

# State Machine

\* github link for this project: [https://github.com/hannah-y-hy/24\\_1003\\_Yoo\\_Sprite-Sheets](https://github.com/hannah-y-hy/24_1003_Yoo_Sprite-Sheets)

1. Variables defining the player's states

: **Velocity, Input.GetButtonDown("Jump"), Input.GetButtonUp("Horizontal")**

2. What causes my variables to change values: **Space bar press** (jump), **Horizontal arrow keys** press/release

3. What is going on in each state:

<p>Walking = true</p> <p>Player sprite animation switches to "PlayerWalk"</p> <p>Pressing right and left arrow keys (=horizontal input) moves the player.</p>	<p>Walking = false</p> <p>Animation switches back to "PlayerBounce", which is just an idle state.</p> <p>velocity == too low</p>
<p>Jumping = true</p> <p>Adds upward force to the player</p> <p>Space bar Pressed: the player sprite moves upward</p>	<p>Jumping = false</p> <p>Gravity pulls the player sprite back down</p> <p>Space bar released: player coming back to the floor(blocks)</p>
<p>Turning = true</p> <p>Player sprite flips direction</p> <p>This is based on key input (left/right arrow keys)</p>	<p>Turning = false</p> <p>Player sprite just faces same direction if there's no change in left/right direction</p> <p>Player keep pressing same arrow key or all arrow keys released (=no movement)</p>