

Reflective Report

I first started week 3, by choosing the 2 briefs from the advanced options and decided I wanted to try and complete the bowling brief I attempted from the previous specialism. The two advanced briefs I chose were the name generator and hit a moving target. I then made a google document and started finding links from youtube to tutorials that I think would be useful to me in the future for when I begin coding the briefs.

The first brief I started working on was the name generator in week 4. I started by searching youtube for some tutorials and creating the scripts I would need for the brief. The first way I set up the scene was by creating a script using all the letters from the alphabet to create a randomly generated word; However this wasn't what the brief asked for; The brief said you have to create pronounceable words. I found the best way to do it for me was using text files that contained prefixes, suffixes and root words and randomly generating a word for the shuffled Lists. I made each individual list and then imported the text files into unity. Next, I set up the scene with a button and an empty text box for the word to be displayed in. It took me 3 tries to get this script correct, because the tutorial I was following only had one text file. I asked for some guidance from my lecturer and was told all I needed to do was repeat some parts of the script 3 times, as I had 3 text files, and then add them up at the end to create a word. Once I did this, it was working and I had randomly generated words from prefixes, root words and suffixes combined together. By the end of the day I was finished with the randomly generated word and just needed to make a non duplication script and an obscenity script, so I made 2 empty game objects named 'Duplication checker' and 'Obscenity checker' for the next time I come back to this brief.

The next brief I worked on was the bowling script. My aim was to make a proper ten pin scoring system as I only had a simple score system that added up points for each pin that fell down. I figured that I would need different slots for the different scores, so I made two slots and then redone the scoring script to make the scores appear in the respective score texts. I then also made a total score text box, so that the two scores could be added up like in an actual ten pin bowling game. The scoring system worked for the first few rolls but then after the first 4 rolls the first score box updated to a '-', which indicated a strike, even when there wasn't. I searched the internet for days trying different codes and nothing was working properly, so after a week I went on to try a new brief.

In week 6, 'Hit a moving target' was the third brief I attempted. I found on Youtube a series I could follow and then at the enemy tracking part I changed the code to use the players position and velocity to aim and shoot at. This took me 3 days to complete because I tried to cut corners thinking I wouldn't need certain scripts like

the turret moving script, but I did. So I restarted the project from scratch and followed the specific videos I needed in the Youtube series accordingly to avoid the problems and confusion I was running into from before. I set up the scene nicely with colourful prefabs, added path patrol points for the Enemy AI to move along and then organised the assets and scripts. I then went back to trying to complete the other briefs I had in progress the following week.

I went back to the random name generator in the 7th week, and searched on github and other coding blogs for duplication scripts. I then put these scripts on the empty Duplication game object and to my surprise none of them worked with text files and lists. So I started to do trial and error myself from scripts I did find and tried to adapt them for my project. I created a script that recognized a duplicate word, but didn't delete it. So the next time I went to class, I asked for help and found a solution. The last part I had to do for this brief was create an obscenity checking script.

The next week I went back to the bowling script, and after not making any substantial progress in 4 days, I decided it would be best if I did 2 beginner briefs as I was running out of time and I still had a lot of work left to do for the ten pin bowling brief.

The 2 briefs I chose to do were, Instanced Scrolling Material and In Game FPS Counter. However, before I started these 2 I wanted to finish the random word generator. I went to research different scripts for obscenity or profanity checking. I found a video on Youtube that did just this and the replaced the profanity with '****'. I added the script I made onto the empty Obscenity checker game object, however it did not work. In order to overcome this I realised that the video tutorial I followed wasn't tailored for lists in unity, but for the unity input text system. So I looked back upon the duplication checker script I previously created for how I had to alter it for lists and text files and did the same for this obscenity checking script. I made a whole new text file that includes a list of combinations of letters that are never next to each other in the English dictionary and some profane words. Once I altered the script for lists and text files it worked and I had just completed my second brief.

The third brief I started on was the FPS counter system. I found a simple and easy video to follow on Youtube and started to set up my 2D scene. The tutorial was very straightforward to follow, but it was just a blank blue screen with the FPS counter text in the top left of the screen. So to make it more interesting I created a script for a randomly moving circle on the screen to see if that would affect the FPS counter. Once I finished that, I made it a prefab, added borders to the scene for the circle to bounce off of, and changed the colour of the background. This was the brief complete in a few hours.

The final brief I attempted was the Instanced scrolling material. Like with the FPS counter I searched youtube for tutorials. The first tutorial I found and followed had me creating a shader using a unity shader graph. So I made my own texture in

Photoshop of a side scrolling Red Carpet scene and this all worked at a reasonable pace. Nonetheless, this isn't what the brief asked for; It specifically stated that the material needed to be scrolling by script. For this reason, I went to go and look for another tutorial for guidance. I first found a seamless tileable texture to be scrolled on a plane object in unity. The next tutorial I found and tried that used a script didn't include the 'Time.deltaTime' function, which was also a requirement for the brief. The last tutorial I found was different from the second tutorial I found because it had 'Time.Time'. As a result of this, I decided to create my own script using parts from both of the previous tutorials and then times the horizontal and vertical scroll time by the 'Time.deltaTime' function. This final brief was completed in a few hours.

What went well was that I felt my knowledge of coding has increased and I feel more confident in myself to create scripts using just my knowledge. In the future, I will plan my time better so that I will be able to show the best of my skills and challenge myself more.