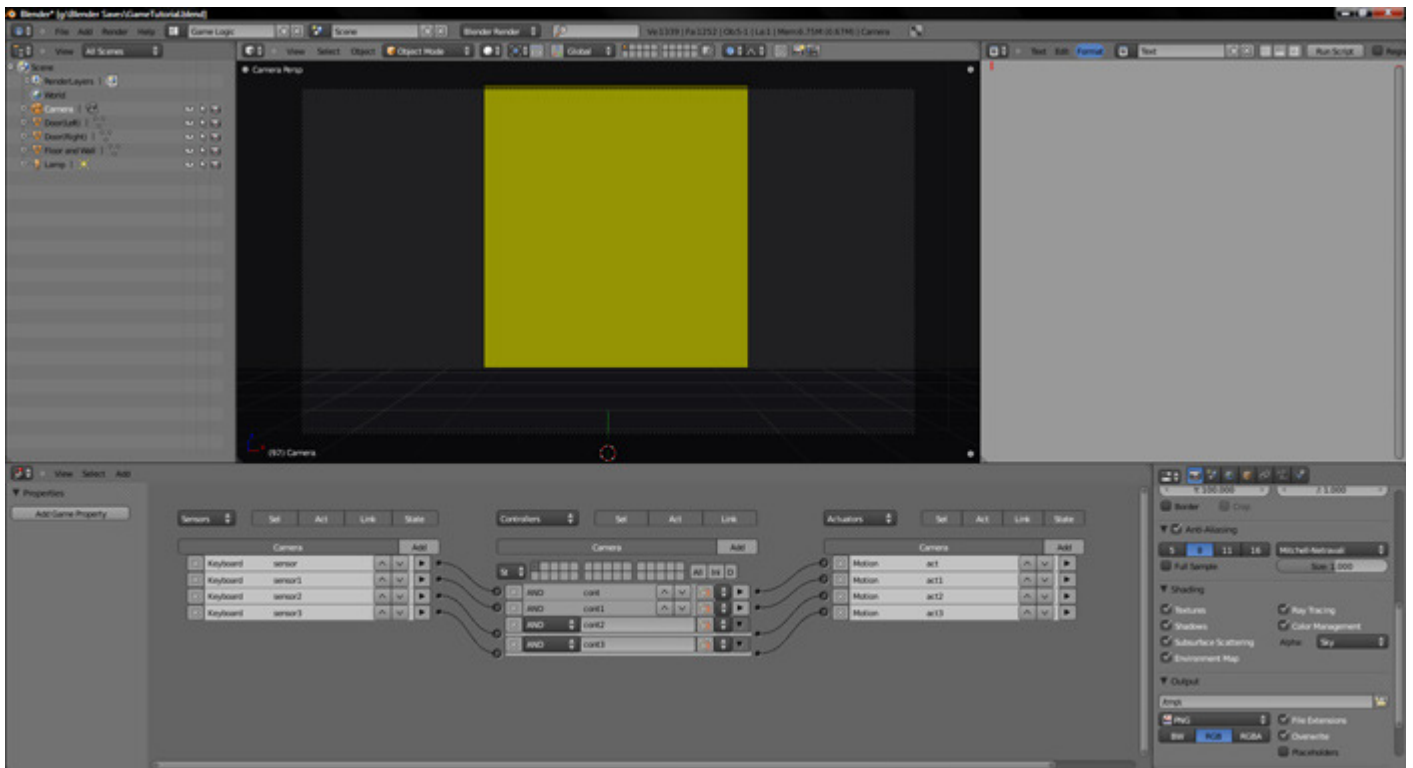


Game Engine - Animation

Dark Scarab Tutorials -- Blender 2.5

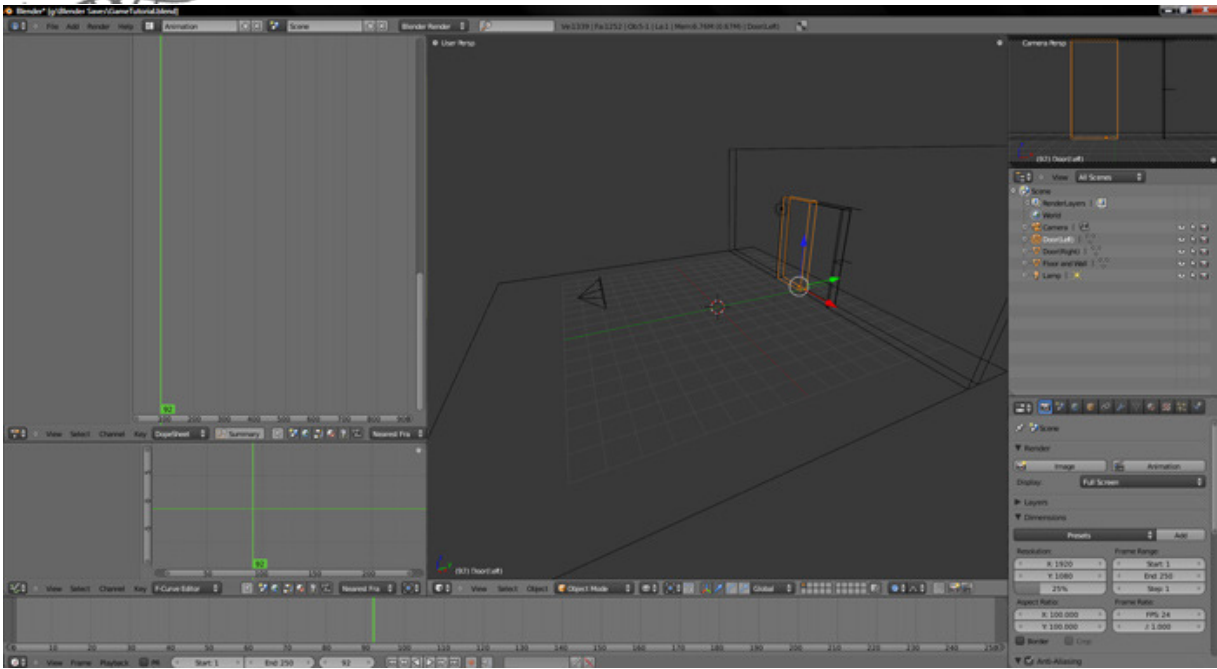
NOTE: In this tutorial, just like nearly all of my tutorials, I have provided what I call keystrokes lines. These are highlighted throughout the tutorial and are meant to allow you to see the actual keystrokes that I went through in order to get the results I get in the tutorial. More advanced users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

For this tutorial I recommend downloading the file that is provided. However, you do not need to download anything if you have successfully completed the Game Engine - Motion tutorial. You can also completely forget about it