Aidan Esposito

Professor Mckim

CMSI 3752

7 March 2024

FINAL PROJECT PLANNING DOCUMENT

For my final project in CMSI 3752 Game Development I would like to make a top down shooter game similar to Journey of the Prairie King from Stardew Valley with mechanics such as different enemies, different rooms, and different power ups to pick up that allow the game to become progressively harder over time.

1. The gameplay concept (what is your game)

For my final project, I want my game to be a top down shooter that is set in a multitude of rooms where you fight enemies that slowly grow in size and scope over time. Every time you take down an enemy, you gain points in the score and, if you have enough points, you can unlock new rooms. Along with this, you can gain temporary power ups to help you along the way. I want the game to get harder and harder over time with enemy hordes getting larger and larger along with different enemy types showing up along the way. Eventually if possible, boss fights would be cool to add but that would be if I had time getting everything else working.

1. Personal priorities (what would you like to take away from this project? How does that influence your game?)

` My own personal priorities and goals for this project includes learning how to make a 2d game and make it fun to play. I also want to learn how to implement different environments and enemy types throughout the course of the game. I want to be able to design a few assets and learn how to make my game more personal to my creative style. I want to learn how to become a better game designer and gain knowledge that can help me in the future. This influences how I will make the game and what I plan to put in it when building the core of it.

1. The core mechanics (high priority work that ought to be finished throughout the first half or so of the project)

The core mechanics I want to implement in the first half of the project is to get basic player movement and room layouts working. I want to get the basic game running and working with a specific score count and a few enemy types that are fully done. I also if possible would like to get at least one or two power ups including that of a triple fire shotgun and a speed boost that lasts for around 30 seconds. I want to get a working player model with animations and a consistent fire rate. Overall, I want the basic features of the game to work by the first half of the project and will plan to add onto the core of the game as the weeks go on.

1. Nice-to-haves (other mechanics / aesthetics that become a priority once the core game is working)

Some nice to haves after the general core of the game is working includes more enemy types and more power ups. I would like to add enemies such as skeletons, bats, and bears that each have different movement patterns and start showing up when the score reaches a certain point. I would like to have around 10 enemy types in total. I would also like to add new power ups up to around five that add more fire varieties and more movement options. I would also like to add more room varieties that can be unlocked and opened via doors with certain amounts of points including a snow, mountain, and swamp area. These rooms would also have different layouts that could change how the game is played. If time is available, boss fights would also be cool to add when a certain amount of score is reached to test the players skills and reward them handsomely for it. Even a shop for powerups in return for points could be added in the future if time is available.

1. Rough Timeline

**Week 7** - Set up basic player model, player gun fire, and player movement as well as the basic starting arena.

**Week 8** - Set up score system and add first few enemy types and possible start powerup systems.

**Week 9 -** Start working on animations and sound effects for current players, items, and enemies as well as set up a basic title screen including controls and start/quit buttons.

**Week 10: First Presentations** - Expand room layouts and implement door point system adding a few new rooms and a few new enemy types.

**Week 11 -** Keep working on room details and layouts along with expanding enemy types and power ups

**Week 12 -** Work on code for overtime enemy increase as game becomes longer and finish bug testing and adding enemy types

**Week 13** - Bug fixes and finishing powerup system, finalizing room layouts for end of game

**Week 14** - Bug fixes and animation / sound effect additions. Start working on bosses / shops if time allows

**Week 15** - Final bug fixes and final layout / enemy / powerup changes, finish game systems

**Week 16** - Presentations