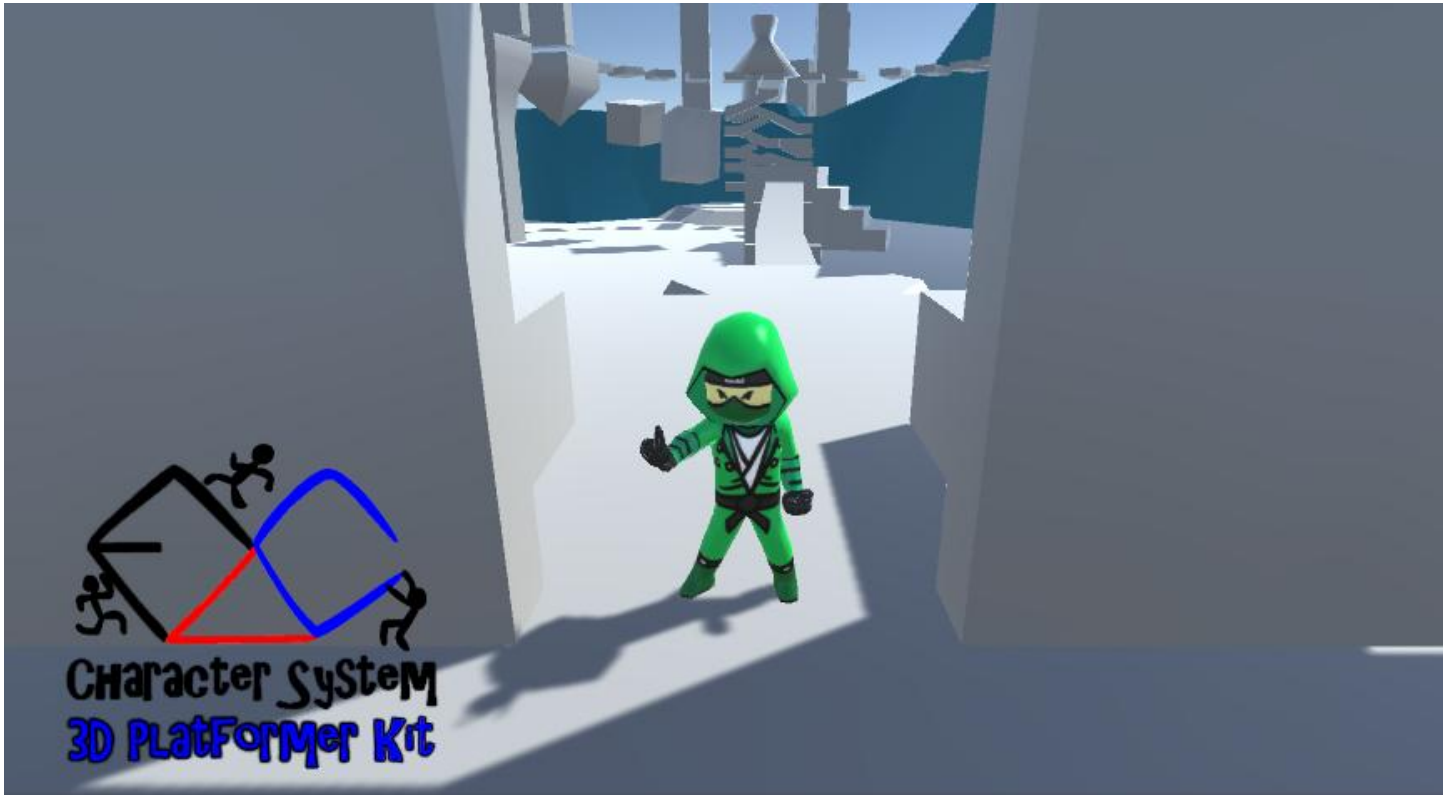


## Easy Ledge Climb Character System / 3D Platformer Kit

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## Easy Ledge Climb Folders and Files

### Models:

- ExampleStage
  - Materials
    - logo.mat
    - mountains.mat
    - standard.mat
  - ExampleStage.FBX
    - .FBX model file of the example stage
  - logo.png
    - Texture file for the ELC (Easy Ledge Climb) logo
- LedgeClimbNinja
  - Materials
    - LedgeClimbNinja.mat

- LedgeClimbNinja.png
  - Texture file for the Ledge Climb Ninja
- LedgeClimbNinja.FBX
  - .FBX model file of the Ledge Climb Ninja (player)
- PlayerController.controller
  - Animator controller for the Ledge Climb Ninja (26 Mecanim animations; all root motion compatible)

### **ParticleEffects:**

- Materials
  - DustCloud.mat
  - DustDoubleJump.mat
- AutoDestroyParticleSystem.cs
  - Automatically destroys script holder once ParticleSystem has completed
- DustCloud.prefab
  - Prefab for the DustCloud particle effect
- DustDoubleJump.prefab
  - Prefab for the DustDoubleJump particle effect
- DustParticle.png
  - Texture file for the particle of dust used in the particle effects

### **Scenes:**

- FirstPerson
  - DemoSceneCharacterController.unity
  - Demo scene that uses a 1<sup>st</sup> person camera view, "ExampleStage" as the stage, "LedgeClimbNinja" as the player, and a Character Controller for the player
  - DemoSceneRigidbody.unity

- Demo scene that uses a 1<sup>st</sup> person camera view, "ExampleStage" as the stage, "LedgeClimbNinja" as the player, and a Rigidbody for the player

#### - ThirdPerson

DemoSceneCharacterController.unity

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

DemoSceneRigidbody.unity

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

### 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
- Lock on behind the player

*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!\**

#### - Player

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

LedgeClimbController.cs

- Grab on to, and climb up and over ledges (Climbing Detectors)
- Move from side to side on ledges (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.

