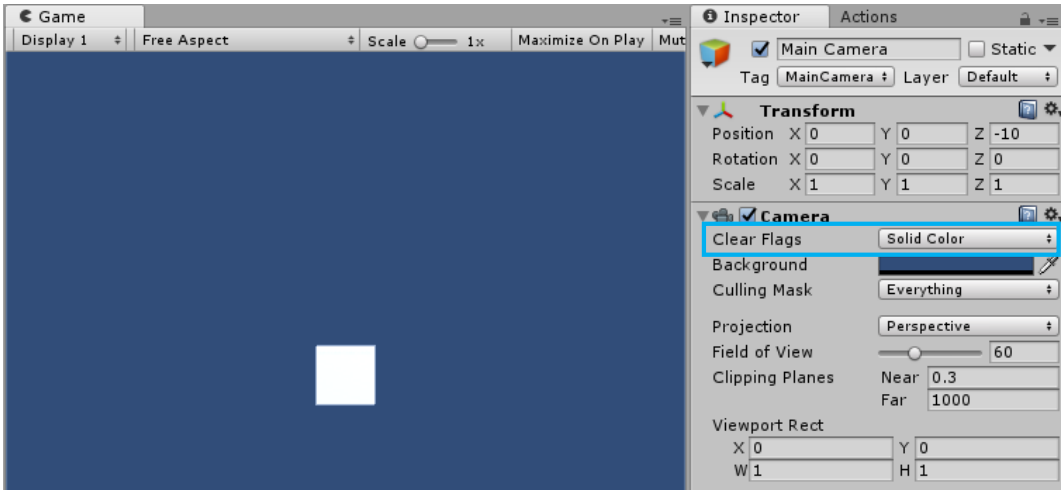
Unity & PlayMaker: Set Position/Rotation and Keyboard Input

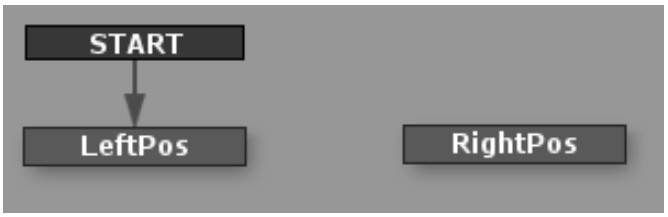
Setting up the scene

In this tutorial we will make a cube change its position based on the keyboard input.
Add a cube to the scene – set its position to the origin (0,0,0).
You can also change **Camera's Clearing Flags** to:" **Solid Color**". So, it's easier to see the cube.



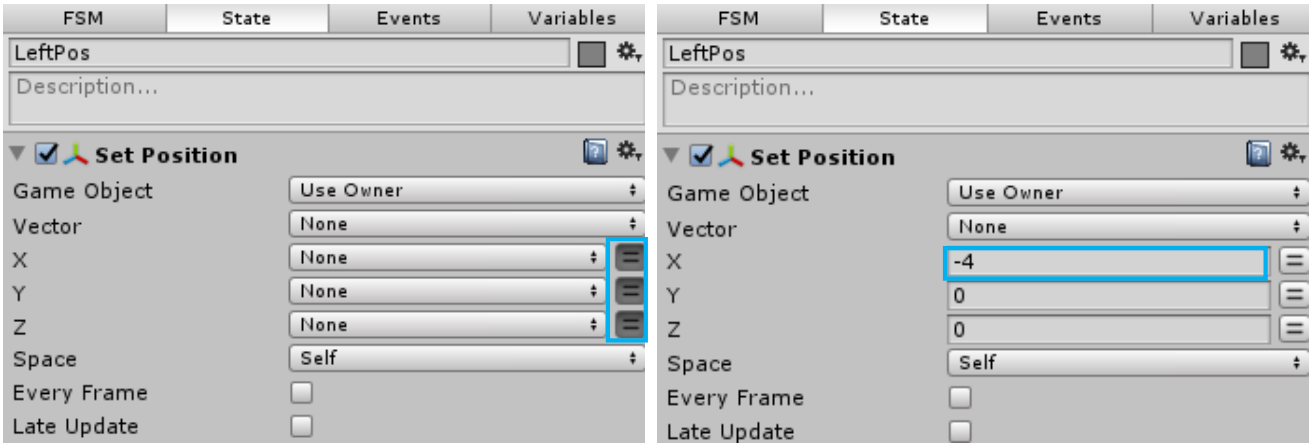
States

Add the 2 states (LeftPos and RightPos)



