

How to play / Controls

Press start and the game will start playing. There is a restart button at the bottom left. Pickup as many cubes as possible! Hitting the walls will reduce points by 1 and hitting the other ball's top will reduce their points by 1 (and yes you can have negative points). The online version is at this link <https://simmer.io/@CreedSnake/roll-a-ball>.

Player 1 Controls:

WASD for horizontal movement

Space to jump

Player 2 Controls:

Arrow keys for horizontal movement

INS for jump (make sure use the numlock to be able to use insert on the numpad)

Basic Requirements / Small tweaks

- #5 - Implemented everything from the tutorial (I made the camera fixed since it was very disorienting to have the camera only moving with one player)
 - I added that the cubes will drop from the sky in a random position whenever a ball picks up a cube
- #6a - I implemented the jump such that the player can only jump whenever the player is touching the ground.
 - To deal with the issue with reacting to rapid presses and sometimes the jump button was not registered. I used the regular Update() method to check for the button press and used a variable to check if the jump button was pressed which is used in the FixedUpdate() method to apply the force.
- #6b - When the game is in the start screen the restart button is hidden until the start button is pressed.
- #6c - as mentioned before the camera is fixed since it was disorienting to have the camera only moving with one player
 - #6ci - Implemented!
 - #6cii - Implemented!
 - #6ciii - Implemented!
 - #6civ - I tweaked this feature such that the ball at the higher attitude must exceed a certain height difference threshold to reduce points to the lower attitude ball. (I did this because when the two balls collide with each on the ground one of them gets slightly bumped upwards and would count as a score reduction which seemed a bit unfair)
 - #6cv - Implemented!
- #6f - Here is the link to the game <https://simmer.io/@CreedSnake/roll-a-ball>

Extra Credit

- #6d [Extra Credit] - I have an announcement that shows up when the timer has less than 30 secs and an alert will pop up whenever a ball wins a collision (and will disappear in 3 seconds)
- #6e [Extra Credit] - The keyboard is probably the only control interface that best fit this game. Using a mouse is very unconventional and probably very hard to map to the

controls. Though using two joystick controller could emphasize the large arcs that the balls need to make when turning since we are applying physic forces to it.

Note

I was developing this game using a 1440p monitor so if the game runs on a 1080p monitor the UI elements might be bigger than normal.