PlayerController.cs

- Move and rotate (Movement)

- Slide down slopes (Movement)
- Perform any amount of jumps with different heights and animations (Jumping)
- Perform a double jump (Jumping)
- Wall jump (Wall Jumping)

*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!\**

## **WebplayerDemo:**

### - Materials

- logo.mat
- mountains.mat
- standard.mat

### - FirstPerson

WebplayerDemo.unity

- Demo scene that uses a 1<sup>st</sup> person camera view, "WebPlayerDemoStage" as the stage, "LedgeClimbNinja" as the player, and a Character Controller for the player

### - ThirdPerson

WebplayerDemo.unity

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

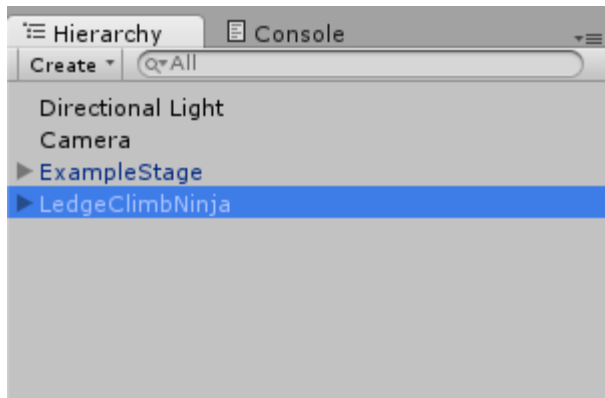
### - WebPlayerDemoStage.FBX

- .FBX model file of the webplayer demo stage

## **Setting Up the Easy Ledge Climb Character System with a New Character**

### **Making the player scripts (PlayerController.cs and LedgeClimbController.cs) work with your character**

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

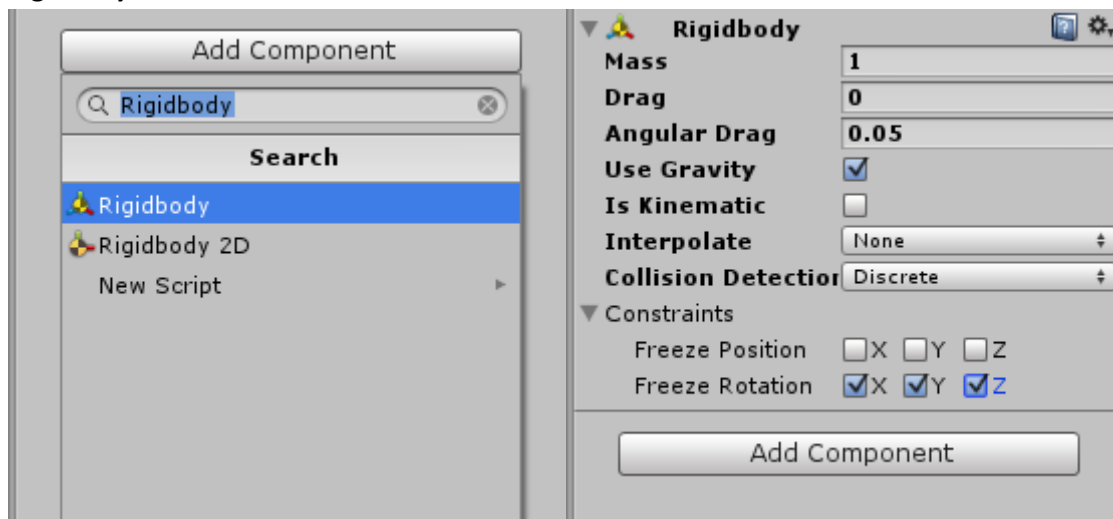


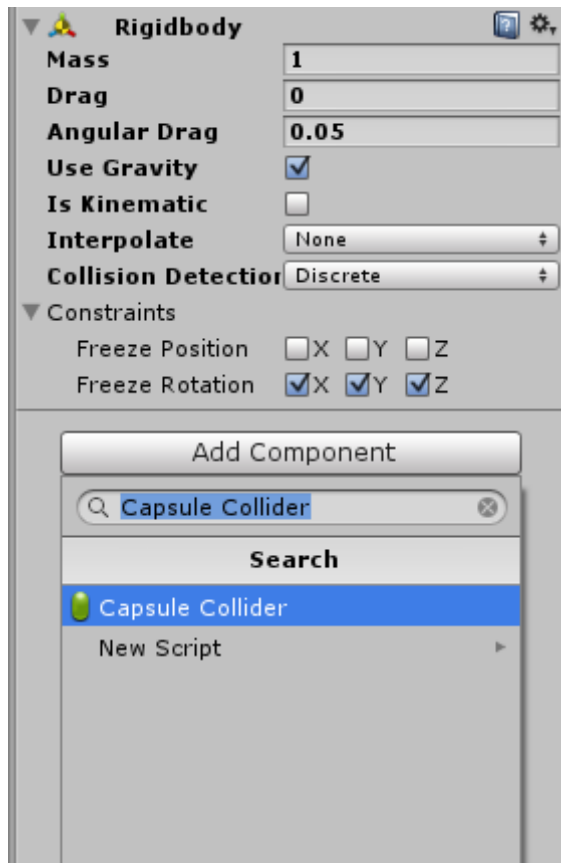
2. If your character does not already have one, add a CharacterController or Rigidbody component to your character from the "Inspector" tab (if you use a Rigidbody, you must freeze your player's rotation and add a collider component as well).

#### Character Controller:



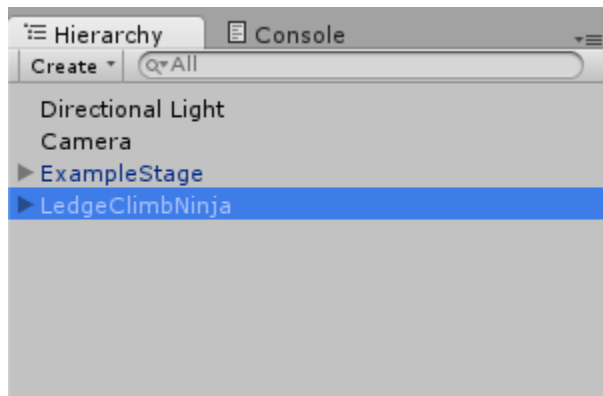
#### Rigidbody:



