CMPT 276

Project Phase 1 - Statement/Description

Project Group 18

February 18th, 2023

Description:

Our customized game will feature three levels, each with ascending difficulty meaning more/faster moving enemies, more barriers, and more traps. Additionally, the player progresses through the game by collecting keys from each level, and using those keys to unlock the exit tower. The objective of the game is for the player to progress through each level without losing all of their health. Health is lost when the player makes contact with either an enemy or a trap. The overall plan to implement this game will be to begin with structuring the layout and classes required for this game with a UML diagram, followed by an implementation in Java, and concluded with testing/prototyping of the final product.

Level Design:

- 3 levels, 2 ‘regular’ ones, followed by one ‘final boss’ level.
- Goal is to unlock towers (3) to finish the game, without losing too much health and dying
- Randomized key drops throughout the map
- Hitting traps reduces health by a set amount
- Hitting enemies reduces health by a set amount, which is higher than hitting a trap.
- Along with collecting keys, the player has access to ‘rewards’ such as health regeneration, armor (extra health) and weapons.

Main Character:

- Moves through the map via keyboard controls.
- Is able to collect rewards:
    - Keys
    - Health Regen/Shield (Armor)
    - Weapons
- Can use weapons to damage enemies

Enemies

- Can shoot projectiles
- Number of enemies determined by level
- Die if hit by a player’s weapon

Board/Map

- 2D grid
- Has barriers, some of which are impassable/walls and others which only slow you down
- The barriers change location and frequency between each level