>	
<b>Allow Grabbing On After Walking Off Ledge</b>	<input checked="" type="checkbox"/>
<b>Show Walking Off Ledge Rays</b>	<input type="checkbox"/>
<b>Space In Front Needed To Grab Back On</b>	0
<b>Space Below Needed To Grab Back On Height</b>	0
<b>Space Below Needed To Grab Back On Forward</b>	0
<b>First Side Ledge Detectors Height</b>	0
<b>Second Side Ledge Detectors Height</b>	0
<b>Third Side Ledge Detectors Height</b>	0
<b>Side Ledge Detectors Width</b>	0
<b>Side Ledge Detectors Length</b>	0
<b>Grab Back On Location Height</b>	0
<b>Grab Back On Location Width</b>	0
<b>Grab Back On Location Forward</b>	0

Walking Off Of Climbable Surface – variables that detect whether the player has walked off a ledge and can grab on to a ladder

Allow Grabbing On After Walking Off Ledge –allows the player to grab on to a climbable surface under the ledge that he is walking off of

Show Walking Off Ledge Rays – shows the rays that detect if the player is walking off of a ledge

Space In Front Needed To Grab Back On – the amount of space in front of the player needed to grab on to a climbable object under a ledge

Space Below Needed To Grab Back On Height – the height of the detectors that determine the amount of space below the player needed to grab on to a climbable object under a ledge

Space Below Needed To Grab Back On Forward – the forward distance of the detectors that determine the amount of space below the player needed to grab on to a climbable object under a ledge

First Side Ledge Detectors Height – the height of the first set of detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Second Side Ledge Detectors Height – the height of the second set of detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Third Side Ledge Detectors Height – the height of the third set of detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Side Ledge Detectors Width – the width of the detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Side Ledge Detectors Length – the length of the detectors that determine if there are ledges to the side of the player keeping him from grabbing on

Grab Back On Location Height – the height of the detectors that determine where the player will grab on to

Grab Back On Location Width – the height of the detectors that determine where the player will grab on to

Grab Back On Location Forward – the forward distance of the detectors that determine where the player will grab on to

► **Scripts To Enable On Grab**

► **Scripts To Disable On Grab**

**Push Against Wall If Player Is Stuck** ☒

Scripts To Enable On Grab – scripts to enable when the player grabs on to a wall (scripts disable when the player lets go of a wall)

Scripts To Disable On Grab – scripts to disable when the player grabs on to a wall (scripts enable when the player lets go of a wall)

Push Against Wall If Player Is Stuck – if the script considers the player stuck, the player pushes himself away from the wall until he is free

▼ Side Scrolling	
Movement Speed If Axis Locked	6
Lock Movement On Z Axis	<input type="checkbox"/>
Z Value	0
Lock Movement On X Axis	<input type="checkbox"/>
X Value	0
Flip Axis Rotation	<input type="checkbox"/>
Rotate Inwards	<input checked="" type="checkbox"/>

Side Scrolling – variables that determine whether or not the player uses 2.5D side-scrolling.

Movement Speed If Axis Is Locked – the move speed of the player if one of the axis are locked

Lock Movement On Z Axis – locks the movement of the player on the z-axis

Z Value – the permanent z-value of the player if his movement on the z-axis is locked

Lock Movement On X Axis – locks the movement of the player on the x-axis

X Value – the permanent x-value of the player if his movement on the x-axis is locked

Flip Axis Rotation – flips the player's rotation on the non-locked axis (it adds 180 degrees to the player's rotation)

Rotate Inwards – when the player rotates from side to side, he rotates inward (so that you see his front side while he is rotating)

### MovingPlatformController\_Standalone.cs

*\*(This script is the exact same as the “Moving Platforms” section of the PlayerController.cs script, only this is a standalone version of the section)\**

Allow Moving Platform Support	<input checked="" type="checkbox"/>
Moving Platform Tag	Platform

Allow Moving Platform Support – determines whether or not the player can move with moving platforms

