**Brief Reflection – Programming Specialism**

**Brief 1: Auto Scaling Text Boxes**

I chose this brief because I wanted to learn more about Unity’s UI systems. This brief seemed perfect for learning additional information about the UI in Unity. When working on this brief I was inspired to make a system that worked dynamically for any length of text the user wanted to use with it. The system also had to be designed in a really efficient way to ensure minimal stress on the system running a game using this. Mechanics such as this though simple play a large part in some genres of games. The finished product turned out very good and I was happy with it.

Whilst working on the brief I discovered Unity had a system already developed that was supposed to be the solution to the brief. Though this already built feature was reported to not be working properly as intended by the Unity developers.

Overall I believe I performed well on this brief as I was able to research how to make the system work efficiently.

**Brief 2: FPS Counter**

This brief interested me greatly as it was something that I could use in almost every future game design project I work on. When researching how an in game FPS counter worked I was able to find a few different solutions to getting it to work. This quick and easy feature to implement into any future project allows for potential debugging options, especially when running a build of a game. Being able to see FPS drops in certain areas of a game can lead to greater optimisation of a game.

The great usage potential of this brief inspired me to work on it and I believe I was able to make a very clean and reusable asset. Working on this brief I also discovered more about the technical side of game development and learnt a few tips and tricks about optimisation.

My performance while working on this brief I believe was very good as I was very motivated to create a solution to it.

**Brief 3: Shuffle**

This next brief was interesting to do as it was a feature I had come across before and had struggled on. This time round I was able to create a solution to the issue and make a list of anything shuffle at run time. By working on this brief I learnt about a lot about Unity’s and C# collection systems and how they work. While working on this brief I was very happy to be able to solve a problem that I had encountered a while back. This gave me additional inspiration to work on this brief.

Due to my successful outcome to the brief response I see my performance as very good whilst working on the brief. The final product of the brief turned out really well and whilst working on it I didn’t stumble on any mayor issue or road blocks.

When choosing to work on this brief I went in with the intention to learn more about C# and Unity’s systems. Upon completing the brief I had learnt a great deal about my intended learning goals.

**Brief 4: Speedometer**

This brief was quite intriguing. The goal of the brief was to create a speedometer in game. This required a fair amount of maths. Additionally I had to calculate Unity units into real world unity. This brief though straight forward had the most road bumps of all, this was due to having to learn certain mathematical practices. Overall the end product turned out well and the asset produced will work perfectly for any racing games I happen to work on in the future.

My learning goals for this brief were different as they were not as related to Unity but to real world maths. This brief was entertaining to work on however because I felt like I was learning more and making progress whilst doing so.

This brief went really well and I felt my performance on it was also good as I was able to overcome mathematical challenges and create a functional system that could be reused and adapted.

**Working during COVID-19**

Being forced to work from home has definitely made completing the briefs different. Without being able to change my work environment it has been harder to initially get motivated to work on the briefs. Being able to just put stuff off till later as there is nothing to do at the moment an hardly any commitments to uphold has made getting started on briefs tricky. None the less I have been able to get four briefs completed and have been able to learn a great deal from working on them.

**Related Projects**

Whilst working on the briefs I also experimented with some other projects. These mini projects allowed me to learn some additional skills during the semester. By doing these mini projects I was able to create more reusable assets for my future projects. By changing and varying what I was working on it allowed me to be more creative with the briefs overall as my approach.

One of my mini projects was a VR escape room game that I worked on over the course of two days. Working on this game taught me a lot about VR development and how it differs from regular game development. By working on this project completely solo I was also able to develop my skills in other areas of game development.

**Planning**

Over the semester my goal for the briefs was to complete one every two weeks. I was able to do this. Keeping a schedule like this allowed me to stay motivated and not get behind on the briefs. By keeping a strict two week per brief schedule it greatly helped me to not leave the briefs to the last minute. Overall this gave me more time to work on them as there was no crunch time.

**Group Projects**

Over the semester the group projects given were challenging in the aspect we had to help one another greatly to stay motivated to complete the tasks. Especially with the current world situations, working remotely on some tasks was sometimes difficult. The asset jam group task was interesting. Being tasked to make something extremely reusable was a great learning experience. As the programmer for the group it fell on me to ensure everything worked by the hand in date and I was tasked with putting everyone’s work into a single project.

Overall the group projects went well and I am happy with my performance and my teams. A lot was learnt from doing short notice and duration tasks.