



# **Zombie Shooter Project 1b**

**AINT166** 

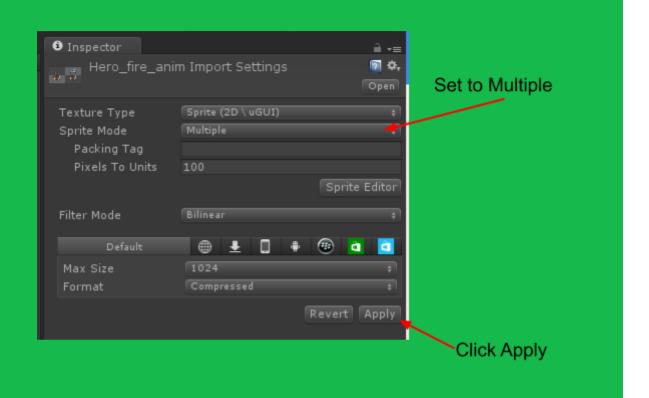
# Task 1. Create the player

#### **Explanation**

- Now we Prepare the **Player** artwork
- The Hero\_fire\_anim image used for the Player has 2 Sprites (or frames):
  - Shooting
  - Not shooting
- We need to set up the graphic in Unity to use each of these separately

#### Do this

- Select the Hero\_fire\_anim art asset in the Project view
- Set the **Sprite Mode** in the **Inspector** to **Multiple**
- Click the **Apply** button



#### Explanation

• Now we open the **Sprite Editor** to slice up our image

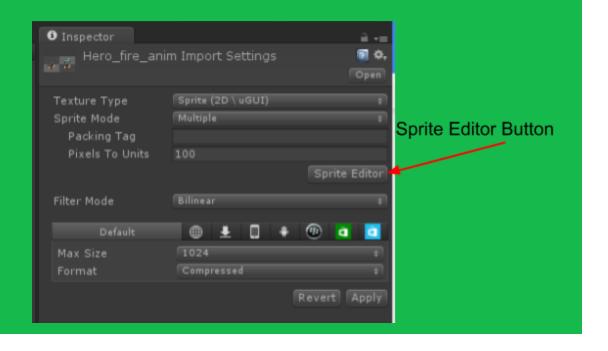
# Useful links

• Learn more about the **Sprite Editor** 

Sprite Editor - Manual

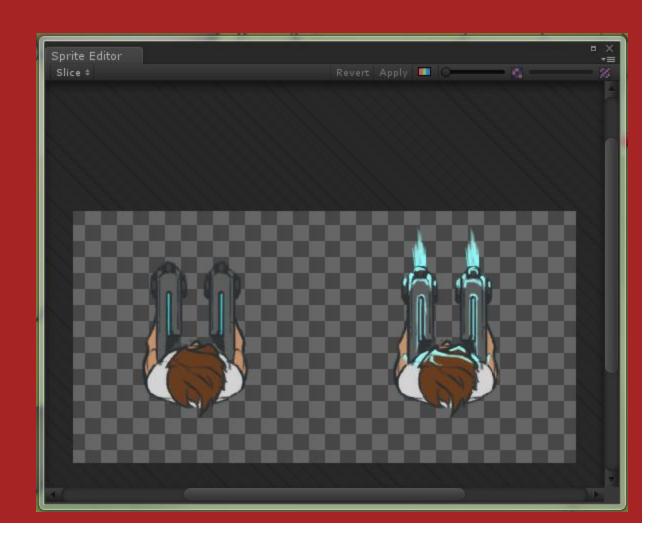
#### Do this

• In the **Inspector**, click the **Sprite Editor** button to open the **Sprite Editor** 