Moving Platform Tag – the tag of the moving platform objects

### Health.cs

<b>▼ Health</b>			
Number Of Hearts	3		
Max Hearts Per Row	8		
Regain Health Over Time	<input type="checkbox"/>		
Quarters Of Health To Regain	2		
Time Needed To Regain Health	7		
<b>▼ Health UI</b>			
<b>▶ Heart Sprites</b>			
Overlay Hearts	<input checked="" type="checkbox"/>		
UI Spacing	X 1	Y 1	
UI Position	X 8	Y 188	Z 0
UI Scale	X 73	Y 73	

Health – variables that control the player's health

Number Of Hearts – the number of full hearts the player has

Max Hearts Per Row – the maximum number of hearts per row

Regain Health Over Time – allows the player to regain his health over a certain amount of time

Quarters Of Health To Regain – the quarters of health that the player regains after a certain amount of time

Time Needed To Regain Health – the amount of time before the player regains health

Health UI – variables that control the player's health UI

Heart Sprites – images of the hearts being used to represent the player's health; in order from no health (0 quarters) to full health (4 quarters)

Overlay Hearts – makes each new heart overlay the last one

UI Spacing – the horizontal and vertical spacing between each heart sprite/UI

UI Position – the position of the heart sprites/UI

UI Scale – the width and height of the heart sprites/UI

<b>▼ Damage</b>	
<b>▼ Enemy Damage</b>	
Enemy Tag	Enemy
Seconds To Stay Invincible After Attacking	0.7
Seconds To Stay Invincible After Being Hurt	1
<b>▼ Fall Damage</b>	
Receive Fall Damage	<input checked="" type="checkbox"/>
Minimum Fall Speed To Receive Damage	4
Minimum Receivable Damage	2
Speed Damage Multiple	6
Max Grounded Distance	0.2
Collision Layers	Mixed ...
Damage Blink Speed	0.1

Damage – variables that control the player's damage

Enemy Damage – variables that control the player's reactions to damage received from or delivered to an enemy

Enemy Tag – the tag of the enemies in the scene

Seconds To Stay Invincible After Attacking – the amount of time the player stays invincible after attacking an enemy

Seconds To Stay Invincible After Being Hurt – the amount of time the player stays invincible after being hurt

Fall Damage – variables that control the player's fall damage

Receive Fall Damage – allows the player to receive damage from falls

Minimum Fall Speed To Receive Damage – the minimum speed the player must fall in order to receive fall damage

Minimum Receivable Damage – the minimum damage (in quarters of hearts) the player receives from a fall

Speed Damage Multiple – the amount of damage the player receives increased/multiplied by the fall's speed

Max Grounded Distance – the maximum distance you can be from the ground to be considered grounded

Collision Layers – the layers that the grounded detectors (raycasts/linecasts) will collide with

Damage Blink Speed – the speed at which the player blinks (becomes invisible and visible again) after being hurt

▼ Respawn			
Respawn Location	X	-45.72	Y 2.999 Z 1.42
Respawn Rotation	X	0	Y 90 Z 0
Respawn At Start Location And Rotation <input checked="" type="checkbox"/>			

Respawn – variables that control the player's respawn\_

Respawn Location – the location at which the player respawns

Respawn Rotation – the rotation at which the player respawns

Respawn At Start Location And Rotation – enables the player to respawn at the same location and rotation he started with

▼ Health Items	
Size	1
▼ Heart	
Health Item Tag	Heart
Quarters Of Health To Regain	4

Health Items – items that give the player health

Health Item Tag – the tag of an item that gives the player health

Quarters Of Health To Regain – the amount of health you regain from the health item (measured in quarter hearts)

▼ Damage Items	
Size	1
▼ Hurt	
Damage Item Tag	Hurt
Quarters Of Health To Lose	2

Damage Items – items that take the player's health



Damage Item Tag – the tag of an item that takes the player's health

Quarters Of Health To Lose – the amount of health you lose from the damage item (measured in quarter hearts)

## ItemManager.cs

Player Camera	 Camera (Transf) 
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Player Camera – the camera set to follow the player (automatically assigns to Camera.main if not set)

