

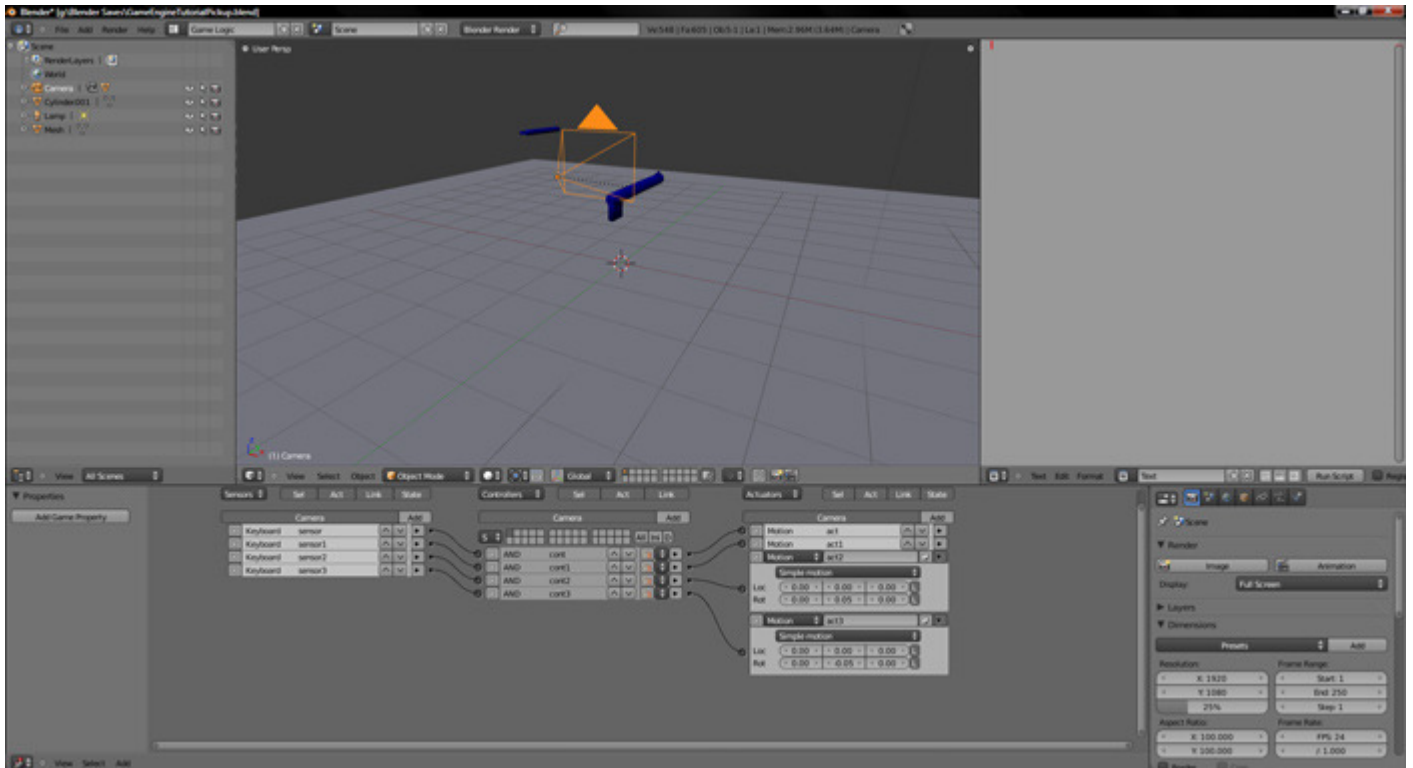
# Game Engine - Weapons

Dark Scarab Tutorials -- Blender 2.5

NOTE: In this tutorial, just like nearly all of my tutorials, I have provided what I call keystrokes lines. These are highlighted throughout the tutorial and are meant to allow you to see the actual keystrokes that I went through in order to get the results I get in the tutorial. More advanced users should be able to go through a tutorial without the keystrokes lines assuming I have explained myself sufficiently.

