

Statement

Overall plan

For this project, we plan to use various platforms for communication, document sharing and version control. We use Discord to communicate, share documents via Google Docs (documents) and Creately (diagrams) while using GitLab for version control.

We will start with implementing the character's movements and how the objects on the board interact with each other. After the initial board is running smoothly, we will be adding different types of board with various difficulties. Lastly, we will design the user interface and tracking record of each player's score.

Game description

Maze_group_17 is a 2D arcade-style game that tests the player's cognitive abilities by successfully overcoming barriers and accomplishing quests. The purpose of the game is to provide entertainment to target users, allowing them to interact with the built system by using strategic thinking through playing the game.

Each game has one main character that the player controls through the keyboard arrow keys, and the goal of the game is to collect all of the rewards on the map and exit the map. A scoreboard of game status is kept, where the player can obtain points when the rewards are collected, and the player loses points when moving to trap cells. The player encountering a moving enemy automatically loses the game. Similarly, the player scoring less than zero will also lose the game and return to the home page.

Must-have features

- The product must allow users to access player movement via arrow keys
- The product must keep track of time and user scores in game (?)
- Instruction/tutorial that enables user to be familiar with the flow of the game

May-have features

- The product incorporate background music
- The product may generate new mazes

Must-not-have features

- Any safety/security related user information will not be collected

Winning Condition: user must satisfy the following three conditions to win the game.

- Player moves to exit cell
- Player collects all of the regular rewards on the map.
- Player's score is above 0

Losing Condition: Users that meet any of the following conditions will lose the game.

- Player moves to cell with moving enemy
- Moving enemy catches up to player's position
- Player's score is less than 0.