

- Implementation:
  - Language Used: Unity
  - Tools Used: Unity3D and Visual Studio
  - Approach:
    - Firstly, created a 2D plane which will act as the base for all game objects like walls, sphere and obstacles.
    - Walls acts as the boundaries for the ball (player) to roll on the game plane.
    - There are some obstacles in the form of Capsules and walls.
    - The player has to collect some targets which are shown in the form of rotating cubes.
  - Challenges:
    - I face the challenge of aligning my camera view correctly and used lot of time in aligning it properly.
    - Debugging the application was difficult in case of null pointer or out of bound index errors.
  - Customization:
    - Added a light spot on the players and light source will move with the player.
    - Made Collectible targets continuously rotating and to protect them from falling down from the plane as the targets are Rigid Body.
- References:
  - <https://unity3d.com/learn/tutorials/s/roll-ball-tutorial>
  - [https://www.youtube.com/watch?v=W\\_fAidYRGzs](https://www.youtube.com/watch?v=W_fAidYRGzs)
  - <https://forum.unity.com/threads/rotating-a-rolling-ball.26396/>

- Snapshots:

## Main Camera

Directional Light

Ground

### ▼ Player

Spot Light

### ▼ Walls

WestWall

EastWall

SouthWall

NorthWall

Obs1

Obs2

Obs2 (1)

Obs2 (2)

Obs1 (1)

Capsule

MovingObj

Capsule (1)

Capsule (2)

Capsule (3)

Pickup (1)

Pickup (3)

Pickup (2)

Pickup (5)

Pickup (4)

### ▼ Canvas

Score Text

Win Text

EventSystem



