# Laboratory #0
## Unity roll-a-ball

- To help you get familiar with Unity, you are going to do, and extend one of their online tutorials: **roll-a-ball**.

- You will need Unity installed on your computer, available for free online (https://unity3d.com/get-unity/download). Make sure you have installed Version 2018.4.8 (featuring long term support). If you have Windows running on your computer, also install Unity Hub. This will be helpful for future assignments. Try looking at the many help forums available online.
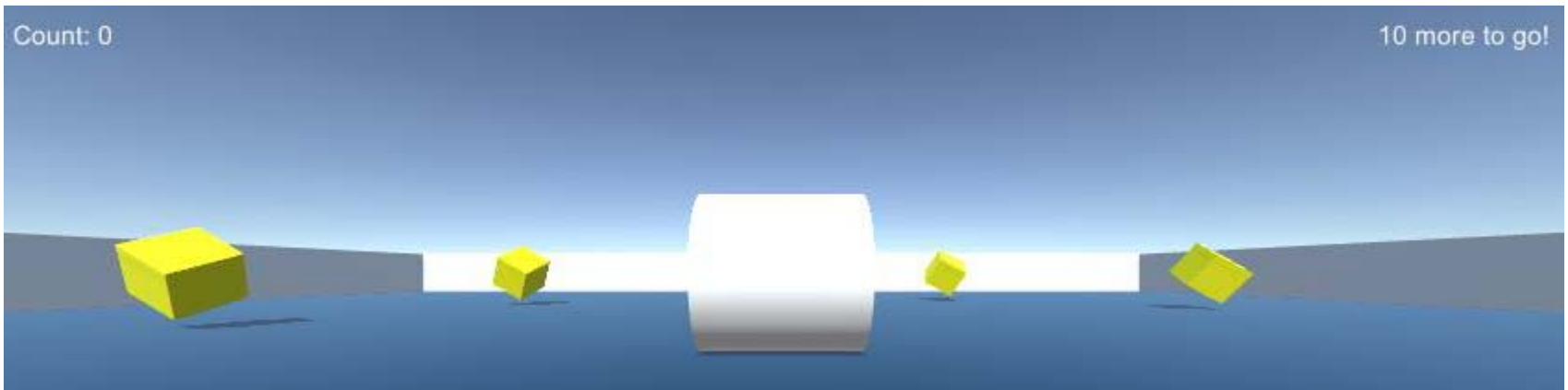
# Laboratory #0 (2)

- Implement the Roll-a-Ball tutorial from the Unity web site at **http://unity3d.com/learn/tutorials/projects/roll-ball-tutorial**

- The Unity roll-a-ball tutorial consists of 4 parts, with a total of 8 videos. It might ask you to sign in with your Unity ID, which you should have on hand from setting up Unity on your computer. Watch each video and follow along creating your own roll-a-ball games as you go. Listen carefully and try to understand every step (not just copy paste in the given code), ask for clarification if you are unsure.

# Laboratory #0 (3)

Add or modify the following features:

- The player object is a rolling cylinder (**not** a ball).

- The camera view is constantly level with the ball, 3 meters behind it.

- Collecting a pickup (yellow cubes) causes the player object to flash red.

# Laboratory #0 (4)

- Create a gap in the wall that allows the Player to fall off the world.

- If the Player falls off the world, return the Player to the starting location.

- If the '**r**' key is pressed, reset the game to its starting state.

- Add a colored spot light that shines on some portion of the world.

- Create and add to the world a second type of Pickup object, of a different color, that the Player will bounce off instead of picking up.

# Laboratory #0 (5)

- Import a texture asset and apply it to the ground or the walls.

- Import a sound asset and play it when the Player moves. Play another sound when the Player touches a Pickup.

- Hitting a wall evokes a sound of some kind (your choice).

- Add a new text field telling the user how many pickup objects remain.


- Submit a **zipped** copy of the Unity project folder. Do not include executables or temp folders; these may be removed by fully exiting Unity before creating the zip file.

# Laboratory #0 (6)

- In this assignment, you need to capture and submit several screenshots. Please wait for TA's instructions.