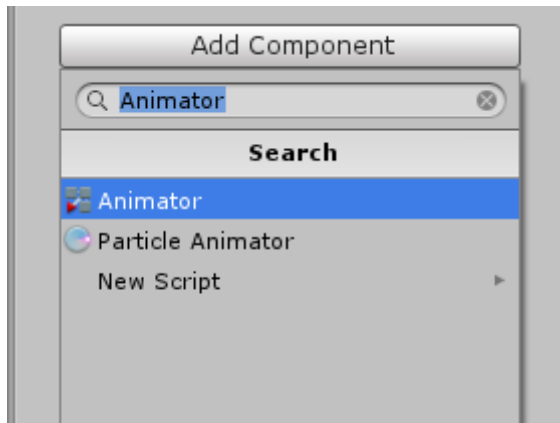


### Making the animations work with your character

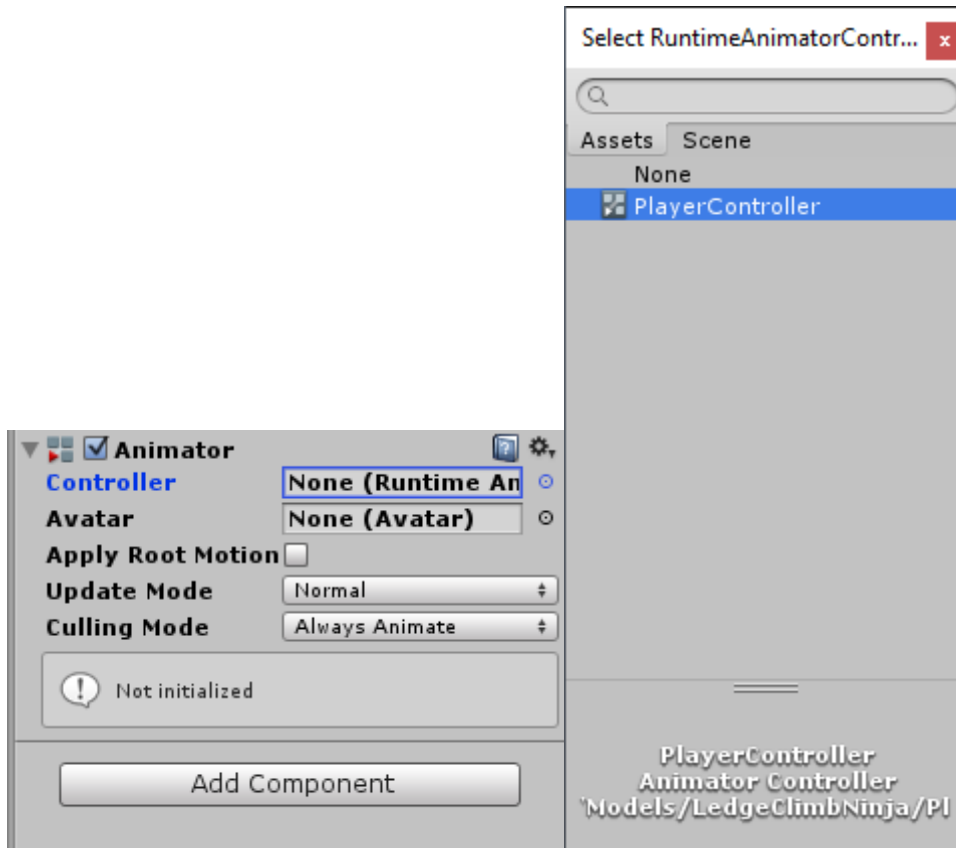
1. Select your character in the “Hierarchy” tab.



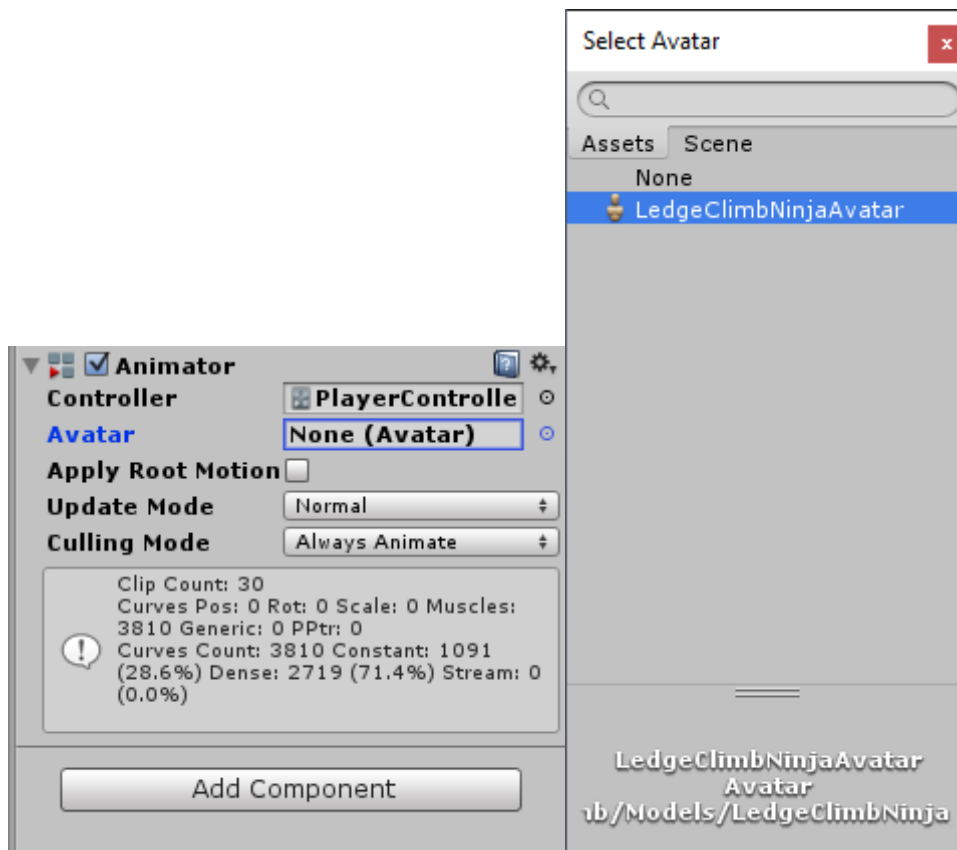
2. If your character does not already have one, add an Animator component to your character from the “Inspector” tab.



