Unity3d PlayMaker recipes

Version 5.3.2f1

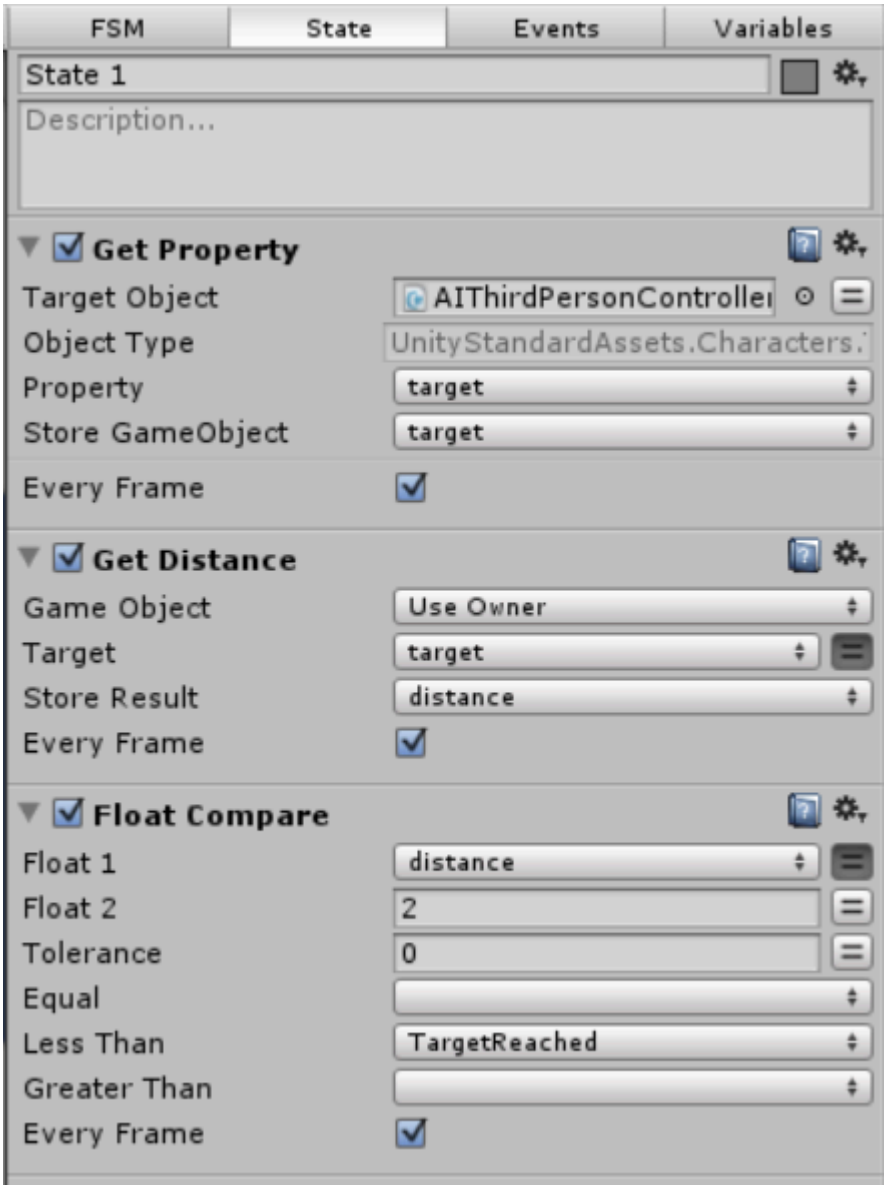
Pro Tips

You can drag and drop components onto the state panel and you can choose to get or set properties and it will automatically add the appropriate action.

