**Reflective Statement – Shaharin Gani Rashid**

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Description automatically generated**I have chosen to do programming specialism due to the fact that I would have control of the little details that a game might have like controls, or game resolution settings, my end goal for doing programming specialism is to learn most computer languages and be proficient at it, that way I would be able to make games and be able to switch between languages and have more flexibility when it comes to making games, or even be able to expand outside the games industry, learning how to code games will also allow me to make games by myself in the future.

For my first brief I have chosen to join two different briefs together in order to utilise what I am able to make, to which at this point I have decided to make a basic game, where cars are able to race each other, at this point it is an unfinished game since I have still a lot more to learn in order to complete what is needed for a game, however, I have been able to test a lot of things with the first brief, from importing packages to make the accelerator, to making my own Text mesh pro on a panel in order to make the fps counter. I have learnt a lot of this as well, learning from things like how to build terrain, to being able to manipulate the colliders that exist within the car, I have also had the chance to learn how to implement different controls within the game, even thought for now I have stuck with the arrows, other things that I have also learnt is being able to code in a Motor in order for the car to function and since the car has a motor I also had to learn how to create or learn to code the cars braking, as well as the steering of the car and learn to edit the steering angle and how too much of a steering angle does not turn the car at all since the speed makes the car understeer.

For my second brief that I have included into the basic car game too, I have chosen to create an FPS counter, the FPS counter is able to tell the user the number of frames per second the computer can handle when the game is running, an FPS counter is able to tell how smooth the game is able to run according to your computer, if the user wants to achieve a better fps number, or a higher fps number, than it may be better to lower the graphics settings since if the game is running at high settings there would be a significant change, a big noticeable change that the user can see, the game will slow down tremendously as well. I faced some challenges when it came to creating this FPS counter or meter, the challenges that I faced were mainly between the code, on having to figure out how to get the calculations correct in order to give an accurate number. another challenge that I faced was being able to place a panel on top an existing canvas, the issue I faced was when I tried to include the TextMesh Text

Description automatically generatedthe texts would not come up, therefore I had to redo or go back a couple of steps in order to start again but double check everything that I am doing, that way I was able to not only check for mistakes that I was accidentally making, but I was also making other improvements that I was familiar with.

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Description automatically generatedThe third and final brief that I had chosen to do, is to make a functional radar that tells the user where the other users or Non-playable characters (NPC) are within the game are, I have had some trouble coming up with the code for this brief since I had to come up with two different scripts, one of which is for the radar itself and being able to detect the other Non-playable characters. Some things that I learnt to include within the scripts are the diameter of the radar, and how far the meter can detect the position of the non-playable character according to the main user, being able to calculate the angle as well as the distance from the user. Other things that I had learnt from the tutorials on how to make the radar include things like the direction that the main user is facing compared to the non-playable character. I had faced many problems along the way but was at the end finally been able to solve the issues that kept popping up for example I wasn't able to run the mini game since errors like words not being recognised or missing variables or missing semi colons. Some big mistakes that I had make was accidently deleting a game object or importing a file that had corrupted my whole game, having to make me make the whole game from scratch so I don't run into existing problems, instead start from a blank slate so I don't run into those problems again.

Over the course of this assignment, I have learnt many things from learning the basics of coding to learning how to script movement and complex coding, coding that I had found so difficult that I had to look up tutorials for it and copy from tutorials one line of code after another. I have been able to mostly learn from my mistakes, which I will make sure to not do in the future, I have also been able to take advantage of learning from little mistakes that I have learnt from coding that from now on I will be making sure that I double check every line that I write.

***I have used these tutorials in order to complete the briefs:***

<https://www.youtube.com/watch?v=O8is_EikILA>

<https://www.youtube.com/watch?v=J0gmrgpx6gk>

<https://www.youtube.com/watch?v=pxB6zFDI068>

<https://www.youtube.com/watch?v=WKF_3BLD4-8>