if you want. In any case, I am going to be using it so if you are as well, then the image below is what it should look like. I would also like to point out that I have already set up movement with the arrow keys (which were done with the Game Engine - Motion tutorial).



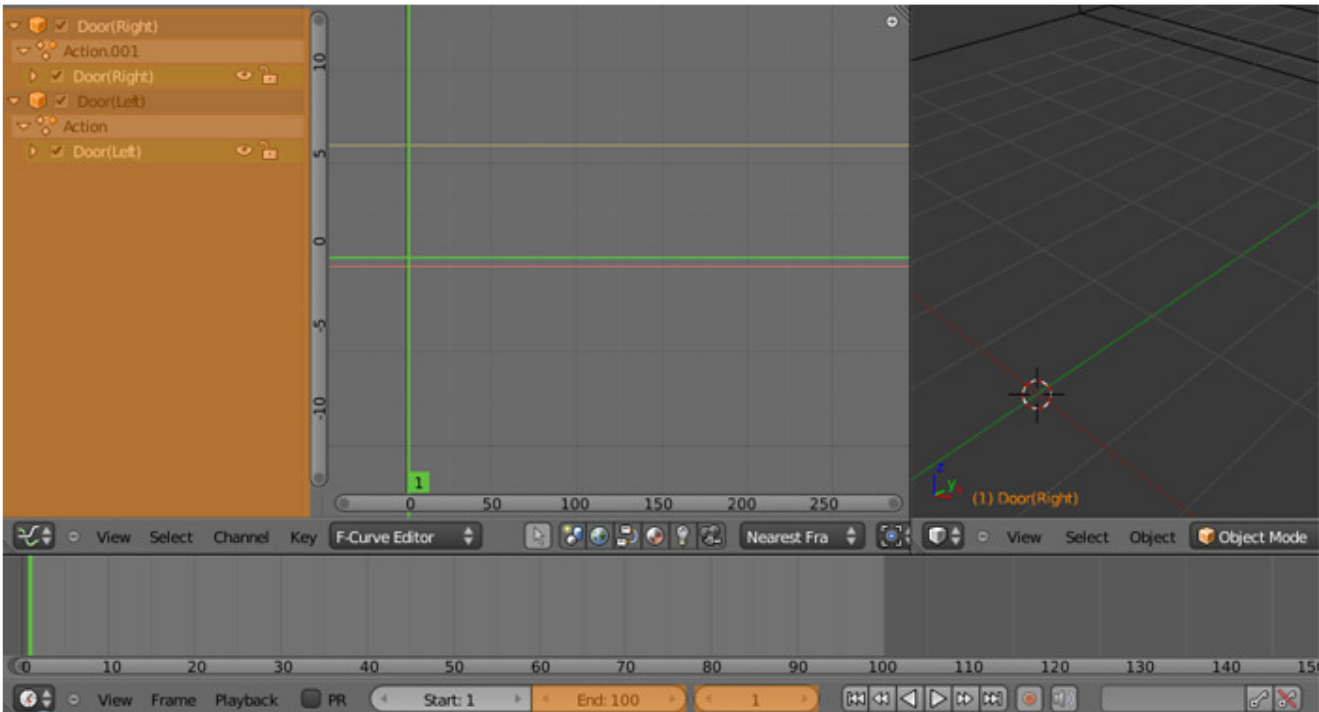
What we are going to be animating is the sliding open of the doors whenever we (the camera) gets near them, which is why we are going to need movement. To see the doors a little bit more easily, I suggest hitting the Z key to make them all wire framed. After that, we are going to need to go to the Animation layout. You can change layouts by clicking on the dropdown list directly to the right of the help menu.