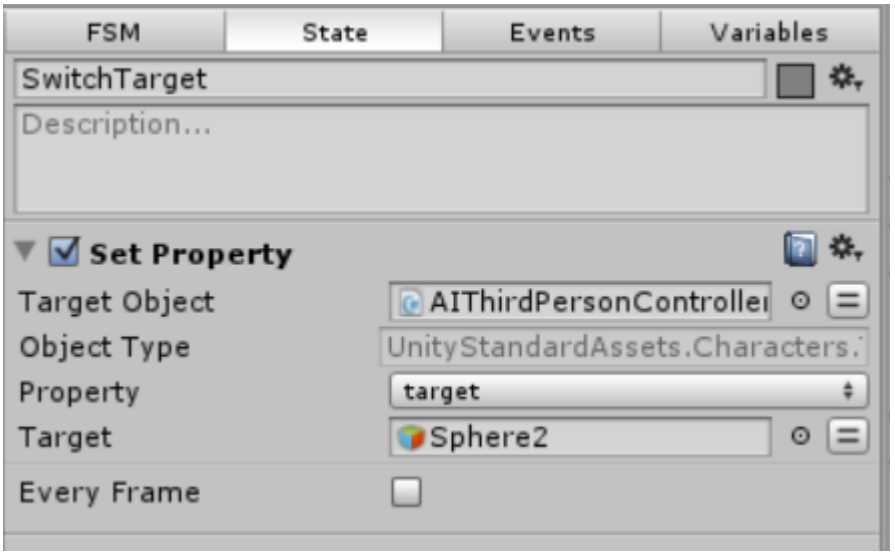
Switch AIThirdPersonController to a new Target

- Add a **Plane** or a **Terrain**.
- If you added a Plane set it to **static** (for navigation)
- Add two **GameObjects** like cubes, set them to static and place them at the floor.
- Add the **AIThirdPersonController** from the Unity **standard assets** to the scene
- Open the **Navigation** window and **bake** the scene.
- Edit the **AI Character Control (Script)** and change the target from Transform to **GameObject** because PlayMaker can't handle Transforms.
- Set one of the cubes as the **target** in the **Inspector**.
- Add an FSM to the **AIThirdPersonController**

The first state:



The second State:

