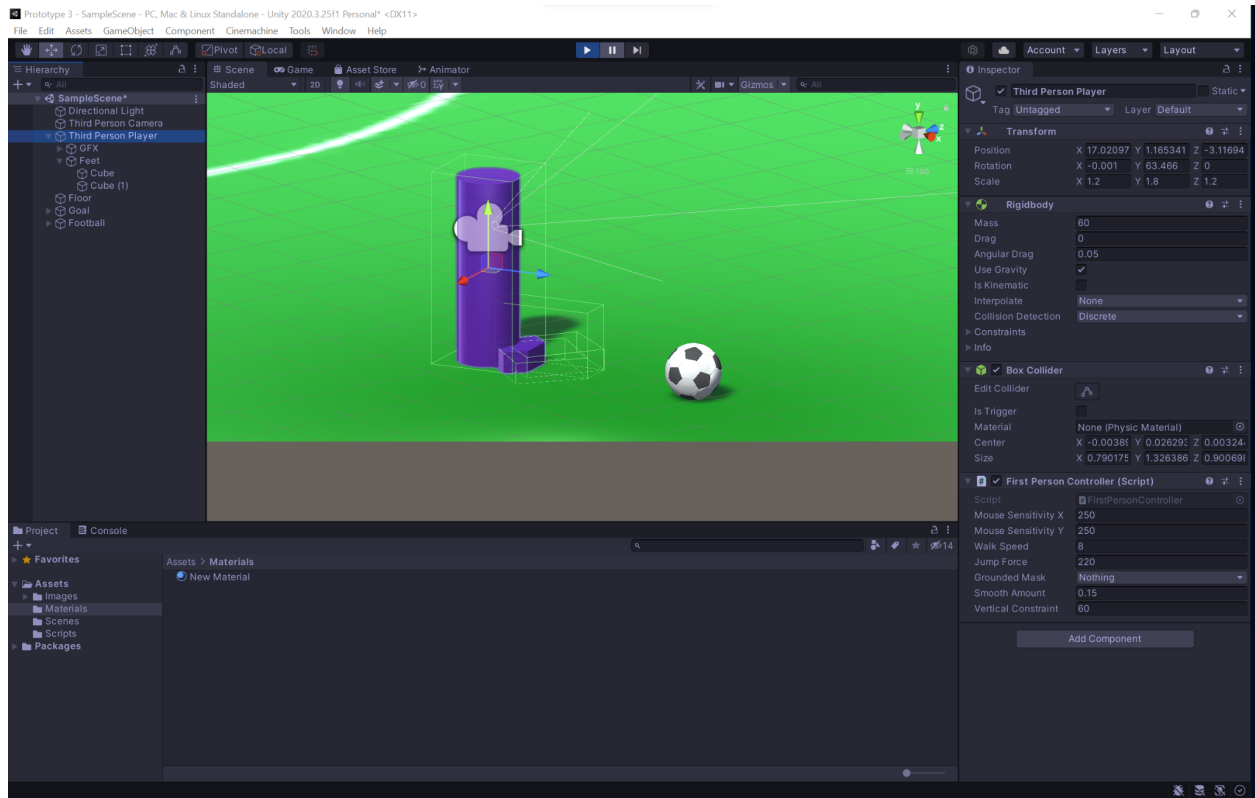
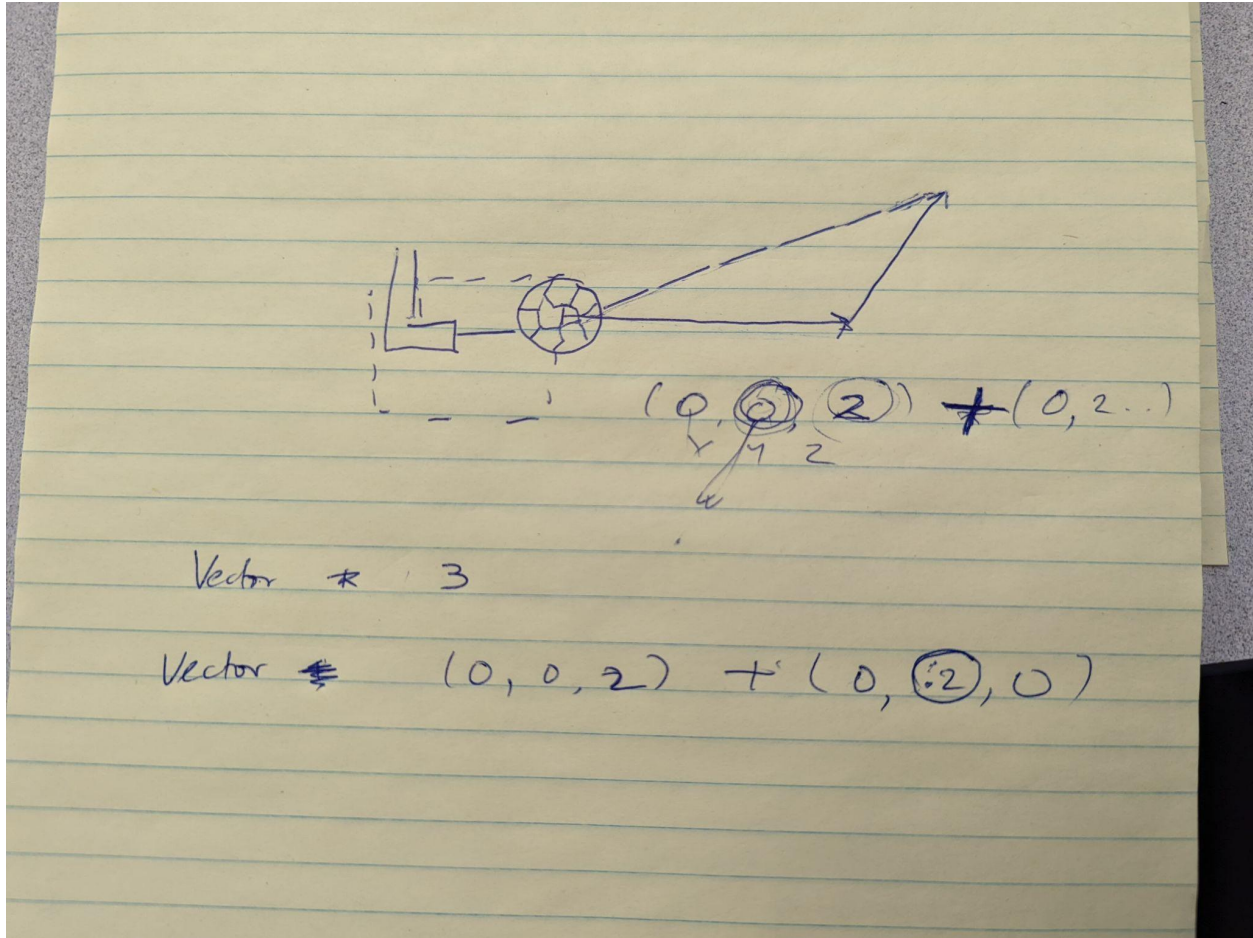