▼ Item List			
Size	1		
▼ Coin			
Item Tag	Coin		
Item UI	CoinUI		
UI Position	X 7	Y 163	Z 1
UI Scale	X 60	Y 60	
Font	ARCHRISTY		
Font Size	72		
Outline Size	19		
Font Color			
Outline Color			
Item Count Prefix			
Item Count Suffix			
Use Item Limit	<input checked="" type="checkbox"/>		
Maximum Item Limit	99		
Add Zeros Before Item Count	<input checked="" type="checkbox"/>		
UI Text Position	X 82	Y -3	

Item List – the items that the player can carry

Item Tag – the tag of the item

Item UI – the UI of the item

UI Position – the position of the item UI

UI Scale – the scale of the item UI

Font – the font of the text

Font Size – the size of the text font

Outline Size – the size of the text outline

Font Color – the color of the text

Outline Color – the color of the text outline

Item Count Prefix – prefix that comes before the item count

Item Count Suffix – suffix that comes after the item count


Use Item Limit – determines whether or not limit the amount of items you can have

Maximum Item Limit – the maximum amount of items you can have

Add Zeros Before Item Count – adds zeros before the item count (the number of zeros added is relative to the maximum item limit)

UI Text Position – the position of the UI item count text

## CameraController.cs

Player	 LedgeClimbNinja (Transform)
Camera Distance	2.95
Offset From Wall	0.1

Player – the player set for the camera to follow

Camera Distance – the distance between the camera and the player

Offset From Wall – the distance between the camera and the wall if they are colliding

▼ Follow	
Always Follow	<input checked="" type="checkbox"/>
Player Height	0
Camera Height	1
Movement Dampening	0.1
Rotation Dampening	0.5
Stay Behind Player While Climbing Ledge Or Wall	<input checked="" type="checkbox"/>
▼ Side Scrolling	
Lock Z Axis	<input type="checkbox"/>
Lock X Axis	<input type="checkbox"/>
Flip Axis	<input type="checkbox"/>

Follow – variables that determine the way the camera locks on

Always Follow – allows the camera to always follow the player

Player Height – the height of the player

Camera Height – the height of the camera

Movement Dampening – the amount of dampening applied to the movement of the camera

Rotation Dampening – the amount of dampening applied to the rotation of the camera

Stay Behind Player While Climbing Ledge Or Wall – makes the camera stay behind the player if he is climbing a ledge or wall

Side Scrolling – variables that allow the camera to follow the player as a 2.5D side-scroller

Lock Z Axis – does not allow the camera to follow the player's z-axis movement

Lock X Axis – does not allow the camera to follow the player's x-axis movement

Flip Axis – flips the rotation of the non-locked axis (adds 180 degrees to the rotation)

▼ Mouse Orbit	
Always Mouse Orbit	<input type="checkbox"/>
Switch To Mouse Orbit If Input Button Pressed	<input checked="" type="checkbox"/>
Mouse Orbit Input Button	Fire3
Start Off Mouse Orbiting For Switching	<input type="checkbox"/>
Camera Height	1
Near Clipping Plane	0.1
Allow Zooming With Scroll Wheel	<input type="checkbox"/>
Zoom Speed	40
Min Zoom In Distance	0.5
X Speed	200
Y Speed	120
Y Min Limit	-68
Y Max Limit	68
Rotation Dampening	3
Zoom Dampening	5

Mouse Orbit – variables that determine the way the camera orbits the player

Always Mouse Orbit – allows the camera to always orbit the player (without the use of a button), as long as the camera is not following the player

Switch To Mouse Orbit If Input Button Pressed – switches to mouse orbit mode and back when the "mouseOrbitInputButton" is pressed

Mouse Orbit Input Button – the button (found in "Edit > Project Settings > Input") that is used to mouse orbit

Start Off Mouse Orbiting For Switching – if the camera is allowed to switch to mouse orbiting, start off mouse orbiting instead of having to switch to it first

Camera Height – the height of the camera

Near Clipping Plane – the nearest possible distance between the camera and the player (when the camera is pushed against a wall)