Creating a first person shooter is a very popular topic for those new and old to the Blender Game Engine. In many games, such as in the Halo series, a person can walk up to a weapon on the ground and pick up the weapon by pressing a button. Now I am proud to tell you that this can be done in the Blender Game Engine *without Python*. Just follow this tutorial and you will be able to pick up any weapon or object your heart desires.

To start, I have created a file for you to download. Basically it has our scene set up and I also have movement applied to the camera (if you don't know how to do movement in the game engine, you can look at my Game Engine - Movement tutorial) using the arrow keys. Other than that, we are ready to go. If you are using the file, it should look something like this when you open it up.

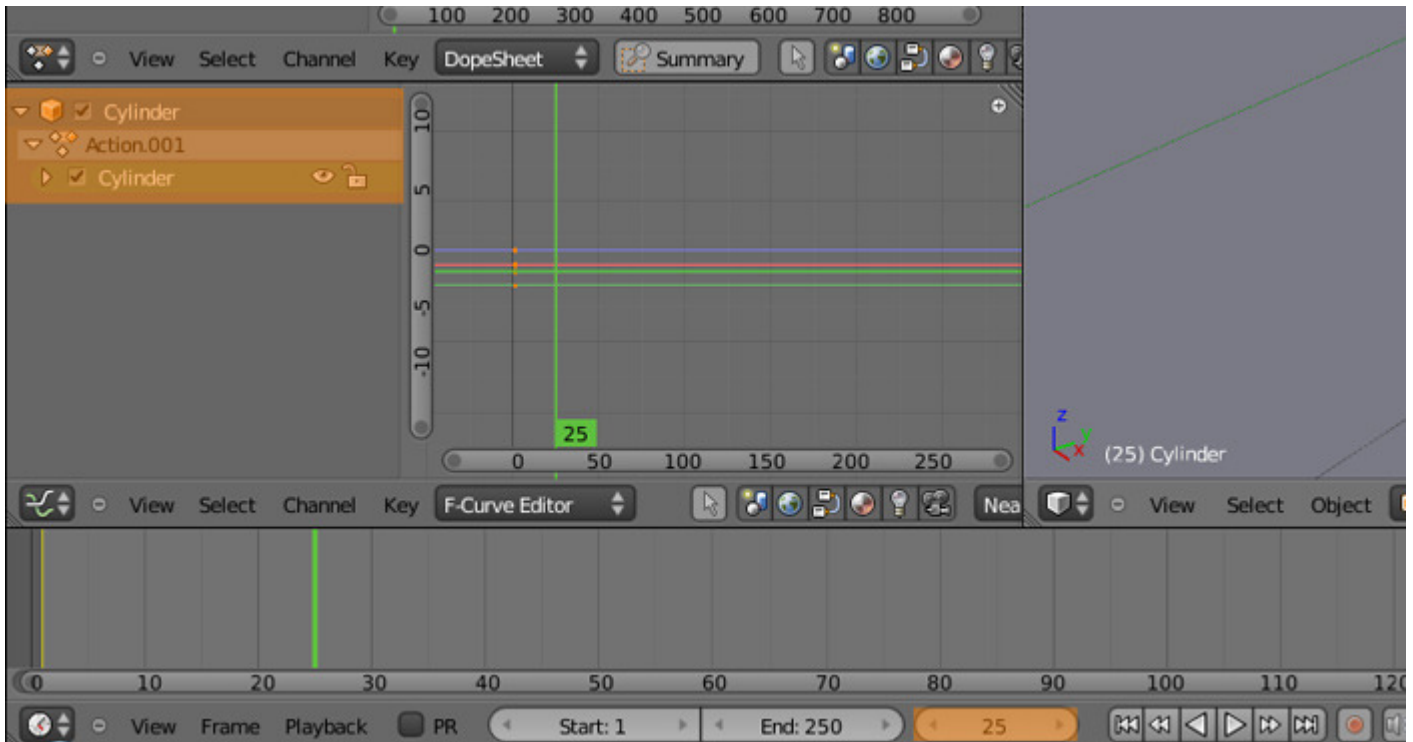


The first thing we are going to do is animate the picking up of the gun. What we are actually going to do is have two guns; one laying on the ground and a hidden one that will not appear (to the user) until the other one is picked up. I am just going to do a basic rotation to hide/show the gun. To start animating, change the screen layout to Animation. You can find the dropdown to do this directly to the right of the help button.