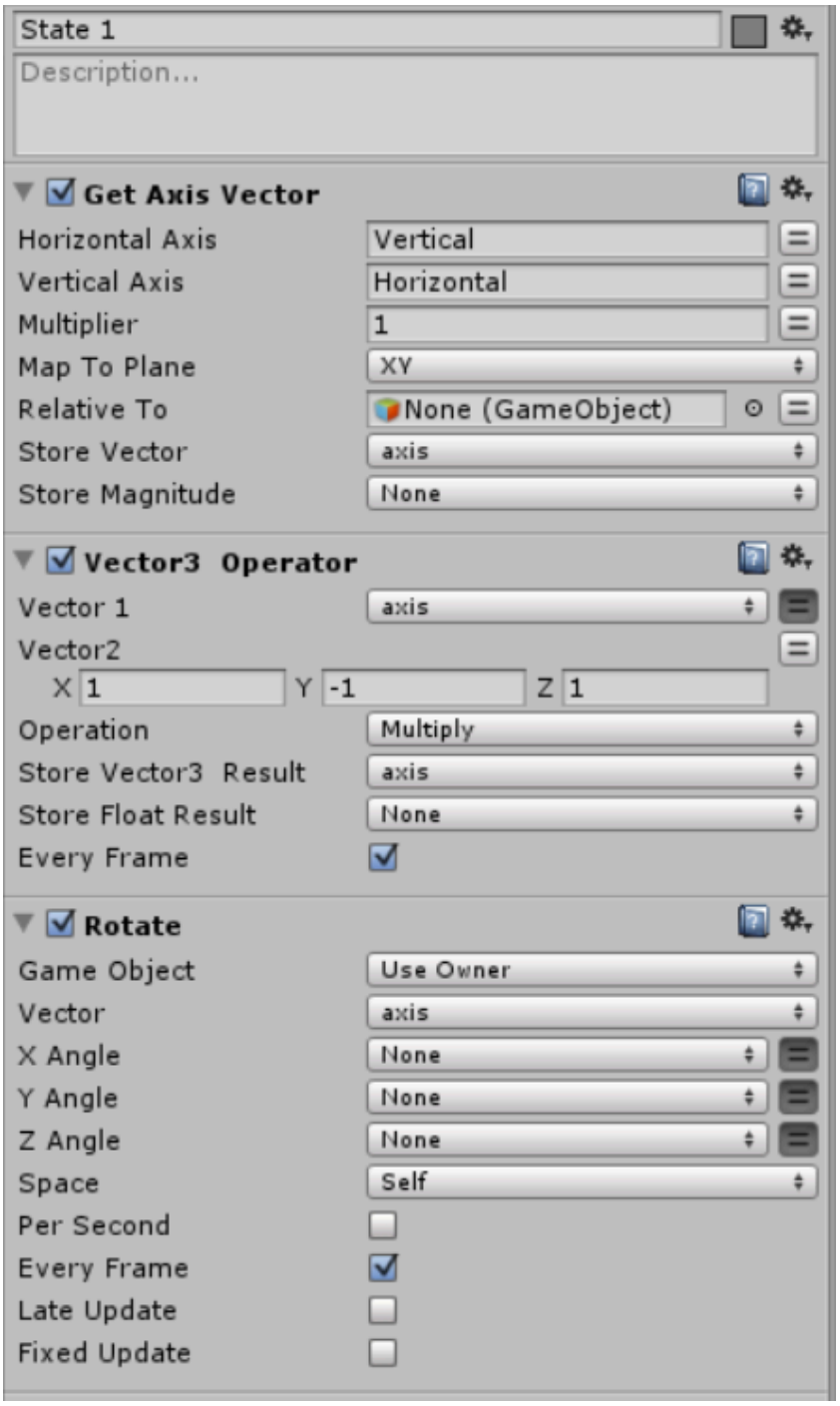


Variables:
float **distance**;
GameObject **target**;

