

Project Title: Dungeon Maze

- Procedural generation of mazes as dungeons which the player can traverse through, interact with, and accumulate a score in the form of coins.

Functionalities:

- ☒ ~~Maze Generation~~
  - Random maze generation
- ☒ ~~Movement~~
  - Runner can traverse the open spaces of the maze
- ☒ ~~Object Interaction~~
  - Runner can interact with items and chests in the maze + store in items in inventory
- ☒ ~~HUD~~
  - HUD provides details of the player: health, inventory, coins, items
- ☒ ~~Menu~~
  - Game event displays: Game over screen, portal, opening screen
- ☒ ~~Monsters~~
  - Mobs that can attack the player but also be killed by the player

Logs:

- Justin Mei:
  - Created the random maze generation and general structure of the maze
  - Created the HUD and most of the information on it including the health, coin count, inventory, and more
  - Created the item functionalities and inventory
  - Contributed to the player's interaction functionalities
- Derek Li:
  - Created the traversal functionalities of the player
  - Created the opening and end screens and portal functionality
  - Created and updated the UML of the project
  - Contributed to the player's interaction functionalities
- Owen Chan:
  - Created the monster functionalities
  - Created and implemented the sprites of the monsters
  - Contributed to the player's interaction functionalities

Color Palette:

Wall: #424874

Lighter: #A6B1E1

Cell: #F4EEFF

Darker: #DCD6F7

Char[][] maze:

- 'w' is wall
- 'c' is cell
- 'e' is end
- 's' is start
- 'o' is coin
- 'h' is chest
- 'm' is monster

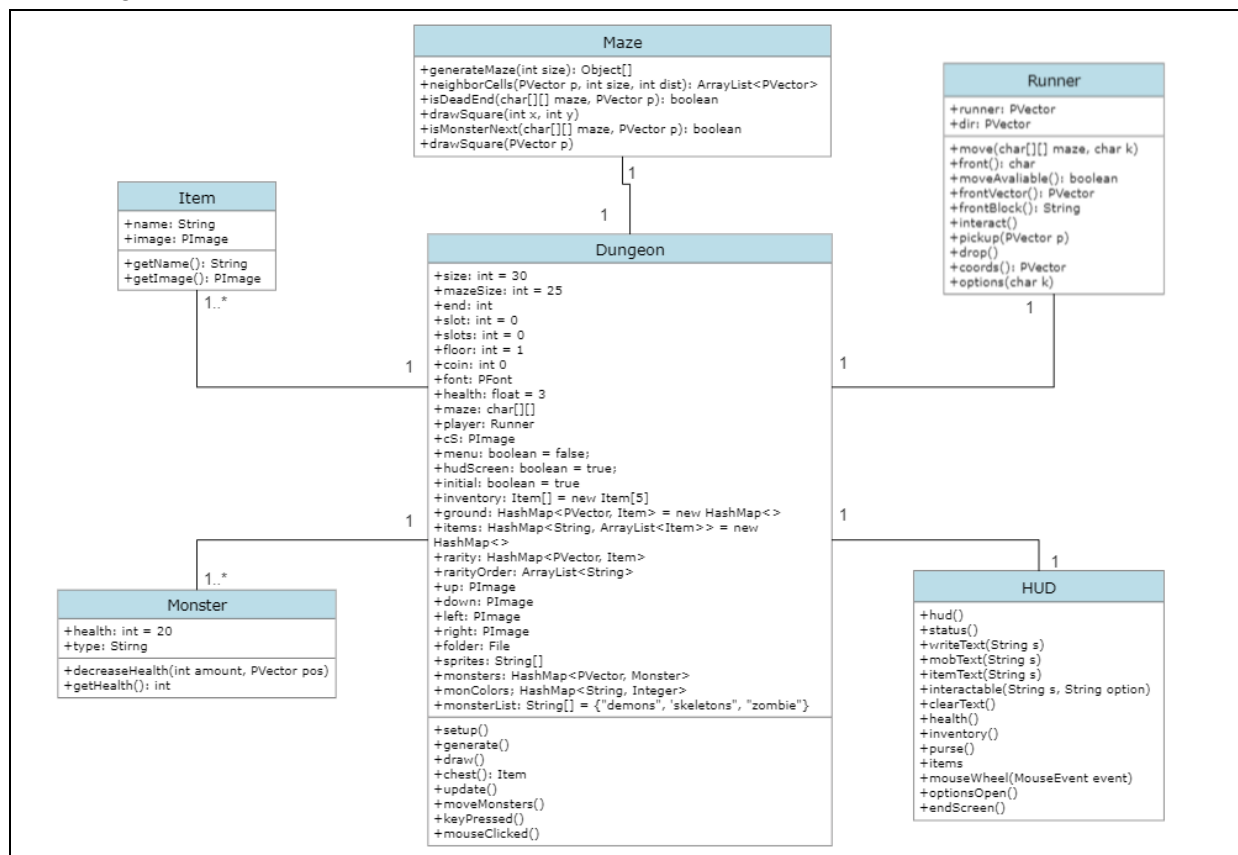
Item Rarity:

- Legendary: #FFB6B9
- Epic: #5C469C
- Rare: #AFD3E2
- Uncommon: #C1D0B5

Misc:

- Border: #CBDBFC

UML Diagram:



Game Objective: Accumulate as many coins as possible while not dying to the monsters that will be roaming the maze.

Interactable Keys:

- "W" to move up
- "A" to move left
- "S" to move down
- "D" to move right
- "Q"/"Middle Click" to drop item
- "E"/"Right Click" to interact with items
- "Left Click" to use weapon
- "Mouse Wheel" to cycle through items
- "1" to select item slot 1
- "2" to select item slot 2
- "3" to select item slot 3
- "4" to select item slot 4
- "5" to select item slot 5