1. Introduction
   1. Abstract

The purpose of the project is to publish a 3D game with graphic shader functionality. The unreal engine is used for the development of the real-time game. The theme of the game is roguelike and the goal is to escape from a dungeon with a co-op combat system.

* 1. Executive Summary

There are over 73,000 games are published in the Steam and the number of games released in Steam is increasing every years. Team have to represent a model that is following public interest in general, but have to be unique in a way so that the game is attractive. Some contents in the game must be regulated before publishing such as hate-speech, copy right, and more.

1. Motivation
   1. Competitive Analysis

| Game | Feature | Image |
| --- | --- | --- |
| [Darkest Dungeon](https://store.steampowered.com/app/262060/Darkest_Dungeon/) | * Trun-Based Combat * Rougelike * Unique drawing * 2D Game |  |

The Darkest Dungeon is a challenging roguelike turn-based RPG with unique gothic 2D drawings. The successful feature of the game is psychological stat system in the game such as horror, stress, and disease that increase and sometimes decrease difficulty of the game. This feature helped the game to gain popularity as difficult game but also upset players because of too much unfair randomness that leads to mostly negative events. Thus, it is recommended to think a model that is more fair and not too random.

| Game | Feature | Image |
| --- | --- | --- |
| [Warriors: Rise to Glory!](https://store.steampowered.com/app/582330/Warriors_Rise_to_Glory/) | * Trun-Based Combat * Rougelike * Online Co-Op * Multi-player * Comedy |  |

The Warriors: Rise to Glory! is rogue-like turn-based combat game. In the game, you create a gladiators with different styles and fight against enemy in the arena. The successful feature of the game is customizable character with various items and meme to entertain players, but some memes are outdated and arkward. It is encouraged to add adding more items to customize the character as free as possible, and put more recent parody to entertain players.

| Game | Feature | Image |
| --- | --- | --- |
| [Monster Hunter: World](https://store.steampowered.com/app/582010/Monster_Hunter_World/) | * Real-time Combat * Co-Op * Multi-player * Action * Open World |  |

Monster Hunter: World, is real-time combat game. The game is open world using everything from disposal of the monsters to hunt down stronger monsters in the world by teaming up with other players. The successful feature of the game is great action with vivid combat effects and smooth movement. The downside of this game is too much repetition to gather items for upgrade. If possible, it is promise to reference the movement and effects in this game to improve combat effects in team’s game.

* 1. Journal Articles

1. [WHAT GAMES ARE SELLING ON STEAM: THE Q2 REPORT](https://howtomarketagame.com/2024/07/16/what-games-are-selling-q2-2024/)

* The author researched that there are about 8,362 games were published in Steam as of July 2024. It is important to follow trends to attract players within a month because the game will be deleted from list of steam algorithm which is based on earning 1000 reviews for recommandation. It is promising that co-op (and other multiplayer games) are very popular in the industry but action roguelike games are decline after too many copies of game called, “Vampire Survivors”.

1. [MOST POPULAR VIDEO GAME GENRES IN 2024: REVENUE, STATICS](https://rocketbrush.com/blog/most-popular-video-game-genres-in-2024-revenue-statistics-genres-overview#:~:text=On%20the%20console%20front%2C%20the,shooter%2C%20and%20role%2Dplaying.)

* According to statistics, the game genres including RPG, strategy, and adventure games will still be a popular game genre in 2024. The game will be roguelike which is defined under the RPG genre with additional concepts of strategy and adventure. The revenue size of both PC games and mobile games are increasing but console games are showing decline.

1. [THE MOST POPULAR LANGUAGE IN STEAM IN 2024](https://games.logrusit.com/en/news/the-most-popular-languages-on-steam/)

* According to the statistics, surprisingly Chinese are mostly used in Steam. The top 5 most popular languages in Steam are Chinese, English, Russian, Spanish, and Portuguese. It would be idle to add one or more languages available in the game to localized. However, it does not guarantee to attract players in large numbers.

1. Requirements
   1. Functional requirements table
   2. Functional requirements description
   3. Non-functional requirements table
   4. Non-functional requirements description
2. Design Document
3. Prototype
4. Team Reporting
   1. Team tasks chart
   2. Team commit chart
   3. Success Report
5. Conclusion