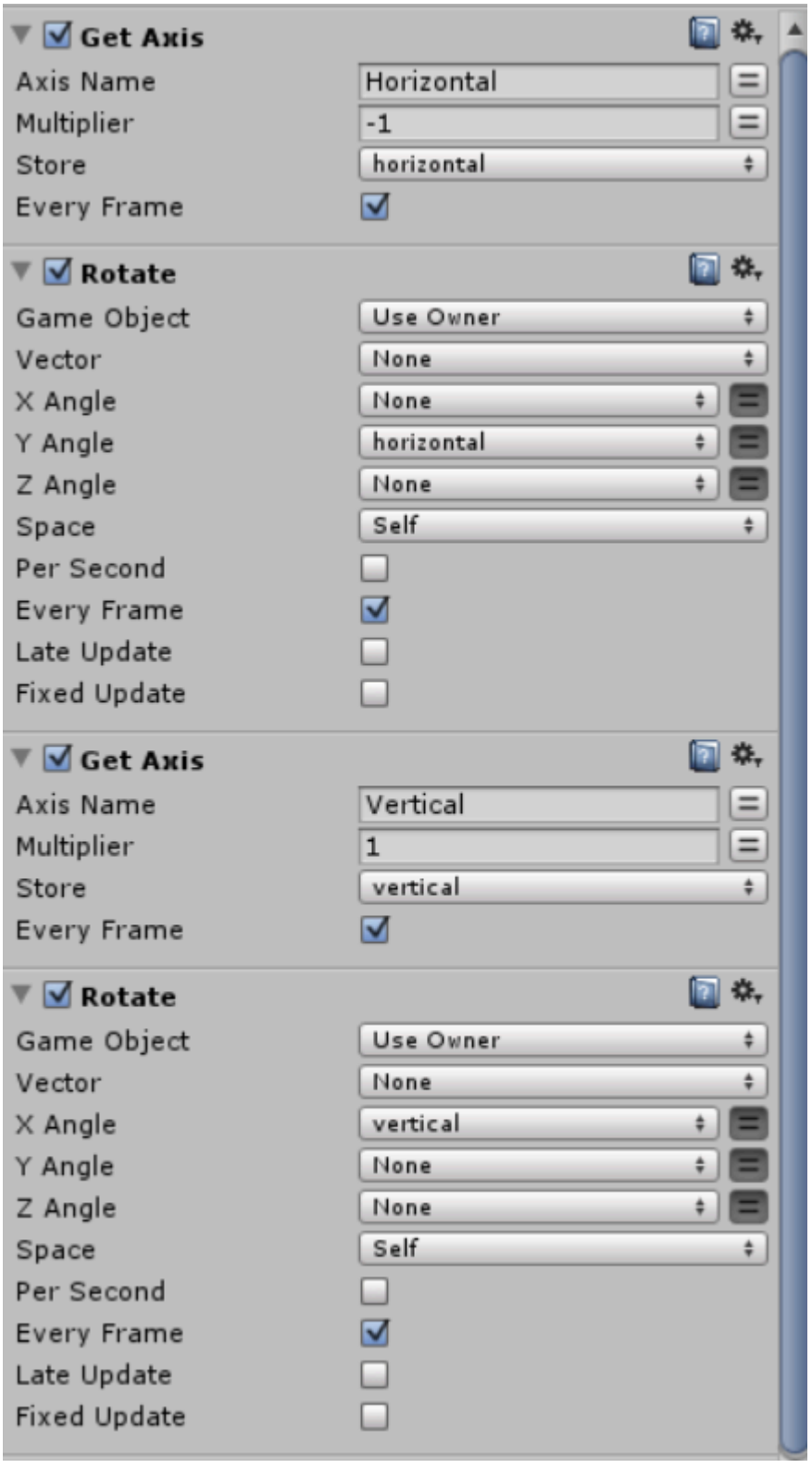
Planetary Two Stick Shooter

- Add **Sphere** at zero, scale by 10 and apply Earth Texture
- Add **Empty** GameObject at zero, call it **ShipCenter**.
- Add new **Sphere** as **child**, this is the Player Ship.
- Move Player Ship -7 units along Z axis.
- Nest **Main Camera** under Player Ship and reset transform.
- Move Main Camera -5 units along Z axis.

Add the following FSM to ShipCenter:

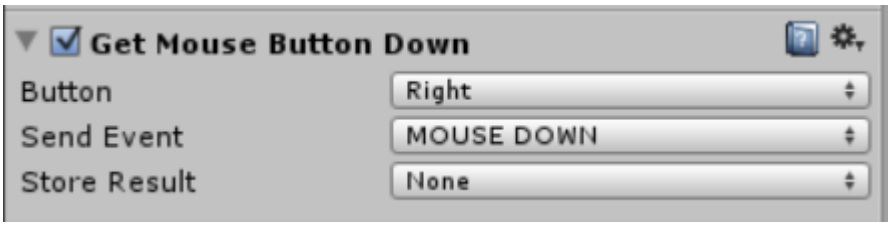


Alternative FSM:

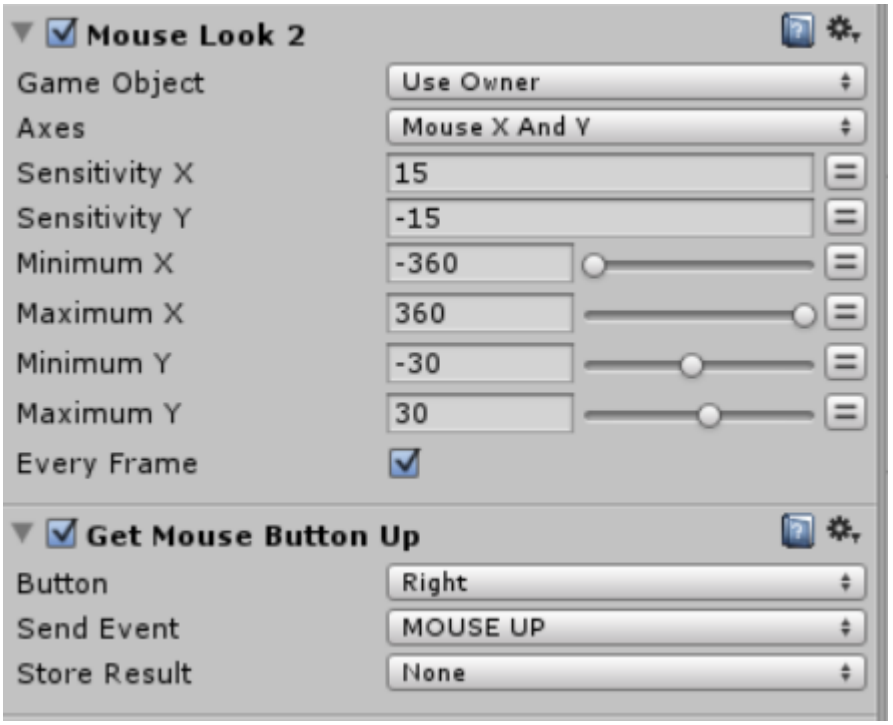


FPS Camera on right mouse button down

Add FSM to Main Camera.
Add this:



