Programming Coursework 2

For my programming assessed coursework 2 I have created four gaming mechanic components on the game engine UNITY and script software Visual studio. I have made a rolling, collectible, respawn and teleporting mechanics. I will combine these four components and create a game with them all being used in tandem. I used basic shapes in unity to help me display the mechanics in question. For the rolling component I created a ball from a sphere and a floor beneath for the ball to roll on from adjusting a cube into the said floor. I then applied the script to the ball. This script then enables the ball to be controlled by horizontal and vertical keys and for it to be moved on the floor. For my second component I made collectibles in the shape of coins to be collected by the player. I created a similar foundation as with the rolling component but added collectible coins. When the player collides with the collectible coin it disappears and is collected. This is done by the coin having a collider that is set to trigger. For the respawn component I made it so when the player falls of or dies the player respawns in the starting position. This was done similar with the other components using unity and scripting in visual studio. I had to add triggers , colliders and other similar facets on unity. For the final component I created a teleportation system. For this I made the player hit a certain invisible area and when it hits and triggers this area the player teleports to another destination. This required specific code and use on UNITY . I want to combine all the components mentioned to create a racing boulder marble game. The marble will roll down and up with momentum using the roll mechanic , on the way there shall be collectible tokens through out the level. There will be a respawn mechanic when you fall of the stage like in Mario Kart. Some parts of the level you need to go to a certain area that will teleport you to the next area of the level. I think all these components working together could make a great racing game, I call it Marble Run.