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

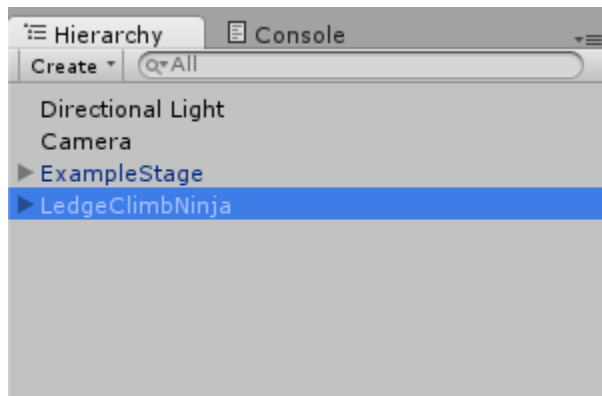


4. Set the Avatar of the Animator Component to LedgeClimbNinjaAvatar.



### Setting up PlayerController.cs with your character

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

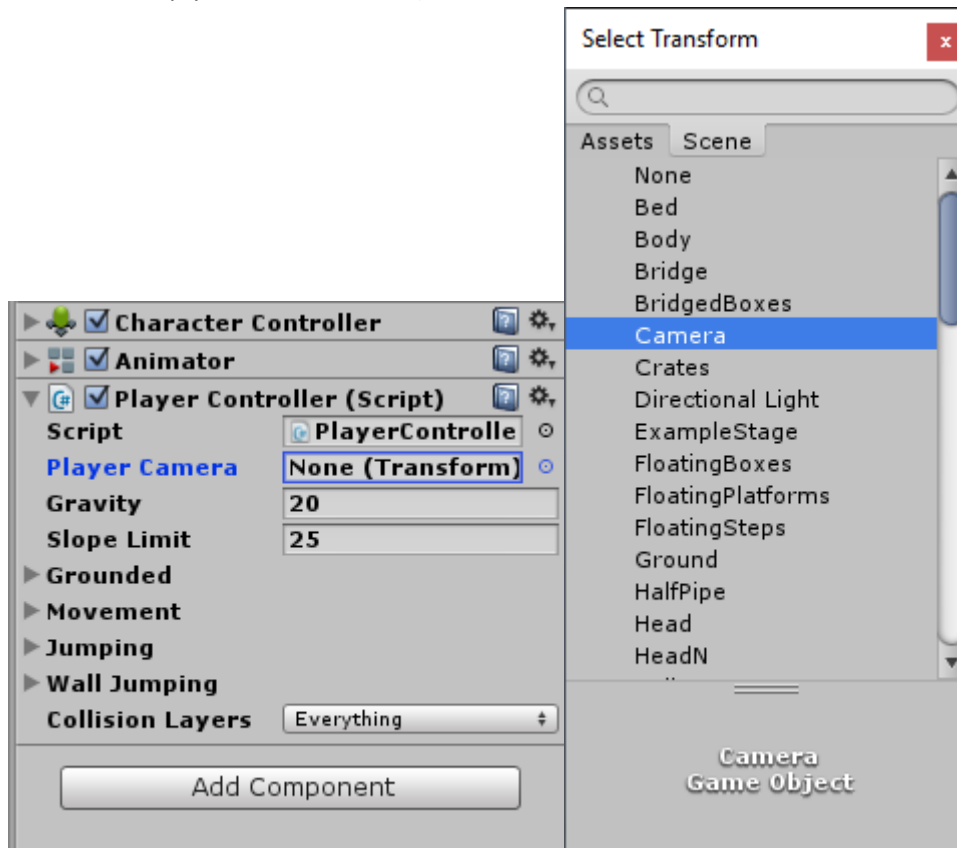


2. Add the PlayerController.cs script to your character (either by using “Add Component” in the “Inspector” tab or by dragging and dropping the script from the “Project” tab on to your player in the “Inspector” tab).