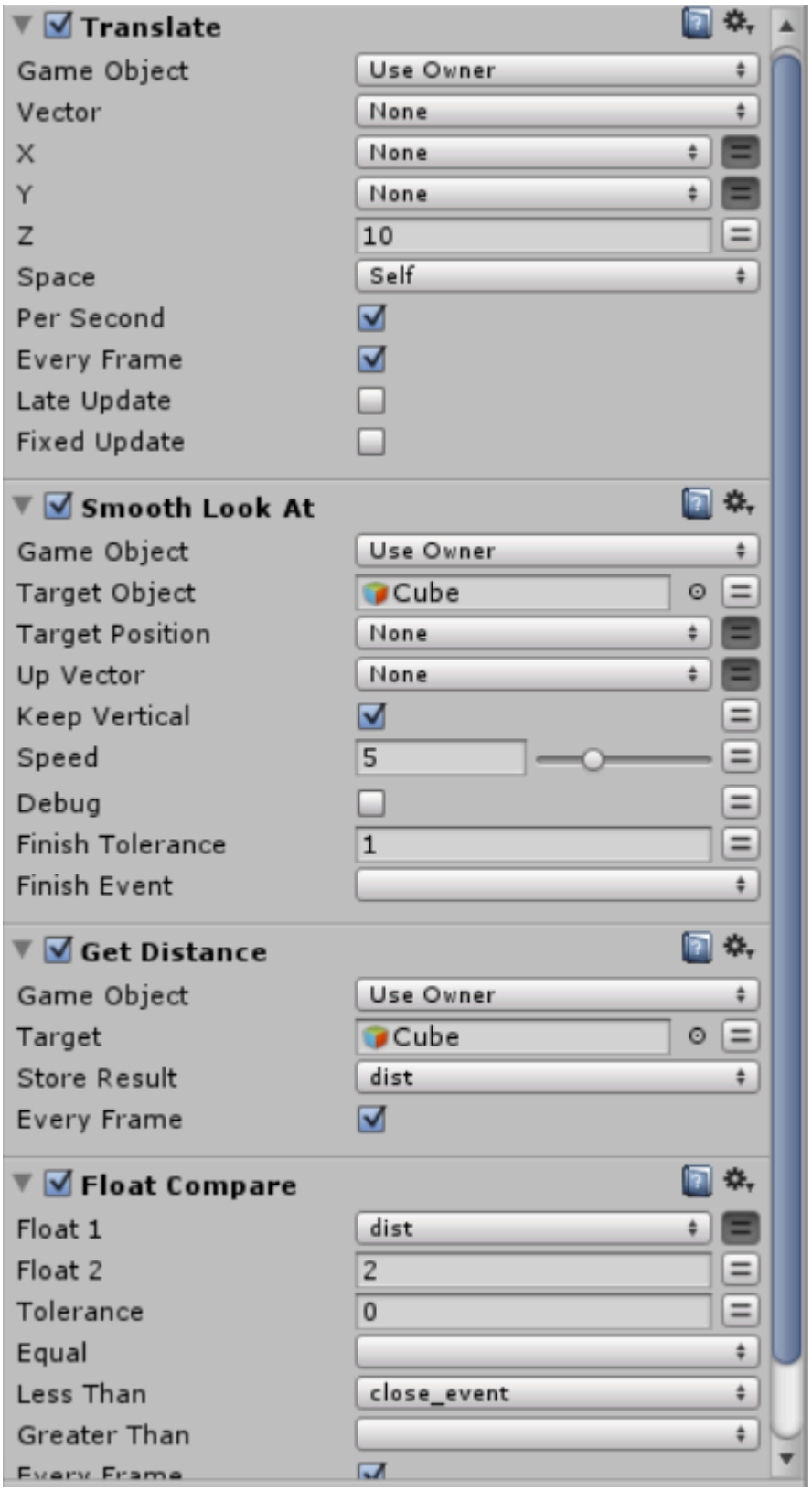
Transition to:



PS: **Mouse Look** is better than **Mouse Look 2** since it does not need a X movement limit.