Allow Zooming With Scroll Wheel – allows the user to zoom in between the "distance" and "minZoomInDistance" values (by using the mouse's scroll wheel)

Zoom Speed – the speed the camera zooms in and out when using the scroll wheel

Min Zoom In Distance – the nearest possible distance to the player that the camera can zoom in to

X Speed – the camera's orbit speed (look sensitivity) on the x-axis

Y Speed – the camera's orbit speed (look sensitivity) on the y-axis

Y Min Limit – the minimum y value the camera can orbit to

Y Max Limit – the maximum y value the camera can orbit to

Rotation Dampening – the amount of dampening applied to the rotation of the camera

Zoom Dampening – the amount of dampening applied to the zooming of the camera (this zoom is applied when the camera collides with a wall, and zooms in or out to avoid it)

▼ First Person	
Always Use First Person	<input type="checkbox"/>
Switch To First Person If Input Button Pressed	<input type="checkbox"/>
First Person Input Button	Fire3
Start Off In First Person Mode For Switching	<input type="checkbox"/>
Camera Distance	0
Camera Height	1.15
▼ Crouching	
Allow Crouching	<input checked="" type="checkbox"/>
Crouch With Player If Possible	<input checked="" type="checkbox"/>
Crouch Camera Height Multiple	0.7
Crouch Speed	8
▼ Mouse Orbiting	
Mouse Orbit In First Person Mode	<input checked="" type="checkbox"/>
X Speed	200
Y Speed	120
Y Min Limit	-68
Y Max Limit	68
► Objects To Enable In First Person	
► Objects To Disable In First Person	

First Person – variables that determine if the player can enter first person mode

Always Use First Person – allows the camera to always stay in first person mode (as long as the camera is not following or mouse orbiting)

Switch To First Person If Input Button Pressed – switches to first person mode and back when the "firstPersonInputButton" is pressed

First Person Input Button – the button (found in "Edit > Project Settings > Input") that is used to enter first person mode

Start Off In First Person Mode For Switching – if the camera is allowed to switch to first person mode, start off in first person mode instead of having to switch to it first

Camera Distance – the distance of the camera from the player

Camera Height – the height of the camera

Crouching – variables that determine if the camera can crouch (lower down) with the player while in first person mode

Allow Crouching – determines if the camera can crouch (lower down)



Crouch With Player If Possible – allows the camera to crouch (lower down) if the player has the script, "PlayerController.cs," and is crouching

Crouch Camera Height Multiple – what to multiply the height of the camera by while crouching

Crouch Speed – the speed at which the camera crouches down and uncrouches

Mouse Orbiting – variables that determine if the camera can mouse orbit while in first person mode

Mouse Orbit In First Person Mode – allows the camera to mouse orbit while in first person mode

X Speed – the camera's orbit speed (look sensitivity) on the x-axis

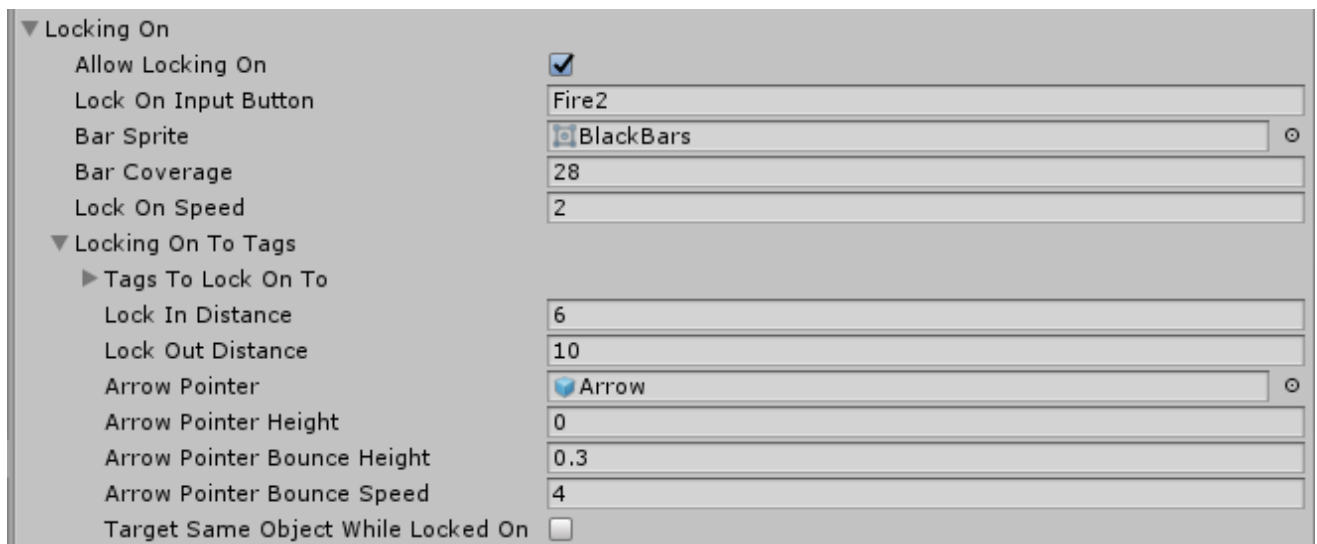
Y Speed – the camera's orbit speed (look sensitivity) on the y-axis

