LAB 3

PART 1

In this lab, we will use the survival shooter game developed in assignment 1 and make it compatible with a VR headset.

Make sure that you have a mobile phone, USB cable and Google cardboard with you.

Follow the steps below.

1. Download the unity package for VR (v1.110.0)
2. In Unity, go to Assets->import package->Custom package and select the unitypackage downloaded. Click on Import.
3. Go to Edit->Preferences->External tools and specify location of Android SDK
4. Go to File->Build settings and select Android. Click Switch Platform.
5. Remove the players' mesh and the animation.
   a. In the Hierarchy window, go to player->player and disable it (un check it in its inspector tab on the right)
   b. In root 'Player' gameobject, disable Animator and the Player Movement script from the inspector tab.
6. Shifting the camera
   a. Change main camera from orthographic to perspective from the inspector tab
   b. Move the Main Camera to the eyes of the player. The view from camera should look something like this-

   Make the Player gameobject a child of Main Camera.
7. Move Player gameobect a child of main camera. This makes sure that player (and the gun) rotates whenever the camera rotates.
8. Display score and life
   a. Change render mode of HUDCanvas to world space. Move the canvas such that it is in front of camera. This should be a child of the main camera.
9. Add VR camera

a. In the project window, go to GoogleVR->Prefabs and grab the "GvrEditorEmulator" prefab and drop it in the scene. This will rotate the camera whenever the headset rotates.

10. Build game
   a. Go to File->Build settings->Player Settings. On the right side, go to the 'Other settings' tab. Check 'Virtual Reality supported', set 'minimum API level' to 19 and 'Color space' to 'Gamma'.
   b. In 'virtual reality SDK's', add Cardboard.
   c. Click on 'Build'. An apk file is generated. Run it on your mobile phone.

In case of any error, check the console tab.

PART 2

In this part, create a menu which allows you to select which level to play. There should be three levels-

Level 1: Only Zombunnies
Level 2: Zombunnies + Zombears
Level 3: Zombunnies + Zombears + Hellephants

This tutorial explains how the reticle can be used.