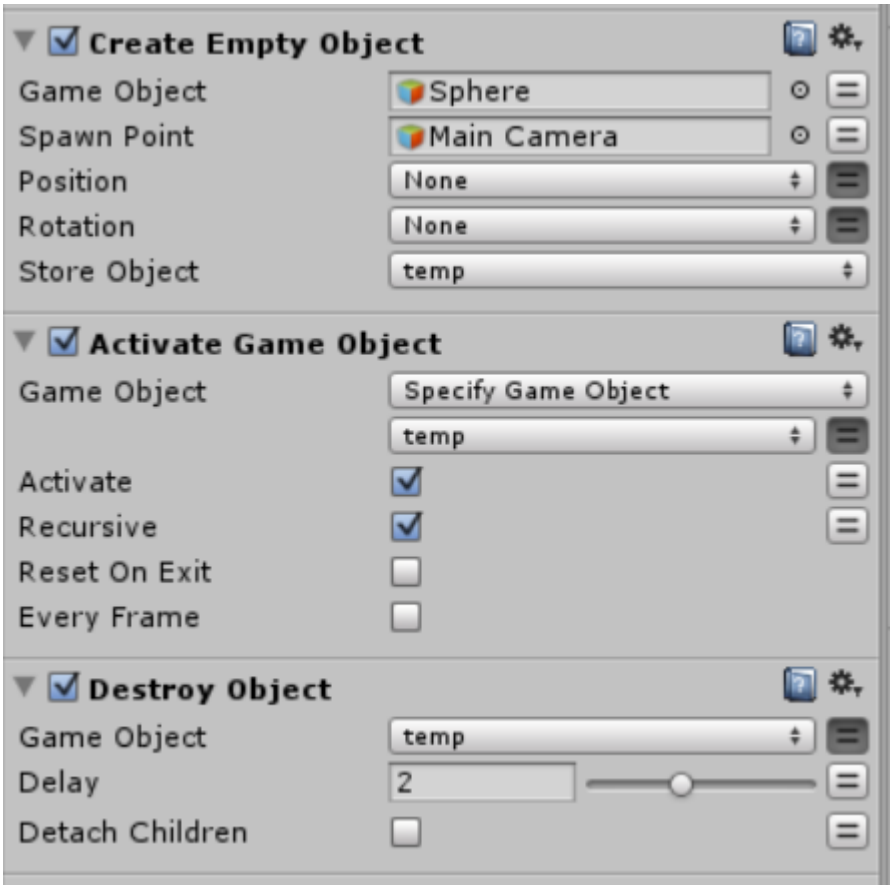
Shoot Homing Missile at Target

Create a **Sphere** and hide it. Give it this FSM:



Add a new state and using a new close_event. Destroy the object there. Maybe add an explosion particle effect if you like.

Use this to shoot a Missile:



This clones our hidden Sphere and activates it only to be destroyed after 2 seconds.

Add an FSM to a UGUI Button (=new Unity5 UI)

- Add EcoSystem a free PlayMaker add on browser.
- Open PlayMaker → Addons → Ecosystem → Ecosystem Browser
- Search for **ugui** and add it.
- This will import a new **asset** called: **PlayMaker uGui**
- From this new asset drag and drop the **prefab: Playmaker UGui** into the scene
- Add Unity5 Button (make sure the Unity5 **EventSystem** is automatically added.)
- On that button add a new component called: **Play Maker U GUI Component Proxy**
- On that button add a new FSM and create a new **state**
- To that state add a new **global transition** called: UGUI → ON CLICK
- Add some cool actions like the **shoot missiles** above
- PlayMaker auto adds an unneeded, legacy PlayMaker GUI GameObject, you can disable that in the PlayMaker preferences and delete it.

Alternative:

You can also place the **Component Proxy** on an empty **GameObject** outside the **Canvas.** You just need to then set the target to the real U GUI component (like the **Button**)