Y Min Limit – the minimum y value the camera can orbit to

Y Max Limit – the maximum y value the camera can orbit to

Objects To Enable In First Person – gameObjects to enable when the camera is in first person mode (gameObjects disable when the camera exits first person mode)

Objects To Disable In First Person – gameObjects to disable when the camera is in first person mode (gameObjects enable when the camera exits first person mode)



Locking On – variables that determine how the camera locks on

Allow Locking On – determines whether or not to allow locking on

Lock On Input Button – the button or axis (found in "Edit > Project Settings > Input") pressed to lock on

Bar Sprite – the image that appears on the top and bottom portion of the screen while locking on

Bar Coverage – the percentage of the screen that the bar texture covers

Lock On Speed – the speed at which the camera locks on behind the player

Locking On To Tags – variables that determine which objects to lock on to

Tags To Lock On To – the tags of the objects that can be locked on to

Lock In Distance – how close you have to be to the tagged object to lock on

Lock Out Distance – how far you have to be from the tagged object (if you are already locked on to it) to lock out

Arrow Pointer – the object (arrow) that appears over the tagged objects head when you are able to lock on to him

Arrow Pointer Height – how high the arrow pointer is above the tagged objects head

Arrow Pointer Bounce Height – how high the arrow pointer bounces

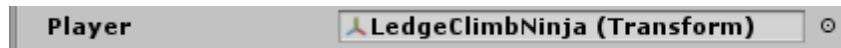
Arrow Pointer Bounce Speed – the speed at which the arrow pointer bounces

Target Same Object While Locked On – stays locked on to the same target, even if another target moves closer