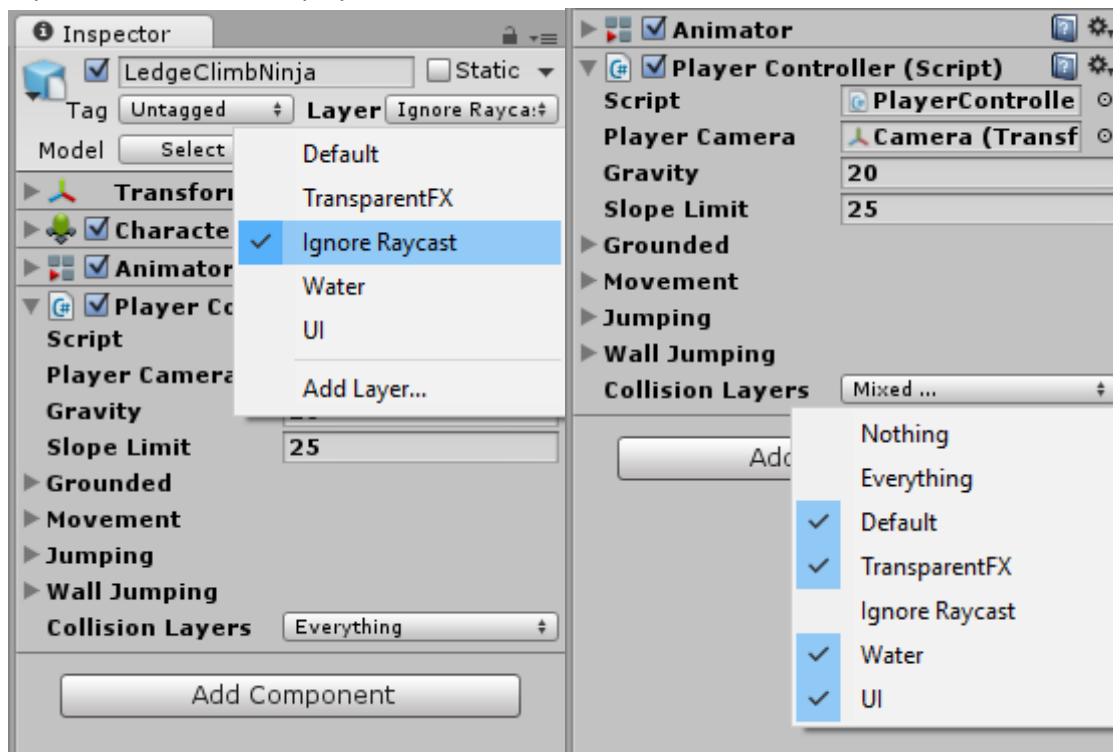




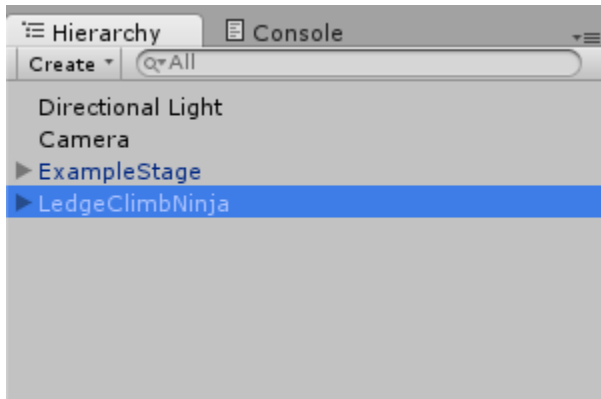
3. Set the Player Camera of the script to the main camera/camera you want to use for your player (in this case, the camera is simply named "Camera").



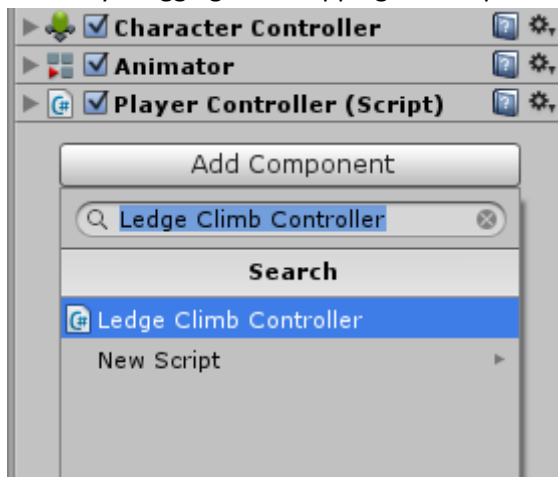
4. Set a layer for your player and uncheck it in the script's Collision Layers (to avoid having the script's linecasts and raycasts collide with the player himself).



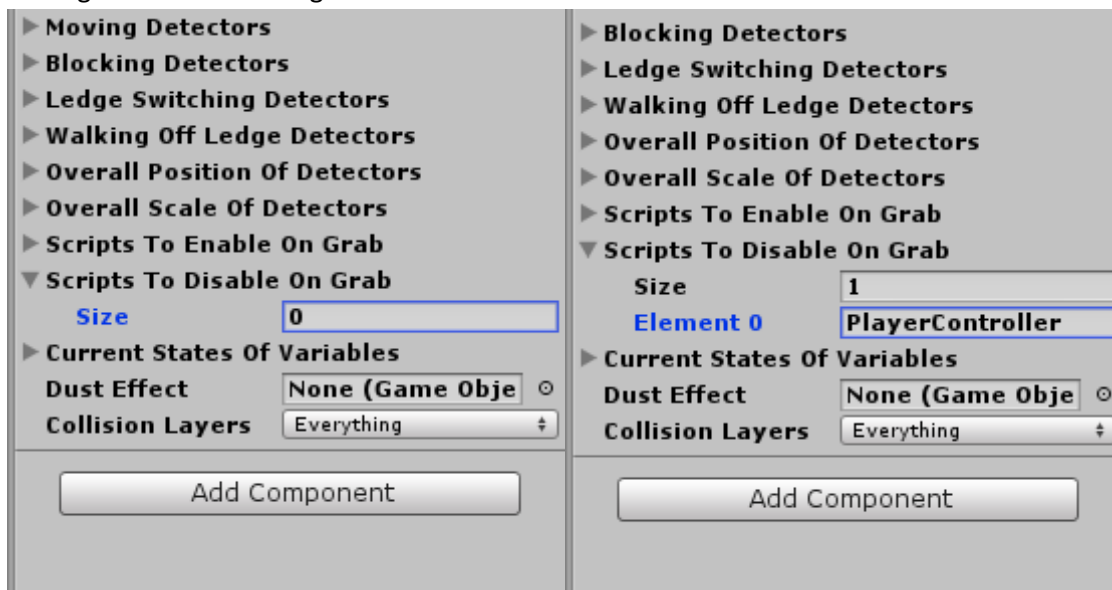
1. Select your character in the “Hierarchy” tab.



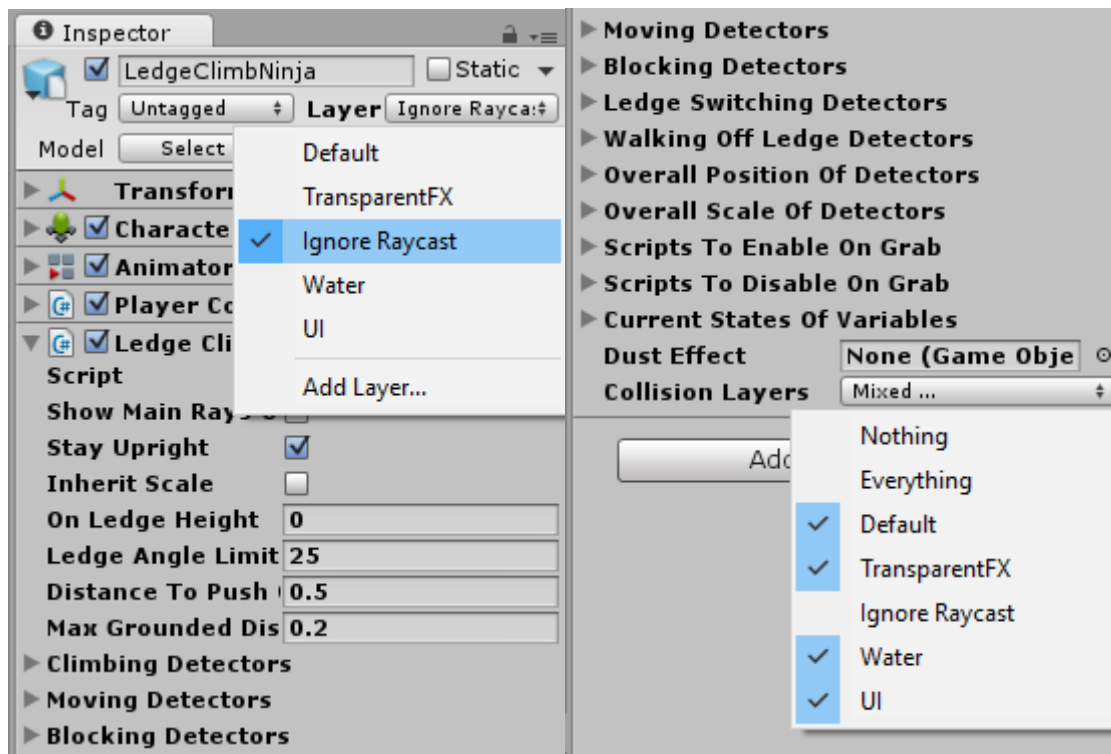
2. Add the LedgeClimbController.cs script to your character (either by using “Add Component” in the “Inspector” tab or by dragging and dropping the script from the “Project” tab on to your player in the “Inspector” tab).



