

Computer Games Development

Project Report

Year IV

C00246189

Andrew Greenslade

Date of Submission: N/A

**Contents**

[Acknowledgements 2](#_Toc54714373)

[Project Abstract 2](#_Toc54714374)

[Project Introduction and/or Research Question 2](#_Toc54714375)

[Literature Review 2](#_Toc54714376)

[Evaluation and Discussion 3](#_Toc54714377)

[Conclusions 3](#_Toc54714378)

[References 4](#_Toc54714379)

[Appendices 4](#_Toc54714380)

# Acknowledgements

I would like to thank the following people who assisted in helping to break down the game and its features along with helping to complete this project including:

* Lei Shi, who helped me with coming up with the general concept for the game and helping to break down its gameplay for problems and issues that may arrive and coming up with possible solutions to them.

# Project Abstract

With the rise of blockchain technology’s presence in everyday life, from news reports of ‘crypto-crashes’ to individuals investing in these technologies e.g. cryptocurrencies like bitcoin/Ethereum, the games industry has become no stranger to these technologies. Over the last few years based on the rise in games featuring these technologies, it has become its own genre on storefronts that allow the use of them. E.g., <https://chaingames.io/>

Even with the variety of game types including different blockchain technologies, like racing games, card games, etc, they all are the same type of systematic approach where you are rewarded for doing a certain task, e.g., mining in a game for rewards, earning a card in a game as a NFT, etc. I aim to make my game different by having a randomised reward type of approach, like a loot box/fortune wheel.

# Project Introduction and/or Research Question

Over the last few years, blockchain technologies such as NFT’s (Non-fungible token’s) and Crypto currencies have surged in popularity and the topic of them have even hit mainstream media and news reports on multiple occasions, nearly on a daily basis on multiple Government run news outlets. With is gain in popularity, the games industry has also adopted these two technologies on a mainstream basis. One example of this is with the company Ubisoft, with Ubisoft Quartz, where you can earn, purchase and trade NFT’s that give in game items like unique weapons, armour, etc. A side effect of these technologies are that most of the players that play these types of games that focus around NFT’s or crypto-currencies aim to play with a purpose of making money.

An example of these economy base game’s that has this effect is CSGO (Counter-Strike: Global Offensive), where you can earn crates you can pay to unlock for sometimes unique weapons skins with or without stickers which increase the skins resale value. In this game it has also been applied to graffiti spray’s and sticker capsules you can put on your gun skin, as well as trade or sell individually.

With this project I aim to Investigate the process and technical challenges involved with making a blockchain based multiplayer game. The purpose I chose this project was to develop something that I could take into my future and possibly use in a games and software development role along with expanding my knowledge in a area of games I haven’t had experience with to date.

-----------------------------------------------------------------------------------------------------

Not gone beyond this point

-----------------------------------------------------------------------------------------------------

Here you present to the audience what you are doing and why it is important. In essence, please provide an introduction to the project, why was it chosen, the potential impact of this research. You should state a research question (if any) and present the project objectives. This will most likely be a concrete question probably from one specific area, such as AI, Networking, Graphics etc.

E.g., Research Question Example (Networking): What is the effect of threshold size in the dead reckoning approach on player performance and player experience?

Summarize the main contributions of the project.

# 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.