## Change Layout to Animation

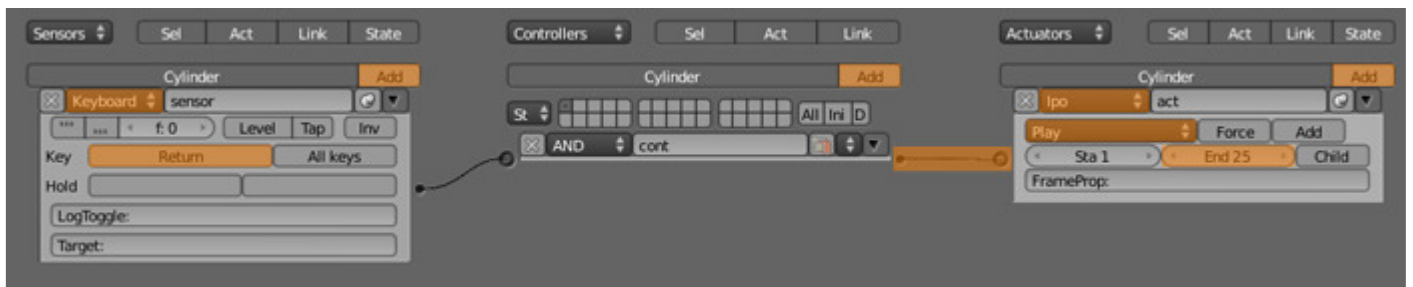
Select the gun that is parented to the camera. This is the one we need to animate, the other one will just disappear when we pick it up so no animation is necessary. Make sure that you are on frame 25 and with your mouse in the 3D viewing window and with the camera gun selected press I and choose LocRot. After that, go to frame 1 and rotate the gun along the X axis by -50 degrees. Insert another LocRot keyframe and then the animation is done.

**Go to frame 25, Select the camera gun, press I-->LocRot, Go to frame 1, R, X, -50, I-->LocRot**



Now we can go back to the Game Logic layout. The next thing we need to do is choose a key that will be used to pick up a gun we find on the ground. For this I will use the Enter key. Select our camera gun again and click Add for each of the columns in the Game Logic panel and connect them together. We then need to change the Sensor to Keyboard and the Key setting for that sensor to the Enter button. Next we need to change the actuator to Ipo and when those settings come up change the Play setting to Ping Pong and End to 25.

**Click Add for each game logic column, connect each column, Change Always to Keyboard, Select Enter key for Key setting, Change Motion to Ipo, Change Play to Ping Pong, Change End setting to 25**

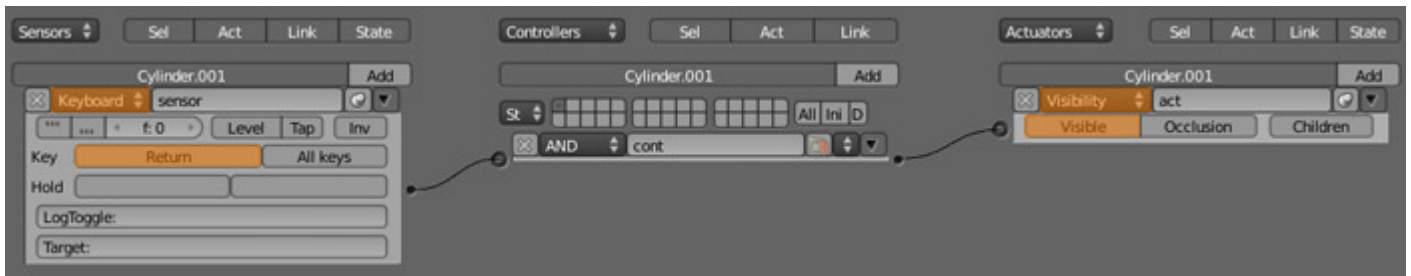


The next thing that we need to do is make the gun that is laying on the ground to disappear when we hit the enter button. Select the gun laying on the ground and click Add for each of the game logic column and connect them together.

