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Proposal Project

Double Project

Assignment 1

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Widely known are the Seven Wonders of the World from the ancient times, a list compiled as early as the 5th Century BC, but lists with new Wonders have been updated as recently as 2007. (Seven Wonders, 2007). I am going to recreate seven of these wonders choosing from manmade elaborate constructions to phenomenons of the natural world. I want my project to be visually appealing, have a stunning effect on the viewer and show respect to the innovative technological capabilities of past generations and marvels of our world. It has to be realistic and therefore have opted to create a virtual reality experience.

The Seven Wonders I have chosen are The Taj Mahal, Great Pyramid of Giza, Stonehenge, Great Barrier Reef, Bell Rock Lighthouse, Rings of Saturn and the Amazon Rain Forest. I will include the surrounding environments to provide a more realistic and immersive experience.

The Wonders will be modeled in 3D and I will endeavor to produce them so they mirror their real life counterpart. The experience of seeing a model or video is not the same as exploring a landmark from a first person perspective in virtual reality (VR). Experts in industrial engineering believe VR's goal is to 'deceive and represent a truth that can educate, train, entertain and inspire.' (Hale and Stanney, 2015, p.3).

The travel and tourism industry is beginning to realise the potential of virtual reality. For instance, Thomas Cook has used virtual reality to promote a trip to New York by allowing interested parties to visit it in VR. This has resulted in an increased uptake in trips to New York by 190% (Bloomberg, 2015), and therefore can also be used to 'entice' prospective tourists to places such as the 'Taj Mahal' in India or the Amazon Forest in Brazil.

It could also be used as an educational tool, creating a unique learning experience and inspiring users to investigate and research other 'wonders'.

The possibilities are endless, not only could a student travel to exotic locations whilst still in the classroom but also learn about the importance of preserving these antiquities and conserving the natural world.

The software products I will be using are Maya, Mud Box, Photoshop and Unreal Engine.

The VR experience will be seen through the Oculus Rift as it provides an extremely realistic immersive sensation. Unfortunately the Rift is expensive so I will also create a VR app for smartphones, which will showcase my Seven Wonders of the World simulation. This would be advantageous for the travel and tourism industry as the app would be readily available for consumer use and could generate interest in visiting these places. An app would be beneficial as an educational tool because of the age restrictions on the Oculus Rift for younger people (Vrfocus, 2016). The app could be used in conjunction with Google Cardboard, which is easily available, affordable and does not come with the same regulations as the rift. Two of the biggest brands, therefore McDonalds and Coca Cola have also embraced this concept encouraging youngsters to create VR headsets from their cardboard packaging (Wired, 2016). The app will be created and packaged after my VR experience is completed by following instructions on the Unreal Engine website. I anticipate creating a simple website where there will be more information about the Wonders and will also be used as a marketing tool for the launch of the app. The website will be built using Tsohost and Wordpress.

The models have to be built and rendered to a high specification. This will be quite time consuming but with careful planning I feel that I will be able to complete all seven. Initially I will aim to complete the Taj Mahal as it is the most complicated and decorative building and then continue to work on the others.

Sounds will be added according to each environment. For example, the Taj Mahal will have a soundtrack that will resonate the sounds of Ancient India. (Youtube, 2009) (Youtube, 2012). I will also add voice recordings of

tourists visiting to add to the authenticity. (Youtube 2010) (2013). The Great Barrier Reef will include a relaxing theme that will fully immerse you in the environment. (Youtube, 2016).

A technical problem I will need to overcome is to ensure that I set the correct settings in Unreal to avoid simulation sickness when the rift is used. Extended use of the rift does build up intolerance to the sickness though breaks are recommended to avoid eye fatigue. Ensuring the acceleration of image movement is at a steady pace also helps with motion sickness.

(Developers,2016). I also need to ensure the scales of the models are similar to their real world counterpart to provide an immersive experience. Another possible issue is the 'screen door effect' where the viewer can see the lines between the pixels because they are viewing the image from within a headset at a very close range. This cannot be avoided but by creating models that are visually enticing and an environment, which is interesting to explore, the viewer tends to ignore the pixels because they are not fixated to one image. Another issue I anticipate is creating the app. As a practice run I have tried launching an app for a previous project and though parts of the set up have been successful I still need to troubleshoot a few issues.

This project will be challenging, as I will be building intricate models and managing a huge amount of work at the same time. Until the models have been created I will not be able to upload them into Unreal and know what adjustments are required. There will be a lot of going back and forth and tweaking to fine tune my project.

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