#### **Check this**

• Check you can see the **Sprite Editor** window

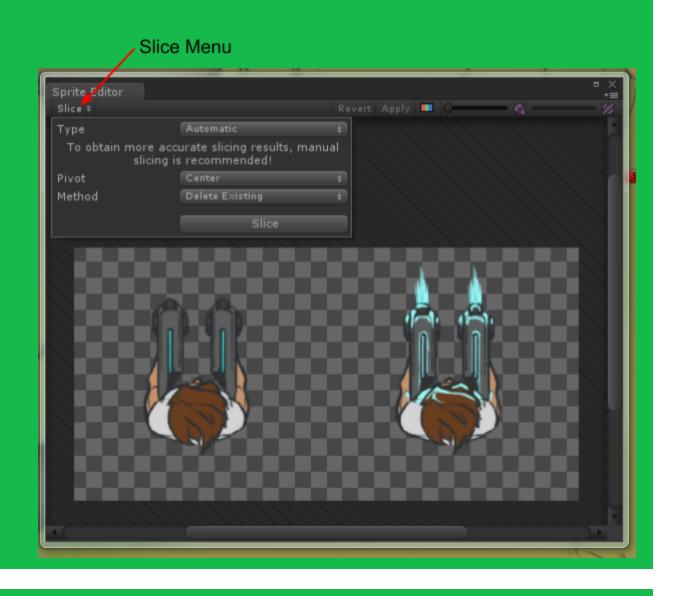


# **Explanation**

• We will now setup the image for slicing

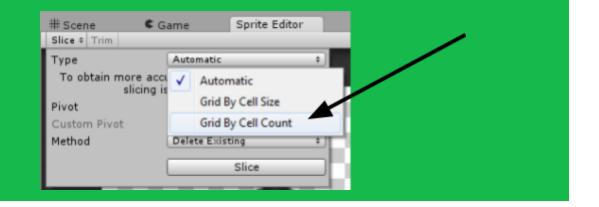
# Do this

• Open the Slice Menu

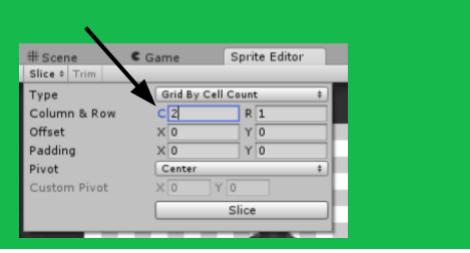


# Do this

• Set The **Type** to **Grid by cell count** 

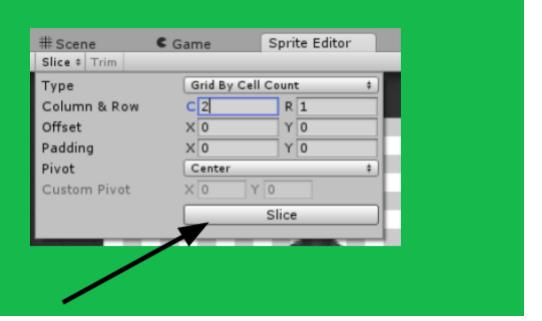


• Set The C value in Column & Row to 2



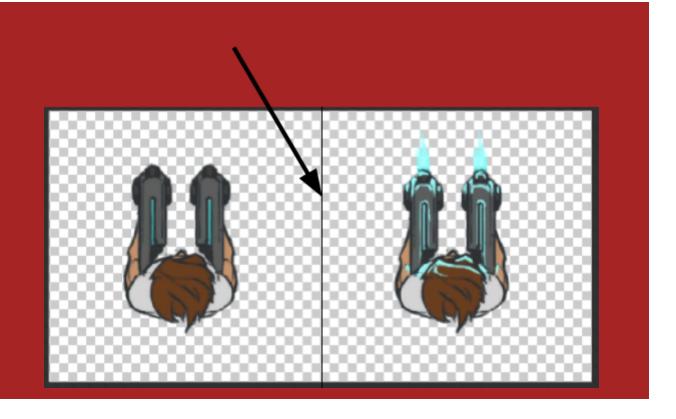
#### Do this

• Click the **Slice** Button



## **Check this**

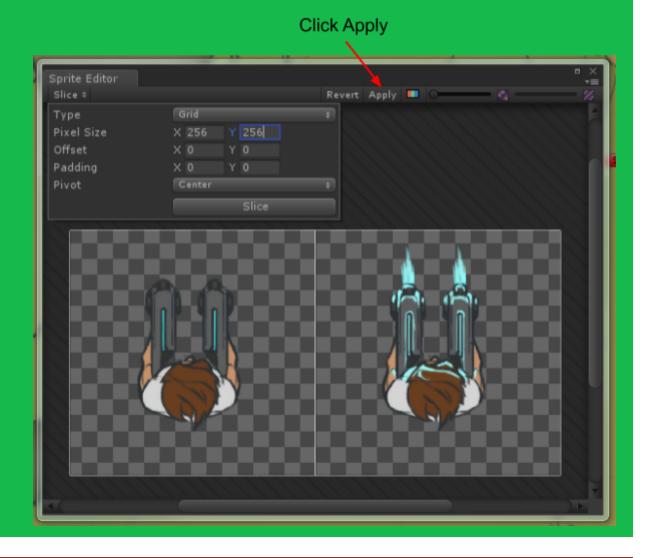
The image should show boxes around each Sprite



# **Explanation**

- We now **Apply** the changes made to the image
- This will slice up our image into 2 **Sprites** called
  - Hero\_fire\_anim\_0
  - Hero\_fire\_anim\_1
- These can be accessed from the **Project view** and used in our **Scene**!

• Click the large **Apply** Button



#### Check this

• The Sprites will now be created in the **Project** view, ready to be used in your Scene!



