

Computer Games Development

Project Report

Year IV

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[Declaration form to be attached]

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# Anything marked with red is still to be written

# Acknowledgements

I would like to thank the following people who assisted in completing this project including;

John Doe of ACME who kindly agreed to …

I would also like to thank ICME for use of ….

Use this template when writing your research report. As a rule of thumb, the report should be of the order of 10 pages (about 250 words/page).

# Project Abstract

The VR game genre became popular in recent years, slowly more and more people try to get their hands on VR technologies this allows users to plunge into virtual reality environment. The emergence of new and modern VR headsets such as HTC VIVE, Oculus Rift and many more stimulated the rapid VR development in the game industry in recent years.

On the other hand, Survival game genre has been on the market for a long while yet always brining something new to excite people and making the companies have competition on which survival game is better yet always surprising players by brining something different to the market. Some survival games after realising they end up doing a version of the game for a VR which always attracts new players. With my game being made in VR I want to bring my own game to a great standard that will have some new features that will make my game unique.

I chose to create this game in a game Engine that is very known and it is Unity game Engine, I will try to create a very optimised game that will run smoothly on any VR headset and I was also wanting to bring something new to that game genre.

# Project Introduction and/or Research Question

The Project I have decided to pick and do is a VR Survival game.

**Why VR?** I have never worked with VR or never seen how that process is made. This project also was chosen because I wanted to learn about VR games as in spare time, I’m trying to develop games/ modifications for different games and releasing them online.

**Why Survival game for the first game in VR?** Having learning about game development I wanted to do something that would challenge me and at the same time educate me and something that would expand my knowledge.

The game will present the player with a cold environment in which they will have to survive and beat few goals of the game to complete it. In the game the user will face different puzzles and different Advanced AI that will try to stop the player from completing the goals. The players main goal is to fix a crashed plane that they will use to escape the dangerous area in which they are trapped in.

**How This project will challenge me?** This project will challenge me in several different ways. First one is that I never worked with VR technology. This will require me to research into the topic on how to create a project file from scratch to suit a specific VR set (HTC VIVE), Input system will be difficult and controlling of any object by the player.

Another challenge that I will face is creating advanced options and controls for the player and also AI that player will be facing against. The AI will need different edge cases not to get stuck or bugged out to provide the player with smooth gameplay.

A big challenge that I will face is the graphics of the game, as many VR games if not done correctly they can make the user feel motion sickness so I have to make sure that the graphics of the game or camera movement will not cause it. Also while creating a game I need to remember that the game is created for VR, that cant be overloaded with very high graphics in order to run smoothly without interruptions.

# Literature Review

Replace this text with an appropriate Literature Review.

The literature review places your research in context. You aren’t the first person to investigate or research a particular topic. Present a short literature review with the following goals:

* Give the reader a good overview of the key concepts;
* Describe the most relevant work (in your own words) that other people have done in this area;
* Use proper academic writing with references.
* Show how the existing work influenced your project.

# Evaluation and Discussion

Replace this text with Results and Discussion.

Describe the results using diagrams such as graphs etc. as appropriate, and discuss what the results mean.

Example: Results indicate that once the threshold gets over a certain point it significantly reduces player performance and player experience

**Project Milestones**

Replace this text with Project Milestones.

Key project milestone dates and measurement on schedule, was project schedule adhered to, effectively planned for delivery on-time or ahead of schedule if appropriate.

**Major Technical Achievements**

What are your major technical achievements?

**Project Review**

What went right? What went wrong? What (if anything) is still outstanding/missing (i.e., still left to do)? If starting again, how would you approach this project differently? What advice would you have for someone attempting a similar project in the future? Were your technology choices the right or wrong ones? If you chose the wrong technology, provide justifications for why you think this. What were the implications of your technology choices?

# Conclusions

summarise your work and findings.

**Future Work**

Indicate what might be some next steps to try (if a student next year was going to undertake a project in this area what might be an interesting thing for him/her to examine?).

# References

# Appendices

Replace this text with Appendices.

This might include ethics application and other relevant material e.g. copy of any questionnaires used.