

1. Problem Statement

a. Within the growing games market there has been a trend towards multiplayer games amongst bigger name studios and a trend towards more retro like games in the independent market. Rarely do you see these two overlap as retro games used to be fairly solitary experiences meant for one. We aim to fix this problem and lead the way in a new trend to combine the old classics with the replayability of the new multiplayer games. We believe that this will create interest amongst players and spark a demand for fun, simple games for more than one person. This in turn will cause game development studios to try and cater to these wants and allow us to create a new demand while simultaneously giving us an edge in experience and establishing our name in a new exciting field.

2. Objectives

- a. Create a robust multi-platform desktop game for many players to compete to see
 who can reach the top of a hill first and remain on top for a certain amount of time.
 Points will be awarded for time and completion of small objectives along the way.
- b. Players will be able to play against friends or other online users by hosting a game and letting friends connect.
- c. Players can select among several character types each with different attributes, including movement speed, damage resistance, and special abilities.
- d. A list of high scores will be maintained globally and will be displayed after the game ends.
- e. Players can collect power ups that are spawned as the game continues. Focus will be placed on fairness and not quantity of items.

f. The game will spawn obstacles for the players to avoid or overcome. Obstacles will be harder and more frequent the further in the lead a player is.

3. Stakeholders

- a. Developers
 - i. Establish our names
 - ii. Gain experience in programming and putting together a game
 - iii. Supplement income

b. Testers

- i. Gain experience in testing games
- ii. Decide whether this is a field that they would be interested in entering

c. Players

- i. Having a new, fun, and interesting experience
- ii. Having an option for a short, but enjoyable game that can be played with friends over the network
- d. Game Production Studios
 - i. Creates a new field to focus creativity on
 - ii. Set up a new brand

4. Deliverables

- a. Client is developed in Java using LWJGL (Lightweight Java Game Library) or libgdx
- b. Game server is hosted remotely and is developed in Java
- c. Single executable .jar file, all source code for client and game server, and credentials to log in to remote server.
- d. A list of defects will be maintained using a freely available bug tracking utility such as BugZilla or Mantis.