### **Assignment 4 - Soccer Scripting**

Estimated time: 1h

# Summary

#### **Assignment overview**

Use the skills you learned in the Sumo Battle prototype in a completely different context: the soccer field. Just like in the prototype, you will control a ball by rotating the camera around it and applying a forward force, but instead of knocking them off the edge, your goal is to knock them into the opposing net while they try to get into your net. Just like in the Sumo Battle, after every round a new wave will spawn with more enemy balls, putting your defense to the test. However, almost nothing in this project is functioning! It's your job to get it working correctly.

#### **Assignment outcome**

- 1. Enemies move towards your net, but you can hit them to deflect them away
- 2. Powerups apply a temporary strength boost, then disappear after 5 seconds
- 3. When there are no more enemy balls, a new wave spawns with 1 more enemy

## **Assignment preparation:**

- Download from Omnivox at assignment 4 the file: Assignment
  4\_Pack\_VGP233.zip.
- Create a Unity3D project, in your repo folder, with
  - "Name\_LastName\_Assignment\_4"
- Extract the content of the zip file inside the Assets folder of your project.
- In Unity, access Assets -> Import Package -> Custom Package navigate to your assets folder and double click on the extracted file:
  - **Assignment4\_assets.unitypackage** and a window will open, click on **Import**.
- Two folders will be created in your assets folder: Assignment4 and Course Library
- Open the folder **Assignment4** and double click on the scene **Assignment4**. That is the scene that you should work on.
- If you forgot the outcome shown in class, the folder instructions contain a video showing how the game should be at the end.
- You can delete the folder Scenes from your project.

#### **WARNING!**

When you import the assignment into your project, it is supposed to have bugs. The purpose of the assignment is for you to fix those bugs, which are listed below. Good luck!

#### **Bugs to fix (Total 10 points):**

- 1. Hitting an enemy sends it back towards you. When you hit an enemy, it should send it away from the player. (1 point)
- 2. A new wave spawns when the player gets a powerup. A new wave should spawn when all enemy balls have been removed. (1 point)
- 3. The powerup never goes away. The powerup should only last for a certain duration, then disappear (1 points)
- 4. 2 enemies are spawned in every wave. One enemy should be spawned in wave 1, two in wave 2, three in wave 3, etc (2 points)
- 5. The enemy balls are not moving anywhere. The enemy balls should go towards the "Player Goal" object. (1 points)
- 6. The player needs a turbo boost. The player should get a speed boost whenever the player presses the spacebar and a particle effect should appear when they use it. (2 points)
- 7. The enemies never get more difficult. The enemies' speed should increase in speed by a small amount with every new wave. (2 point)