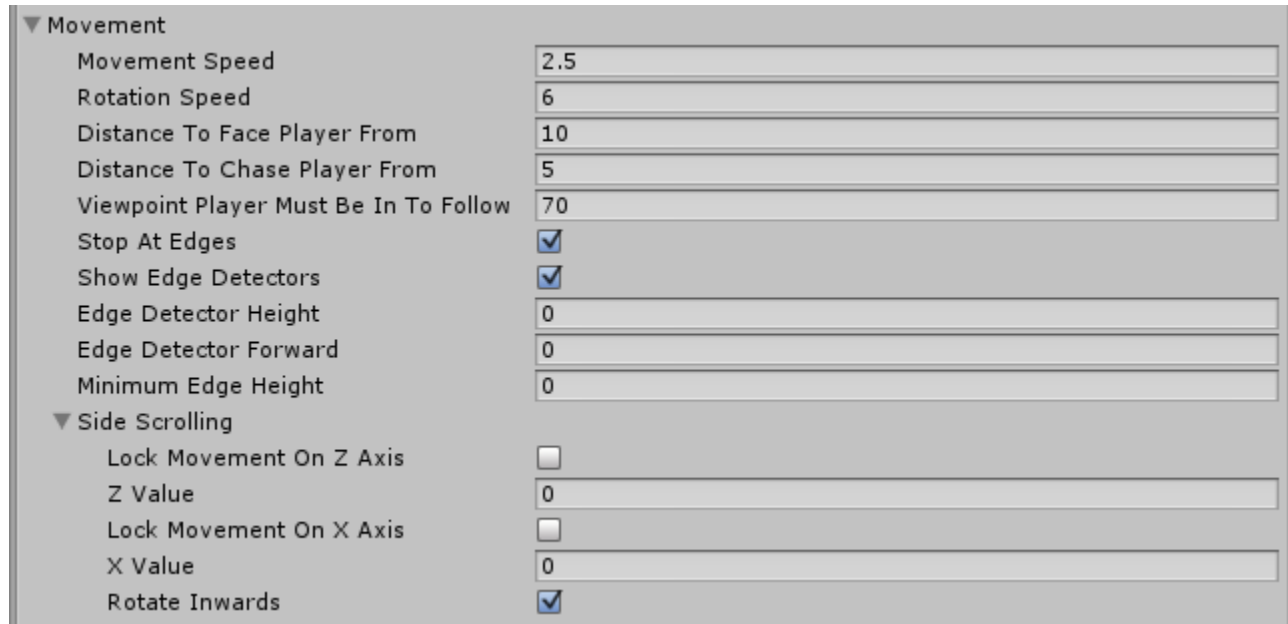


Collision Layers – the layers that the detectors (raycasts/linecasts) will collide with

## EnemyAI.cs



Player – the player in the scene



Movement – variables that determine the enemy's movement

Movement Speed – the enemy's movement speed

Rotation Speed – the enemy's rotation speed

Distance To Face Player From – the maximum distance the player can be for the enemy to face/look at the player

Distance To Chase Player From – the maximum distance the player can be for the enemy to chase the player

Viewpoint Player Must Be In To Follow – the size of the enemy's viewpoint; if the player is inside the viewpoint, the enemy will follow him

Stop At Edges – stops the enemy before he walks off the edge

Show Edge Detectors – detectors that determine where the edge is located

Edge Detector Height – the height of the edge detectors

Edge Detector Forward – the forward distance of the edge detectors

Minimum Edge Height – the height of the edge detector that determines if there is surface below the player

Side Scrolling – variables that determine whether or not the enemy uses 2.5D side-scrolling

Lock Movement On Z Axis – locks the movement of the enemy on the z-axis

Z Value – the permanent z-value of the enemy if his movement on the z-axis is locked

Lock Movement On X Axis – locks the movement of the enemy on the x-axis

X Value – the permanent x-value of the enemy if his movement on the x-axis is locked

Rotate Inwards – when the enemy rotates from side to side, he rotates inward (so that you see his front side while he is rotating)

▼ Attack

Attack Power

Attack – variables that determine the enemy's attack

Attack Power – the amount of damage you inflict to the player on collision (measured in quarter hearts)

▼ Health

Maximum Health

Regain Health Over Time ☒

Health To Regain

Time Needed To Regain Health

Minimum Distance From Player To Regain Health

▼ Health Bar

**Player Camera**

Camera (Transform)

Show Health Bar ☒

Health Bar Up Amount

Health Bar Overall Height

Health Bar Overall Width

Outline Height

Outline Width

Health Height

Health Width

▼ Health Bar Materials

**Outline Material**

OutlineMaterial

**Health Material**

HealthMaterial

**No Health Material**

NoHealthMaterial

Outline Color

Health Color

No Health Color

Seconds To Show Health Bar After Enemy Death

Health – variables that determine the enemy's health

Maximum Health – the health of the enemy

Regain Health Over Time – allows the enemy to regain his health over a certain amount of time

Health To Regain – the health that the enemy regains after a certain amount of time

Time Needed To Regain Health – the amount of time before the enemy regains health

Minimum Distance From Player To Regain Health – the distance from the player that the enemy must be to regain health

Health Bar – variables that determine whether the enemy has a health bar or not

Player Camera – the camera set to follow the player (automatically assigns to Camera.main if not set)