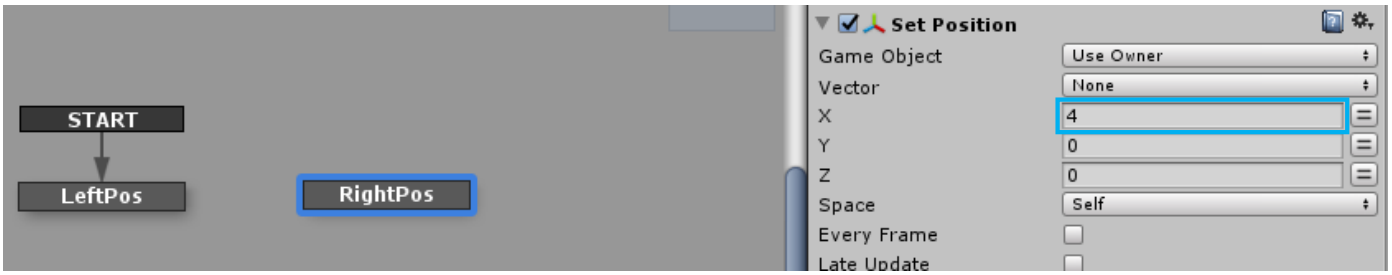
In the action browser search for "**Set Position**". Add it to the state.
It should look like this, click on little boxes on the right side of the axis properties.
This will enable you to enter a **value** instead of a **variable**.

Change X Value to **–4**.



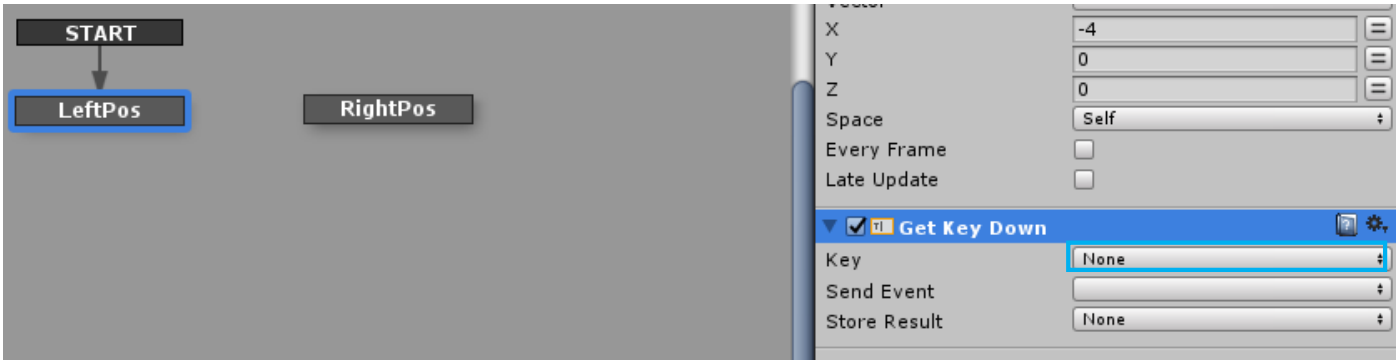
If you run the game, you should see the cube changing its position to (-4,0,0) left side of the screen.

Add “**Set Position**” Action to the “**RightPos**” state. Set **X** to **4**.



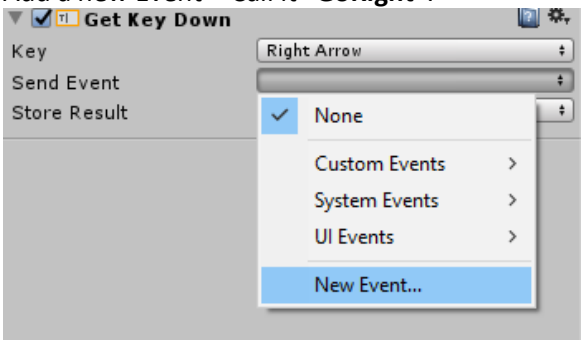
Keyboard Input

Select the “**LeftPos**” state and add “Get Key Down” action.