Whenever I happen to be watching Soccer with a friend who knows little about the sport, they tend to say the most ridiculous things. One comment that stuck out to me was “what if the players were allowed to fight with mixed martial arts rules?” That to me sounded like something I’d love to see, but would pay money to actually experience. I decided to make this prototype work towards a first person game of soccer to immerse the user in that experience.



I set up a prototype first-person player object. For the feet, I made a trapezium-like shape, which consisted of 3 reshaped cubes with their own colliders. Each collider was extruded a bit so that the player would be able to see the ball whilst facing forward and dribbling it. For the middle cube, with a script I made it so that it would exert a small forward force on the ball to simulate the nature of dribbling where you gently kick the ball forward to move it to progress it. However, this script does not affect the two colliders on the side. This allows the player to move diagonally/sideways with the ball whilst being able to maintain close control with it. In real life, players use the outside side of their feet to have close control of the ball, and I'm trying to simulate that effect here.



The picture above represents me trying to formulate how to get the player to kick the ball. I spent longer than I should thinking that raycasting was what would be needed, but eventually, I realized that using the `Vector3.forward` variable with the object of the player's feet, multiplying it with a force multiplier, and then adding a vector with a positive y value to add height, I was able to simulate the ability to shoot the ball. I copy-pasted that command and removed the addition of the positive y vector in order to allow the player to pass the ball across the ground. I also used a separate trigger box collider around the feet so that the player wouldn't have to be touching the ball in order to kick it.

I then used a capsule as a placeholder goalkeeper. I mostly used the ball's position, as well as a trigger collider over the 18 yard box to control their movement. It mostly just sets the position with fixed variables. I will be looking to make their movement more dynamic and intelligent with rigid body `addForces` in the future.

Finally, after adding some cones and adding functionality for the user to reset the simulation, I reached a point where I was happy with this as a working prototype.

Unfortunately, I didn't have time to program a kung fu fighting defender, but we will hopefully see that in future iterations.

Playtester Questions

1. How does the movement feel when dribbling the ball? Were you able to effectively dribble around the cones using the side of the player's feet, or did you rely on walking right behind the ball to push it in front of you?
2. Are there any more mechanics you'd like to see added for the dribbling to feel more dynamic?
3. Would you recommend any major changes to the shooting or passing? Are there any other types of kicks you'd like to see added?
4. Later down the line, I want to make this game more ridiculous, such as by adding a combat system. Could you please offer a few more stupid ideas.
5. Answer question 4 again, but don't allow yourself more than 5 seconds to think

Response to Playtesters

A lot of my playtesters noted how difficult controlling the ball was. I did not make it obvious to the player that they should be using the side of the feet to dribble the ball more carefully. Even so, I do feel I now need to add another mechanic to make dribbling the ball feel easier and more intuitive. Some playtesters suggested a 'sticky' mechanic where the ball could be made to stick to the player's feet. However, I prefer the chaotic nature of having to constantly push and adjust your position in order to dribble. I will play around with larger hitboxes, and a few extra mechanics to give players more agency on how they'd like to maneuver the ball.

A few had complaints about the shooting. Some wanted to be able to have more control over the shot's power and direction. One suggestion was to have a power bar where the player could hold the shooting button to charge up. Some mentioned they had difficulty scoring past the goalkeeper, which made me think twice about the element of randomness I wanted to add to shots down the line. In order to still be able to add that mechanic, I might consider sacrificing realism by increasing the size of the goal.

In terms of suggestions on how to make the game more whacky and absurd, I received dozens of hilarious ideas. My favorites included guns to shoot the ball and other players, kicking other players into their goals to score and a combat system. Most already seemed to really enjoy the falling over mechanics, even though I am yet to add functionality to get allow the player to stand up once fallen. Once I am able to

fix/add the features I've just mentioned above, I'll focus more in incorporating some of these ideas.