**Project Postmortem**

What went well?

Throughout this project, I have learned a variety of valuable new skills. Before undertaking this project, I had no previous experience using virtual reality and had never developed a game for virtual reality either. I learned how to set up a project to be compatible with virtual reality and learned how to set up the camera within the scene for VR. I now have an understanding of the pros and cons of VR, as well as gaining experience with the challenges involved in developing for Oculus Rift. I also gained more familiarity with lighting and setting up objects and materials within Unreal Engine, down to creating emissive maps which were compatible with UE4 and learning how to fix problems I was having with opacity. In addition to this, most of my previous experience with 3D modelling had been hard surface modelling, creating artificial environments and objects. I had little knowledge of organic modelling. However, after researching into tranquillity and wonder, I found that these emotions (particularly tranquillity) were most commonly found within natural environments. This meant that in order to meet the brief, I would need to learn how to model organic forms. Despite my lack of previous experience, I feel that I have successfully managed to create a variety of organic objects and create an environment that elicits feelings of tranquillity and wonder.

I believe that I made sure to research tranquillity and wonder thoroughly, and planned my project around this research. I made sure to incorporate this research into every step of the project and my models, even ensuring it was included in details such as the colour pallete I chose and the sound effects I decided to include. I created mood boards at the start of the project, which I regularly used for inspiration. I enjoyed the challenge of trying to elicit these specific emotions in the player, making sure to regularly ask people for feedback and what they thought could be improved. I also made sure to keep viewing my project in VR, as I found that it was much different viewing the project within VR rather than just in the Unreal Engine viewport. I also made sure to take detailed noted when meeting with my specialist tutor Dave Pimm and took on board any advice I had received. I made sure to ask him about specific details when meeting, such as asking about the grass in my scene, the time of day and which sound effects I may choose to include.

I managed to produce every model I had intended to make in the planning phase, along with a few extra assets as a result of my meetings with Dave and feedback I had received. I made sure to manage my time to be able to complete this project to a high standard on time.

I also believe that I managed to push myself to learn new skills rather than relying on knowledge I already had, which took a lot of trial and error but allowed me to not have to compromise the vision I had for the final outcome.

What could have been improved?

I found it difficult to balance my assignments, which meant that there were weeks I had to spend a lot more time than anticipated on this project in order to meet my milestones and finish the project on time. Although there were weeks I was busy with other assignments, I made sure to spend the extra hours I needed in order to complete all of my milestones. I also had some problems setting up the Oculus Rift headset as I had never used one before.

What did I learn?

Originally, I had a lot of difficulty trying to learn how to model organic forms. However, I believe that I have created a fairly successful natural environment. While I found it challenging at the time, I am grateful for the experience as it will allow me more flexibility when applying for jobs in the future. I also enjoyed pushing myself to learn new techniques rather than sticking to things I had already learned while at university. I also needed to use my problem solving skills a lot during this project, as I overcame a lot of obstacles during the development of my VR experience.