

# The Unity Challenge!

Task Duration:- 3 hours

**Objective:** Use Unity platform to create a simple game, to show your understandings of OOP, Unity3d, problem solving and data driven applications. The purpose of this game is to control one particular rolling sphere and collide it with 10 different randomly placed cubes which is of two different colors placed on a flat plane space. The game ends once when the cube collides with each other or the 60 second timer ends.

**Specification:** Scenes 0

1. **Main Menu: Starting scene for game**
  - To start the game place a button as “Start Game”.
  - Show the top score with the start screen.
2. **Gameplay: Where this awesome game lives in**
  - Where the actual game is played with the ball and cubes
  - After completion the player should be moved back to “Main Menu”
3. **Data:** Parameters for cubes and rolling sphere are: as per the color the points will be gained after the rolling sphere hits the cube.
4. **Map:** Map should be a limited, flat plane. Ten cubes should be spawned randomly on this map. Cube color will be selected randomly.
5. **Scoring:** Once the sphere collides with any cube, the score will increase with respect to the color of the cube with which the Rolling spare has collided.  
The streak should be displayed on the screen along with your score.

**Example**

- If the blue cube contains 20 points and the red cube contains 15 points. So when the rolling spare collides with the blue spare a streak should appear showing the gain of 20 points.

## Game play Instruction:

● Hits blue – gets 20 points ● Hits blue – gets 40 points (20 multiplied by streak = 2) ● Hits blue – gets 60 points (20 multiplied by streak = 3) ● Hits red – gets 15 points (Streak is reset) ● Hits red – gets 30 points (15 multiplied by streak = 2) ● Hits blue – gets 20 points (Streak reset) End of Game There is a timer that counts down from 60 seconds. When the count reaches 0, the game is concluded and the summary window displays some “Congratulations you gained XYZ scores”. Otherwise, if all cubes are collided with before the timer ends, the game ends and the player receives a bonus point of 1 for every second left on the timer. Good luck!

**Output:** Publish an output in the form of .exe formate.