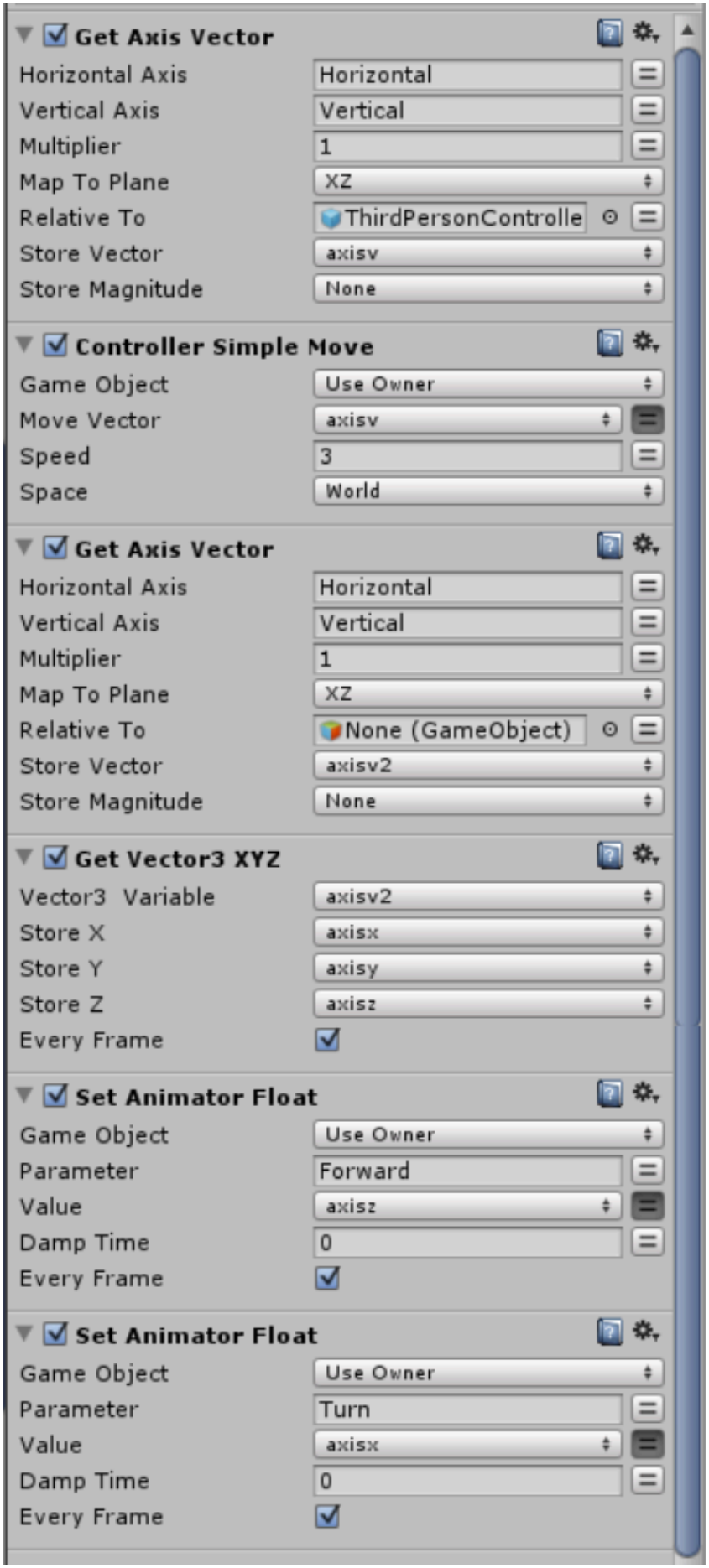
Similarly the FSM can be even on yet another GameObject.

Here is a video showing this as well: https://www.youtube.com/watch?v=HHSyHiY5lI4

Add ThirdPerson WoW style Camera

- Add the **ThirdPersonController.prefab** from the Unity **Characters standard assets**
- Nest an empty GameObject under it and call it **CameraPivot**
- Give it (Ethan) a better Skin
- Disable the **Apply Root Motion** property on the **Animator** component
- Replace the **Rigid Body** with a **Character Controller** component
- Nest the **Main Camera** under the CamerPivot
- Make it so that the Main Camera looks at the back of the head while placing the pivot at Ethan's back.
- Add one FSM called **Move**