Your 2 Sprites for the Player

#### Do this

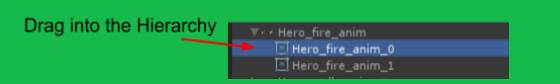
• You can now close the **Sprite Editor** Window, we won't be using that again for the moment

#### **Explanation**

- The Player artwork can now be added to the **Hierarchy**
- We will use only one **Sprite**
- The other we will use later in an animation

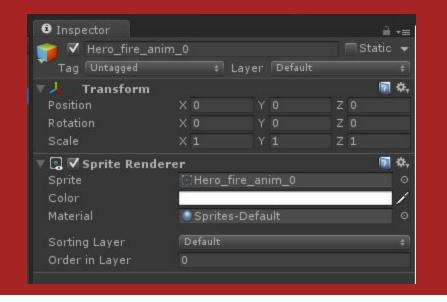
# Do this

 From the Project view, drag the Sprite Hero\_fire\_anim\_0 into the Hierarchy



#### **Check this**

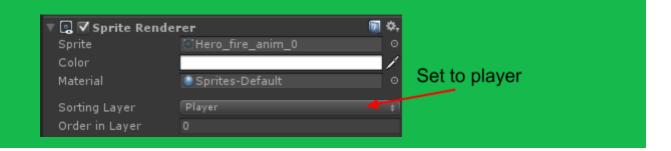
• The Hero GameObject should look like this in the **Inspector** 



# Explanation

• The Hero's **Sprite Renderer** needs to have its **Sorting Layer** set so it appears above the **Arena** 

- Select the Hero GameObject in the Hierarchy
- Set the Sorting Layer on the Sprite Renderer Component to Player



#### **Explanation**

- The **Hero** will need to react to the physics of the level we are creating.
- He needs a **Rigidbody2D** to help with colliding with other things in the game