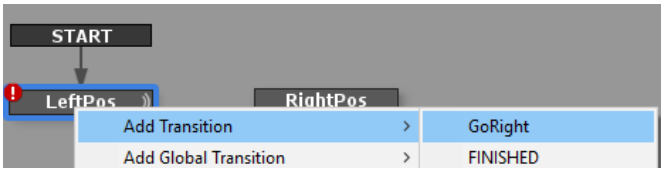


Select a **Key**: **Right Arrow. (**Pressing Right key when you’re on the left state will change position to right.)

Add a new Event – Call it “**GoRight**”.



Use that event for the transition.

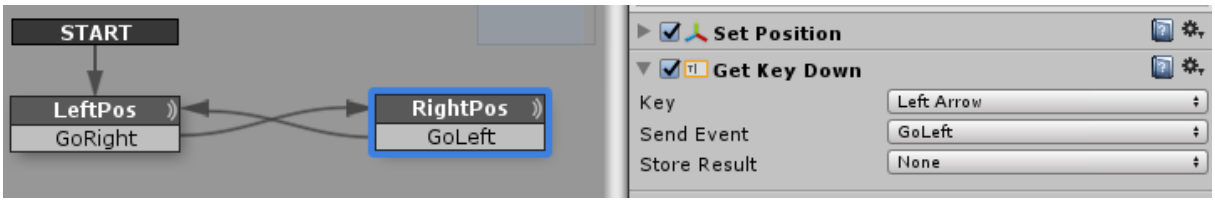


Link it together.

Run the game, and press the [Right arrow Key], the cube should move right.

Follow similar steps to make the cube go the left position when it is in the right position.

When you're finished, you "Right state" should look like this.



Now the cube should move left and right.

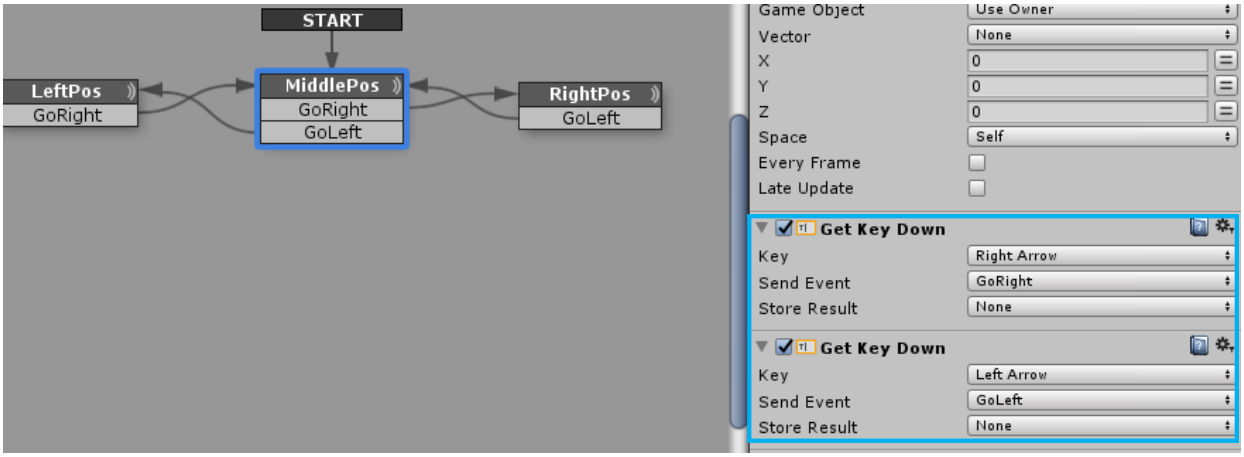
Task 1

Add the "**middlePos**" state, so that the cube can switch between 3 lanes.

This mechanic is utilised in a lot of popular games such as Subway Surfers and Temple Run.

Try to do it without looking at the solution first.

Solution



Task 2

You can set rotation of the object in the similar way to “Set Position”.
Here are rotation positions for different states to make it look as if the cube is always rotating towards the centre.
Feel free to try out your own rotations.