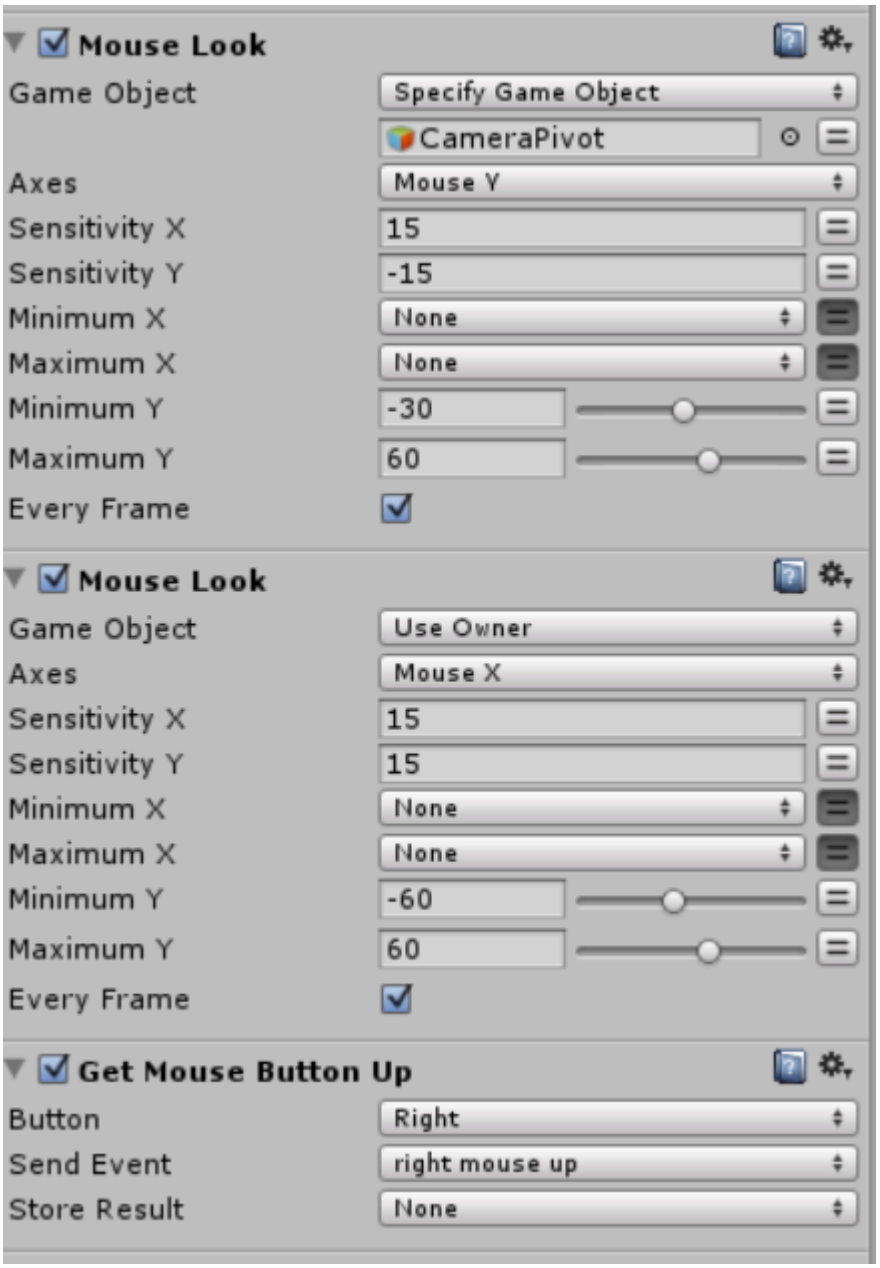
Add this:



Notice the different **Relative To** - this is important for some reason.

Also you will need the **Animator Proxy** package from **Ecosystem** for this to work!

Add another FSM called **Look** and add this:



Look in this guide for the FPS Camera on how to **trigger this state** with the **right mouse** button.

NOTE THERE IS A BUG IN PlayMaker MouseLook.cs

Change:
transform.localEulerAngles = new Vector3(**-**GetYRotation(), transform.localEulerAngles.y, 0);

To:
transform.localEulerAngles = new Vector3(GetYRotation(), transform.localEulerAngles.y, 0);

Notice the minus sign!

Fix the Ethan animation to walk backwards

The solution to this is harder than one would think.

Basically if you use the ThirdPersonController.prefab (with the Ethan model) it uses the animation motion to move the character.

This is the so called "Apply root motion" feature.

So if you want to continue to use the animation motion like the prefab does you need to find an animation that really walks backwards. There is no way to cheat or play the animation backwards as far as I could find after trying this for many hours.

Luckily Ethan contains a clip where he walks backwards, it is part of the walking clip.

The new Unity 5 animation system uses begin and end times on animation clips so you can use a selection on an otherwise longer animation clip that has multiple different motions.

So we need to create a clip selection with an begin and end time that only uses Ethan walking backwards.

Unfortunately I found no way to reuse the existing FBX with the clip, I had to manually duplicate the FBX file, (You can do that in the file system or in Unity by pressing Ctrl-D)

Once you have duplicated the walking animation FBX file you can dive into the GroundedAnimation state in the Animator window and add a new motion using the "Add Motion Field". Use the duplicated animation clip and click on Edit.

There you can move the begin and end sliders to select the short backwards animation. It is far to the end, I am using start 341 and end 371.

Finally select your blend tree and input the value -1 for Pos Y of your new motion.

That is it.

Now when you issue: m_Animator.SetFloat("Forward", -1, 0.1f, Time.deltaTime); (Notice the -1)

He will use the walk backwards animation and also move backwards.

See also:
http://answers.unity3d.com/questions/952747/how-do-i-make-a-character-walk-backwards-rather-th.html

It might be possible to use multiple selections on the same animation without copying the FBX file, see here for a possible solution:

https://youtu.be/4BUVe_1Cpac?t=557

I have not tested it myself however..