Show Health Bar – determines whether or not to show a health bar above the enemy

Health Bar Up Amount – the up distance of the health bar above the enemy

Health Bar Overall Height – the overall height of the health bar above the enemy

Health Bar Overall Width – the overall width of the health bar above the enemy

Outline Height – the height of the health bar's outline

Outline Width – the width of the health bar's outline

Health Height – the height of the health bar's health

Health Width – the width of the health bar's health

Health Bar Materials – the materials of the health bar

Outline Material – the material of the health bar's outline

Health Material – the material of the health bar's health percentage

No Health Material – the material of the health bar's no health percentage

Outline Color – the color of the health bar's outline

Health Color – the color of the health bar's health percentage

No Health Color – the color of the health bar's no health percentage

Seconds To Show Health Bar After Enemy Death – the amount of time that the health bar stays visible after the enemy has been killed

<b>▼ Damage</b>	
Acquire Player Attack Button From Player If Possible	<input checked="" type="checkbox"/>
Player Attack Button	Fire1
Damage Radius	1.25
Knock Back Factor	1
Player Viewpoint Enemy Must Be In To Get Hit	80
<b>Hurt Effect</b>	DustDoubleJump
<b>Death Effect</b>	DustCloud

Damage – variables that determine the enemy's damage

Acquire Player Attack Button From Player If Possible – if the player has the "PlayerController.cs" script attached to him, acquire the player attack button from that script

Player Attack Button – the button (found in "Edit > Project Settings > Input") that the player uses to attack the enemy

Damage Radius – the radius the player must be in to hurt the enemy

Knock Back Factor – the distance that the enemy gets knocked back after getting hit

Player Viewpoint Enemy Must Be In To Get Hit – the size of the player's viewpoint; if the enemy is inside of the player's viewpoint (and the player is inside of the enemy's hit area) and the player attacks, the enemy will receive damage

Hurt Effect – optional effect to appear when the enemy gets hurt

Death Effect – optional effect to appear when the enemy gets killed

<b>▼ Respawn</b>	
Allow Respawn	<input checked="" type="checkbox"/>
Respawn Wait Time	3
Respawn Location	X 0 Y 0 Z 0
Respawn Rotation	X 0 Y 0 Z 0
Respawn At Start Location And Rotation	<input checked="" type="checkbox"/>
Minimum Distance From Player To Respawn	3
Respawn Effect	DustCloud

Respawn – variables that control the enemy's respawn

Allow Respawn – determines whether or not the enemy can respawn after being killed

Respawn Wait Time – the amount of time to wait, after the enemy has been killed, to respawn

Respawn Location – the location at which the enemy respawns

Respawn Rotation – the rotation at which the enemy respawns

Respawn At Start Location And Rotation – enables the enemy to respawn at the same location and rotation he started with

Minimum Distance From Player To Respawn – the minimum distance the player must be from the respawn location in order to respawn

Respawn Effect – optional effect to appear when the enemy respawns

Collision Layers	Mixed ...
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Collision Layers – the layers that the detectors (raycasts/linecasts) will collide with

## MovingPlatform.cs

▼ Movement			
Start Position	X	-17.55	Y 0.09 Z 16.98
End Position	X	-17.55	Y 5.27 Z 16.98
Movement Speed	3		
Waiting Time Before Moving	1		
Start Moving Immediately	<input checked="" type="checkbox"/>		

Movement – variables that determine the movement of the platform

Start Position – the Vector3 that the platform starts at (before moving to the end position)

End Position – the Vector3 that the platform ends at (before moving back to the start position)

Movement Speed – the speed of the moving platform

Waiting Time Before Moving – the amount of time the platform waits (once it has reached the start or end position) before moving again

Start Moving Immediately – for the first time that the platform starts moving, do not wait

▼ Rotation			
Rotation Direction	X	0	Y 0 Z 0
Only Rotate When Moving	<input type="checkbox"/>		

Rotation – variables that determine the rotation of the platform

Rotation Direction – the direction to rotate towards

Only Rotate When Moving – only allows the platform to rotate if the platform is already moving/not waiting to move