For my final project I decided to make a game where the player tries to kick a soccer ball through a series of rings that move from side to side. There are 3 rings at various distances and speeds, and a ball is placed in the center of the screen. The player can use the 'a' and 'd' buttons to move the ball left or right in order to aim. The player holds down the space bar to build up kick power, and the ball is launched based on the amount of time the player holds the space bar. Once the ball travels a specific distance everything is reset.

My game could be improved by adding a physics system that would allow the ball to hit the rings and bounce off. A system of colliders could be implemented which covers each surface in the game for more realistic ball movements. Right now the bouncing and speed of the ball are based off an equation rather than actual air resistance or gravity.

At the end of this class I do feel like I have learned some important aspects of computer graphics and game design. I realize how difficult it can be to create a game engine from scratch, so given the task I would prefer to use a game engine that already exists such as Unity or Unreal. This class has definitely given me an appreciation for the work that goes into creating an engine such as those.