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.



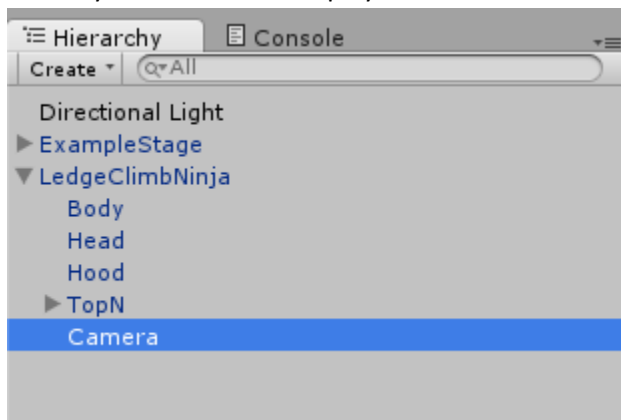
4. Set a layer for your player and uncheck it in the script’s Collision Layers (to avoid having the script’s linecasts and raycasts collide with the player himself).



## Setting up the camera

If you are making a 1<sup>st</sup> person game (do not use CameraController.cs):

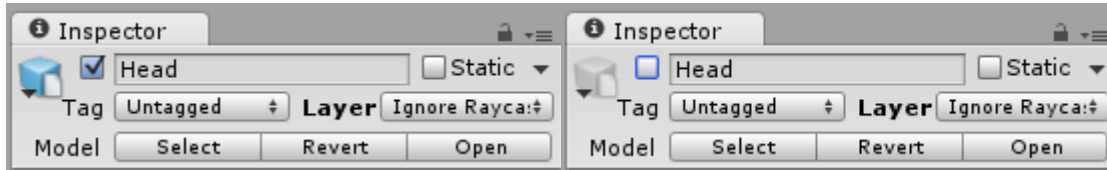
1. Attach your camera to the player.



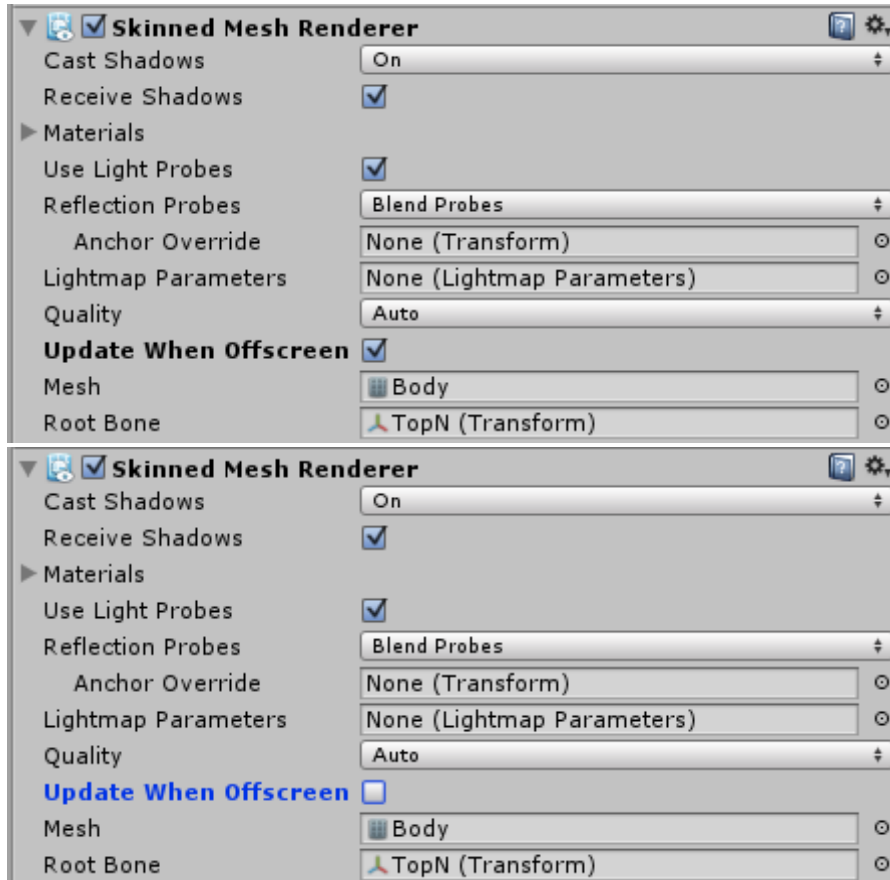
2. Position the camera at the head of the player.



3. Disable any model parts that may be blocking the camera (in this case, the “Head” and “Hood” model).

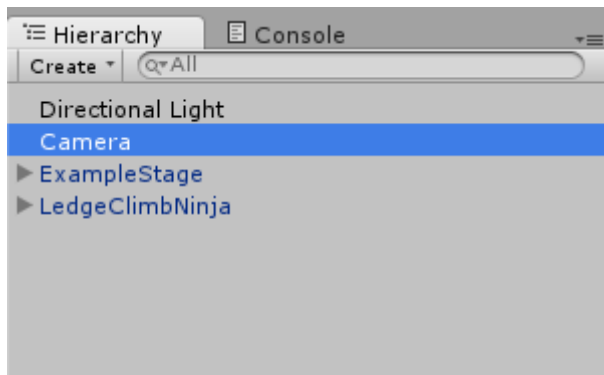


4. Enable the “Update When Offscreen” option (found in the model’s Renderer component) of any model part you may want to appear in the 1<sup>st</sup> person camera view (in this case, the “Body” model’s).