Z, Change layout to Animation



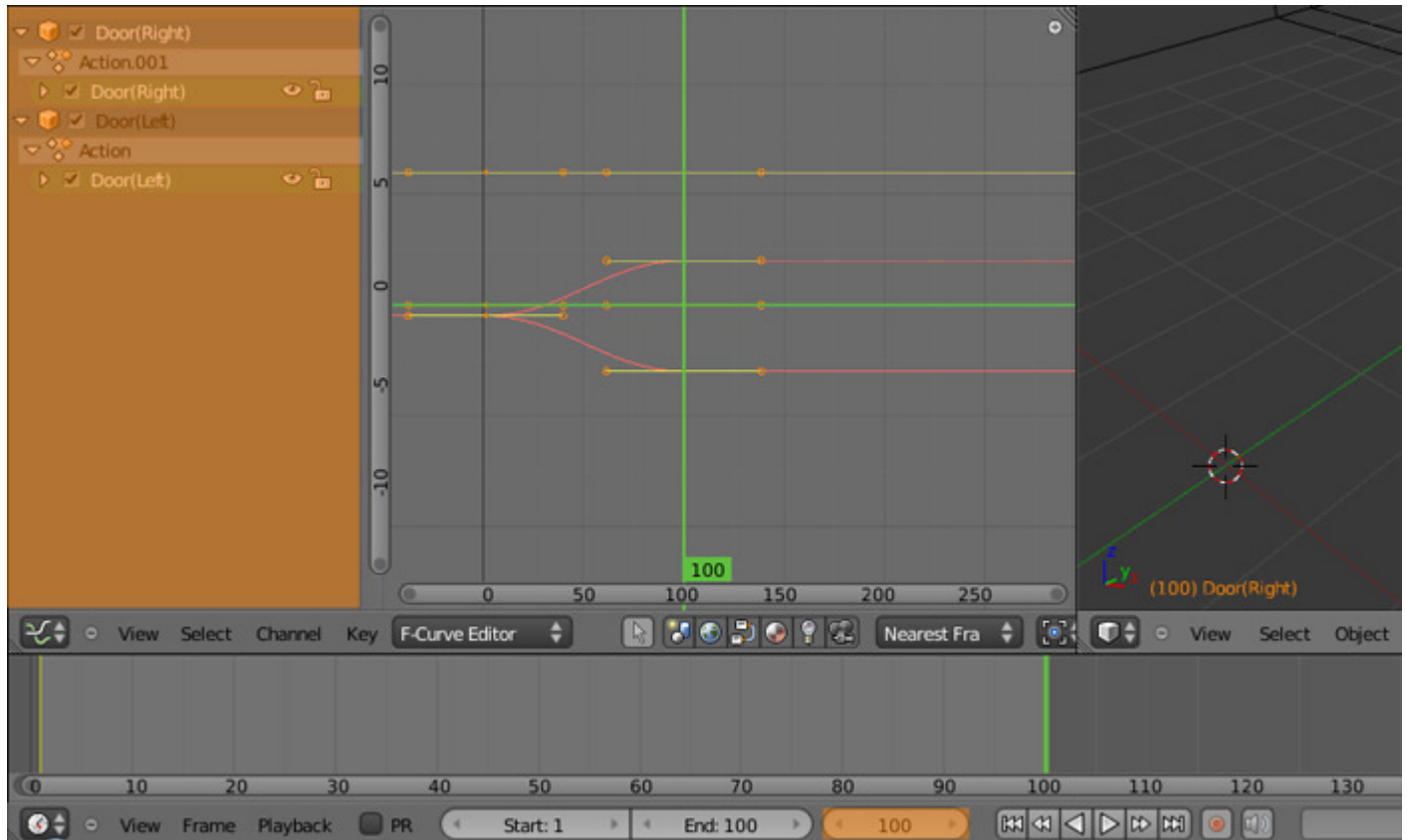
Now we want to change the length of our animation. In the timeline window, you should be able to see a setting labeled End. Change this to 100. This is going to be the exact length of the movement of the door without any wasted time before or after the movement. Also, make sure that you are currently on frame 1. Since we already have our door selected press I with the mouse in the 3D viewing window and then select location. This sets a keyframe in the DopeSheet and the F-Curve editor and will be the initial position of the door. You also want to select the other door and insert another location keyframe.

