# Programming Manual

Programming Specialism Semester 2

#### **FPS Counter**

- 1. Open a Unity project
- 2. Install and import the FPS Package
- 3. Right-click the hierarchy and follow UI -> Text TextMeshPro
- 4. Attach the 'FPSDisplay' script to the canvas
- 5. Drag in the TextMeshPro text into the 'Fps text' section of the script
- 6. Reposition the text where you would like the counter to appear
- 7. Turn off Vsync to prevent your monitor refresh rate from limiting your fps
- 8. Press play and your counter will now be counting the current fps

### Radar Package:

- 1. Open a Unity project
- 2. Install and import the Radar Package
- 3. Go to the 'Items' folder in the package and select 'RadarPoint'
- 4. Go to the inspector and select layers, and add a new layer
- 5. On Layer 6 add 'Invisible' and on Layer 7 'Radar' (These must be spelt properly)
- 6. Go back to the 'Items' folder and select the layer again for the 'RadarPoint' this should automatically gain the 'Invisible' layer, same with 'RadarPoint1' if they do not assign these layers to them
- 7. Go to the game view and at the top change from Free to Full HD 1920x1080
- 8. The scene supplied has 5 enemies but to add additional enemies go to the radar script and open the 'Tracked Objects' and simply drag in objects you wish to be tracked as enemies

## Scrolling Text:

- 1. Open a Unity project
- 2. Install and import the Scroll Text Package
- 3. Download any repeating texture from the web, or use the material provided in the scene
- 4. Create a plane in the scene and attach the repeating material
- 5. Attach the 'Scroll Tex' script to the plane
- 6. Edit the values on how you wish the material to scroll
- 7. Press play and the texture will begin to scroll seamlessly indefinitely
- 8. Duplicate this plane and edit the values of this new plane
- 9. Press play and you will have 2 varying scrolling textures

## SpeedOMeter Package:

- 1. Open a Unity project
- 2. Install and import the SpeedOMeter package
- 3. Create a UI canvas
- 4. Create an image and add the SpeedOMeter Graphic
- 5. Attach the SpeedOMeter script
- 6. Create a UI text child to the SpeedOMeter and centre it in the middle of the graphic
- 7. Create an empty child object to the SpeedOMeter and call it arrow and create a child UI image for that arrow call it an image
- 8. Attach the arrow image to the UI image (You may need to adjust the pivot centre of the arrow image to the bottom to make the rotation better)
- 9. Within the 'SpeedOMeter' script in the inspector, window attach your Player who must have a rigidbody component
- 10. Go to the arrow game object and rotate it so it faces the minimum value and maximum value on the SpeedOMeter graphic and add these values to the script in the inspector
- 11. Assign the Speed text and the arrow image in their respectful sections
- 12. Press play and the SpeedOMeter should be tracking your speed