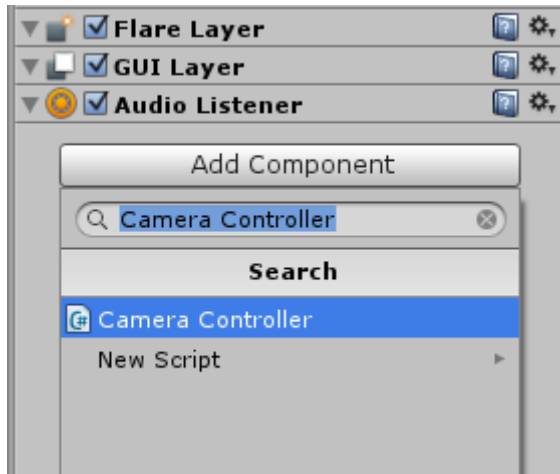


If you are making a 3<sup>rd</sup> person game (setting up CameraController.cs with a camera):

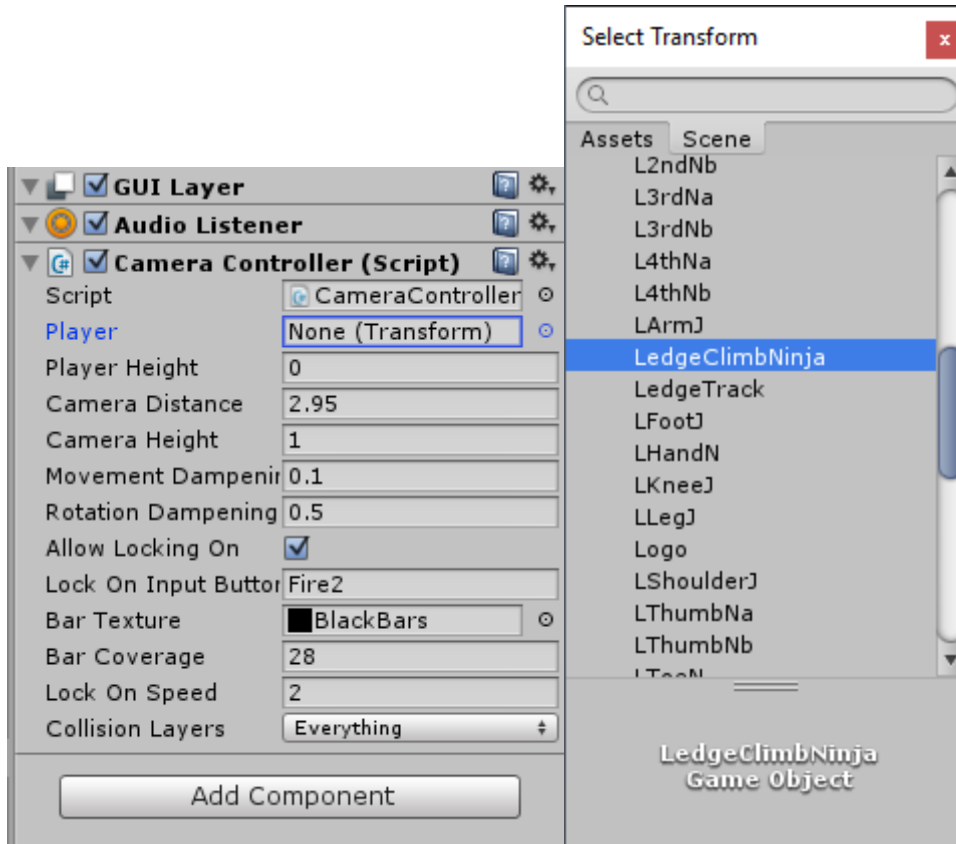
1. Select your camera in the “Hierarchy” tab.



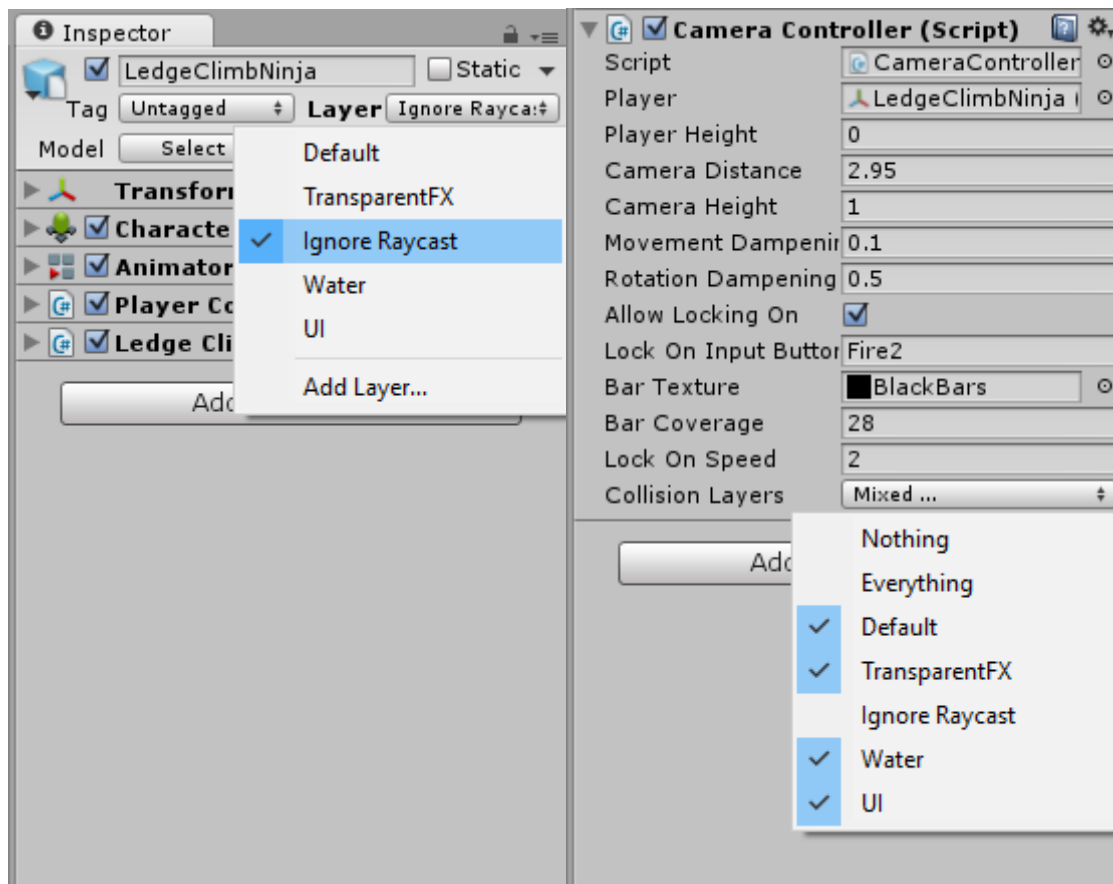
2. Add the CameraController.cs script to the camera (either by using “Add Component” in the “Inspector” tab or by dragging and dropping the script from the “Project” tab on to your camera in the “Inspector” tab).