**Change End to 100, Go to Frame 1, Press I in the 3D viewing window, Select Location
 Select the other door, Press I in the 3D viewing window, Select Location**



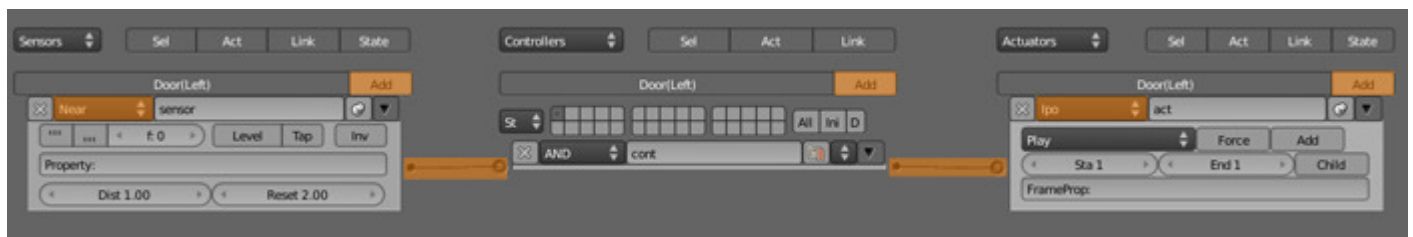
The initial position of both of our doors are now set. Now we need to set the final position of the doors. Before we move anything, we need to go to Frame 100, that last frame in our scene. After that, select the left door and move it along the X axis by about -2.5 so that it goes into the wall. Once that is done, press the I key and select Loc. Then select the right door and move it 2.5 units along the X-axis. Insert another Keyframe.

Go to Frame 100, Select the left door, G, X, -2.5, I->Location, Select the right door, G, X, 2.5, I->Location



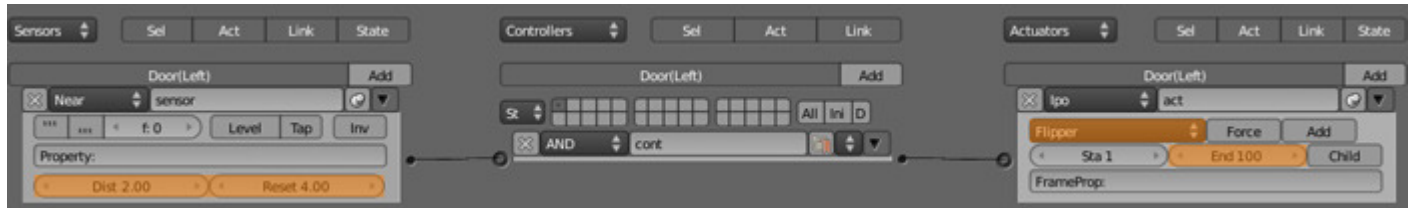
With all of our animating complete, we can start working with the Game Engine. To do that, we need to change the layout back to the Game Logic layout. Select the left door. Then in the Game Logic panel, click on Add for each of the columns and connect them together. Since the doors are meant to open when we get near them, we will change the Always sensor into a Near sensor. Then change the Motion actuator into an Ipo actuator. Repeat this for the other door.

Change the layout to Game Logic, Select the left door, Click Add for each column in the Game Logic panel, Change Always to Near, Change Motion to Ipo, Repeat for right door.



Before this is going to work in the game engine, we must change a few of the settings. In the Near sensor, we need to change the Dist (Distance) setting to 2.00 and Reset to 4.00. Then, over in the Ipo actuator we want to change Play to Flipper and End to 100 (the duration of our animation). After you have done that, you should be able to play it in the Game Engine. We need to do the same this for the other door as well.

Change Dist to 2.00 for the near Sensor, Change Reset to 4.00, Change Play to Flipper and End to 100 for the Ipo actuator



After you have done that, you should be able to approach your door in the Game Engine and watch it open when you get close enough. When you get far enough away, the door will close again.