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Post Mortem: 3D Game

My fourth and final game that I created during this semester, and the second one that I created from scratch, was a 3D pool game. The player controls a third person camera surrounding the cue ball, and hits the ball with a pool cue. The goal of the game is to knock another ball that cannot be directly controlled into a pocket on the pool table. The third person camera and ball controls worked incredibly well. The strength of each shot can be easily controlled with a slider and the movement feels smooth. The collision and rolling speed are very accurate. Adjusting the drag and friction so the ball would not roll forever was tricky, but after some tweaking, it works rather well. I purposely made the holes oversized because the gravity is sort of floaty, and it would be incredibly frustrating if the hole was small enough for the ball to bounce out over and over. Another thing that worked very well was the ball respawn. After slowing down, the ball would reset its rotation and reinstantiate the pool cue and strength slider. This part was particularly difficult to code, and I am very happy with how it turned out. The modeling of the different game pieces also worked very well, the shaders for the balls and table look very good.

Moving textures and shaders to Unity was a tricky process that never really resolved itself. The textures for the eight ball and the felt-shader for the pool table would not load into the Unity editor. I had to manually reset all of the colors on the pool cue and the table, because their textures would not load. The other part of the game that did not end up working was the under table collider. In theory, if a ball collided with the object under the table, it would either scratch (if the cue ball hit it), or have the player win (if the eight ball hit it). Unfortunately, the collider was never able to detect any collisions, and I could not figure out why.

After this project, I feel that I am very familiar with 3D modeling software, where I had not a clue how to use it before. Also, I found that I have started to have a good grasp on coding language, and need to research answers and functions less often. I am very proud of how my game turned out, and from here, I can make this game much more fun and complicated, which was my goal from the very start.