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).



## Easy Ledge Climb Character System Variables and Features

### PlayerController.cs

<b>Player Camera</b>	Camera (Transf) ⦿
<b>Gravity</b>	20
<b>Slope Limit</b>	25

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

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

▼ Movement	
Forward Speed	6
Side Speed	4
Back Speed	5
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

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

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

▼ 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

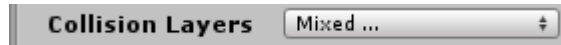
Space On Wall Needed To Wall Jump Up Amount – moves the rays that detect the amount of open space on a wall up and down

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

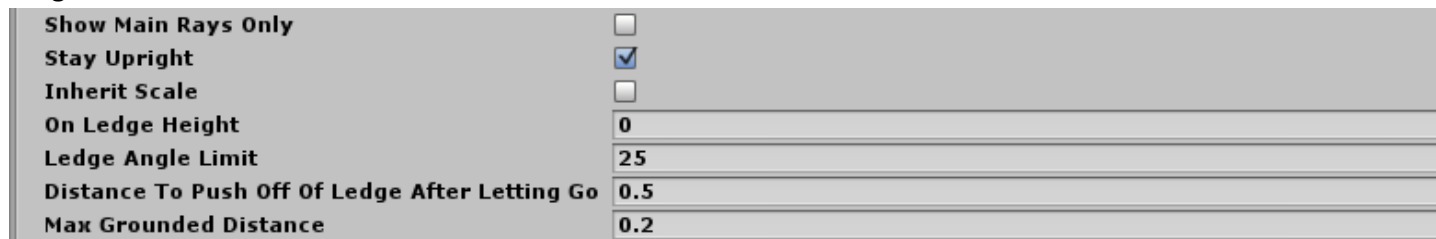
Space On Wall Needed To Wall Jump Width – changes the width of the rays that detect the amount of open space on a wall

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



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

### LedgeClimbController.cs



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

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

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

▼ <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

▼ Walking Off Ledge Detectors	
Allow Grabbing Back On To Ledges	<input checked="" type="checkbox"/>
Show Grab Back On To Ledges Rays	<input checked="" 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
Allow Jumping Off Ledges	<input type="checkbox"/>
Show Jump Off Ledges Rays	<input type="checkbox"/>
Space Below Needed To Jump	0
Jump Height	7
Jump Distance	2
Jump Deceleration Rate	4
Use Gravity	<input type="checkbox"/>
Gravity	20
Input Percentage Needed To Jump	95
Disable Scripts While Jumping	<input type="checkbox"/>
Jump Landing Effect	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

<b>▼ Overall Position Of Detectors</b>	
<b>Up Distance</b>	<input type="text" value="0"/>
<b>Forward Distance</b>	<input type="text" value="0"/>
<b>Side Distance</b>	<input type="text" value="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

<b>▼ Overall Scale Of Detectors</b>	
<b>Length</b>	<input type="text" value="1"/>
<b>Width</b>	<input type="text" value="1"/>
<b>Height</b>	<input type="text" value="1"/>

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

<b>► Scripts To Enable On Grab</b>	
<b>► Scripts To Disable On Grab</b>	

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)

<b>▼ Current States Of Variables</b>	
<b>Ledge Grab Possible</b>	<input type="checkbox"/>
<b>Climb Up Possible</b>	<input type="checkbox"/>
<b>Left Movement Possible</b>	<input type="checkbox"/>
<b>Right Movement Possible</b>	<input type="checkbox"/>
<b>Currently On Ledge</b>	<input type="checkbox"/>
<b>Grounded</b>	<input type="checkbox"/>



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

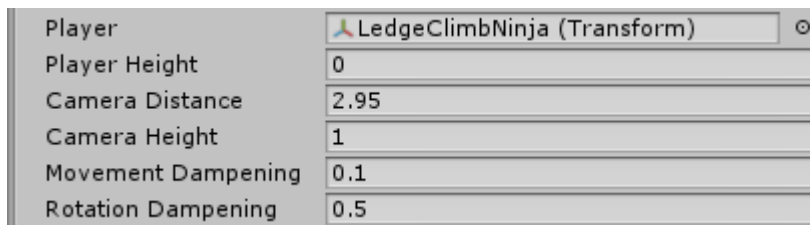
Grounded – determines if the player is currently grounded/on the ground or not



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

### CameraController.cs



Player – the player or object set for the camera to follow

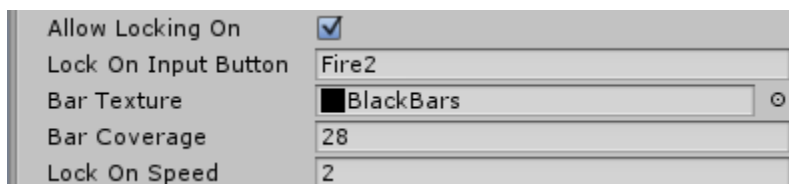
Player Height – the height of the player

Camera Distance – the distance between the camera and 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



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 Texture – the texture 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



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