

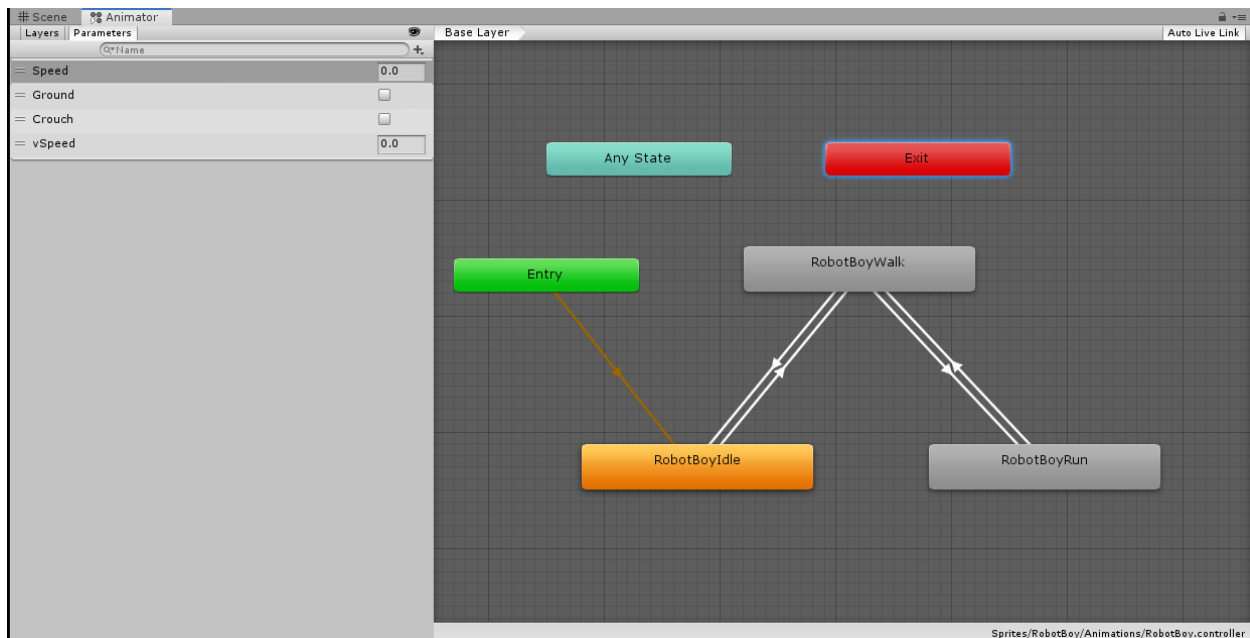
CECS 528 2020 HW2 (3) Unity game project notes – 4

Download MoreAssets.zip from the Blackboard, which contains the folders, PlatformerControlScripts and Sprites. The Sprites folder has more sprites you could use in your project, whereas the PlatformerControlScripts folder, has the following C# scripts (as used in the Don't Fall Off game):

Platformer2DUserControl.cs (process user inputs)

PlatformerCharacter2D.cs (control character 2D movement and animation)

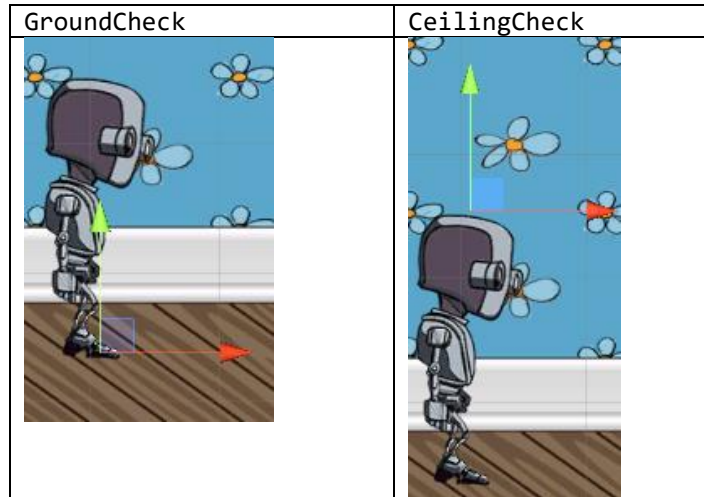
In order to use PlatformerCharacter2D.cs, at the minimum we need the following animator controller (called RobotBoy):



As shown above we need to add these Parameters, Grond (bool), Crouch (bool), and vSpeed (float), even they are not used in the animator controller. The Parameter, Speed, is used in the animator controller to make transitions between Idle, Walk, and Run animations.

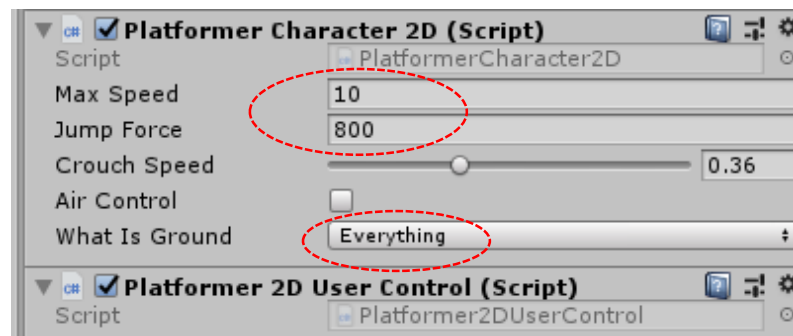
4 Control the player's movement and animation

4.1 Add two empty game objects named, GroundCheck and CeilingCheck, respectively as child game objects of the game object, Player. Set the positions of these two child objects as shown below:



4.2 Add Rigidbody 2D and Box Collider 2D components to the Player game object and set their properties in the Inspector as shown in class.

4.3 Add the scripts Platformer2DUserControl.cs and PlatformerCharacter2D.cs to the Player game object and set their properties in the Inspector as follows:



Play the game and adjust the properties of the Player's components as needed.

Note: The tutorial, Unity 2D platformer Character Controller Tutorial 2017/2/22 (<https://learn.unity.com/tutorial/live-session-2d-platformer-character-controller#5c7f8528edbc2a002053b694p>), presents a platformer character controller based on *kinematic* (vs. *dynamic*) rigidbody, which is claimed to have a character control game feel similar to that in classical platformer games like Mario Bro.

5. Add dynamic (or interactable) game objects and design game plays to use those objects.

Grading policy of the Unity game project:

1 Endless level and rooms visual design	30%
2 Animation and animator controller design	30%
3 Character control and game play design	40%