## Overall design of your game.

- i. What core technology are you implementing?
  - 1. Procedural map generation
    - At the beginning of each game, the map will be randomized. Each map will be balanced so that there is not too many of one structure.
  - 2. Artificial Intelligence
    - a. Al will act like a player. They will play the game according to the rules, and they will do anything necessary to win.
    - b. Due to time constraints, the AI is a little basic, in that it just plays the game normally. The AI doesn't try to win nor does it try to counter the player.
- ii. What other systems will you need to implement to support this?
  - 1. Game state
    - a. Each player will take turns completing their turns, so the game needs to know and remember whose turns it is.
    - b. Use of a finite state machine
- iii. What game engine will you be working in?
  - 1. Godot, primarily the GDScript side.

## Software architecture and plan.

- i. How will you implement this core technology and supporting systems?
  - 1. Procedural map generation
    - a. Map will always be in a grid, similar to Monopoly
    - b. Tiles are laid out randomly using a random number generator
    - c. To make the game balanced, certain tiles will only be used a number of times.
- ii. What is built out?
  - 1. Main parts of the board:
    - a. Map will be mostly filled with hallways
    - b. Several classrooms
      - i. Give +1 intelligence point to character
    - c. 1 Playground
      - i. Gives +1 strength point to character
    - d. 1 Cafeteria
      - i. Replenish 1 health to character
- iii. What did not go according to plan?
  - 1. During Thanksgiving, I fell behind due to circumstances beyond my control so I had to cut out a lot of features.
  - 2. I wanted to use my own sprites but I found that it would be very time consuming, so I borrowed a user's sprite online. Link is under Sources

- 3. Initially, I wanted the AI to be a little more complicated but right now, it just plays the game as intended
- 4. I wanted to build more rooms, such as a principal's room and gym. However, given the resources I found online, I could only build a couple of rooms.
- 5. At the end of each round, I wanted to do a short mini-game between the player and enemy. However I ended cutting it and had the player and enemy continuously playing the game.
- 6. I wanted the end condition to tie in with the minigame, so that whoever won the most minigames would ultimately win the game. However, I made a really simple end condition in that the first player to get 10 intelligence points wins the game. The strength and health doesn't really matter because there's no fighting in the game.
- 7. I had to also cut out any big GUI features such as a main menu, stats page, and end screen.

## Division of labor

i. Hogan - 100% of labor

## - Sources:

- Textures are from Alilali and kadokawa
  - https://forums.rpgmakerweb.com/index.php?threads/alilalis-random
    mv-stuff.92882/