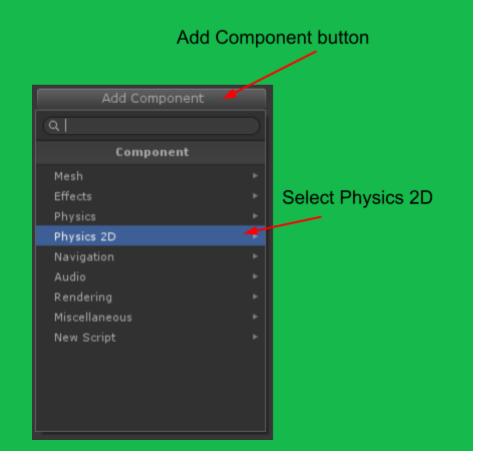
#### Useful links

• Learn more about Rigidbody2D

<u>Rigidbody2D - Manual</u>

#### Do this

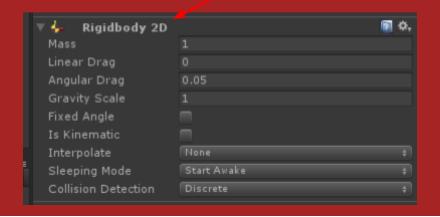
- Select the Hero **GameObject** in the **Hierarchy**
- Click the Add Component Button, underneath the Sprite Renderer Component
- Select Physics 2D > Rigidbody 2D



#### Check this

• Make sure the Component is a **Rgidibody2D** 

# Check the Component is a Rigidbody2D



# **Explanation**

- The Hero now has weight in a 2D world
- Trouble is, he has weight in the Y direction (going down)
- We need to set the Gravity Scale of our Rigidbody2D so the Player doesn't fall downwards when we start the game

• Set the **Gravity Scale** to **0** on the **Rigidbody2D** Component



# **Explanation**

- The Hero needs a way to interact with the other objects in the world
- Unity uses Collider Components to do this
- We will use a CircleCollider2D Component

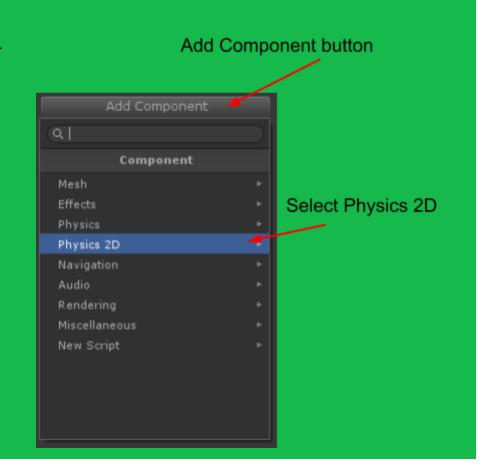
## Useful links

• Learn more about CircleCollider2D

<u>CircleCollider2D - Manual</u>

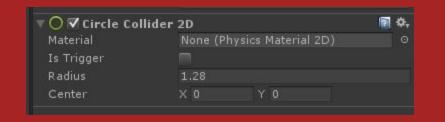
#### Do this

- Select the **Hero GameObject** in the **Hierarchy**
- Click the Add Component Button, underneath the Sprite Renderer Component
- Select Physics 2D > Circle Collider 2D



#### **Check this**

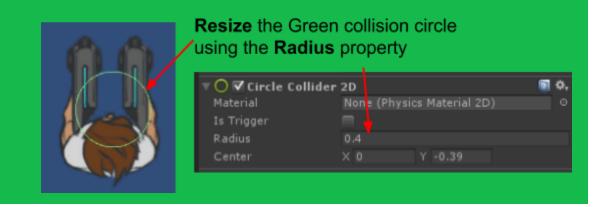
• Make sure the Component is a Circle Collider 2D



### **Explanation**

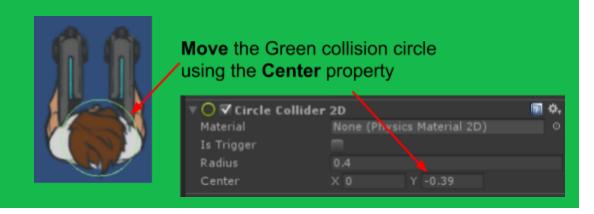
- Our Hero's **Collider** is a bit too large at the moment
- We need to shrink it down and move it closer to the Player artwork

 Resize the Hero's Collider to about 0.4 using the Radius property



#### Do this

 Move the Collider to the centre of the Hero's head using the X and Y of the Center property



#### Check this

• The Hero GameObject should look something like this