Select the gun on the ground, click Add for each game logic column, connect each column together

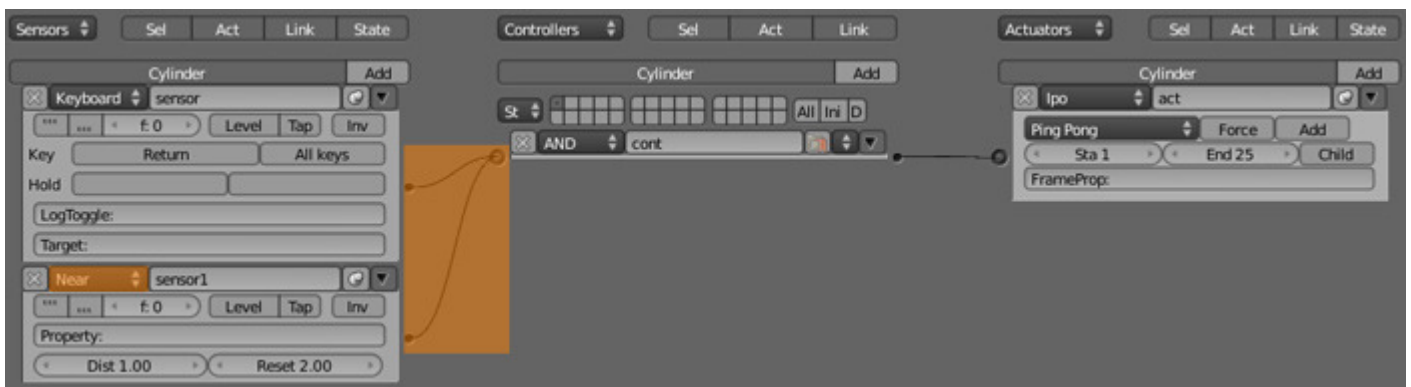
Like before, we want to change the Always sensor to a Keyboard sensor and make the Key setting the enter key. We also need to change the motion actuator to a Visibility actuator. After that deselect the Visible setting. That will make the gun disappear when we pick it up.

Change Always to Keyboard, Make the key setting the enter key, Change Motion to Visibility, Turn off Visible setting



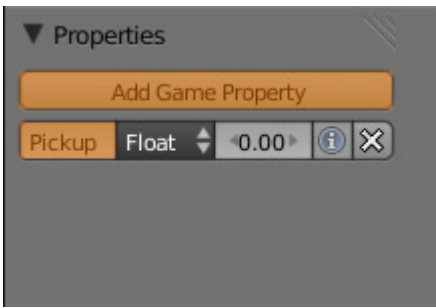
At this point, if you test your game out, you should be able to see the camera gun appear when you hit enter and the gun on the ground to disappear. However, this isn't exactly what we want to do. We only want to be able to pick up the gun on the ground when we are near it. Select the gun on the ground and click Add in the sensors column. This time change the sensor to a Near sensor. We also want to connect this sensor to the same Controller we connected the other sensor to. Then you have to do the same thing with the camera gun. Now we should have to walk up the gun on the ground and be close to it before hitting enter will make it pick up.

Select a gun, Add a sensor, Change sensor to Near, Connect new sensor to the controller, Repeat with other gun



But wait. That didn't work...To solve this problem we have to give the camera gun a property. With the camera gun selected, click on Add Game Property. Rename that new property 'Pickup'. Then select the gun on the ground. In the property field of the Near sensor type in Pickup.

Select the camera gun, Click Add Game Property, Change property name to Pickup, Select gun on the ground, change Property setting for the near sensor to Pickup



Now you should be able to test out your game and make it all work correctly.