SCOPE STATEMENT

— We intend to design a roguelike game wherein the player can battle enemies, pick up equipment, cast spells, and work towards defeating a final boss. If they die they will restart the game.

GROUP GOALS/OBJECTIVES

— To implement a class structure that enables dynamic creation of enemies, dungeon rooms, weapons, etc. without the need to hardcode these objects in.

— To create an efficient program that effectively communicates between files and different class structures.

— To use sprites in conjunction with pygame in order to create an effective user interface.

INDIVIDUAL GOALS/OBJECTIVES

Sam M.

— I hope to just improve my coding/Python skills overall. While I have taken coding classes before and have some background with Python, I would like to be far more proficient in my skills. One of the reasons is so I can be a valuable member of my team so we can successfully create our game. Another reason is that since I am graduating this upcoming spring and entering the workforce I would like to be able to use my new honed skills into my future job.

— Specifically regarding my Python skills I hope to have deeper and more specific knowledge of while loops, for loops, and nested for loops. Given my assigned tasks for our project these are aspects I'm going to need to improve so we can have our ideal version of our game. I have a background in all of these aspects so while I expect a challenge it's something I know I can figure out. Another skill I want to work on is implementing sprites from the Pygame library, while this is something I haven't had any background in, I'm excited to learn about this and implement it into our game.

Sam E.

— I hope to improve how I use classes in python. I often use them in suboptimal ways and they do not effectively communicate with each other. By focusing on using classes in order to create dynamic objects that can be easily implemented I hope to improve my usage of classes.

— I also hope to improve my ability to program good communication between the front end and back end of a program. I have done a bunch of programming with the back end but have mostly used the terminal for GUI. Using a separate GUI such as pygame and custom sprites I will gain skills in communication between frontend and backend of a program.

Ender W.

— I hope to improve my understanding of object based programming in python. I will do this by creating classes and objects to handle the large amount of code within the project.

— I also would like to learn how to communicate between different files within a project. I will do this by splitting up the code between python files, allowing them to interact. For example, I will split up the logic for the free movement part of the game and the logic for the combat in the game into two files

TECHNOLOGIES AND TOOLS

— Python
— Pygame
— Pixel Art Graphics

TIMELINE

— Gantt Chart
—https://docs.google.com/spreadsheets/d/16tPGYMNaf5N6ne8HtXM05OGHJ2J4SXgtLI1TMZnUNWk/edit?usp=sharing

TASKS TO DO

— Coding

- Enemy object: combat and non-combat
- Enemy object iterations
- Player object: combat and non-combat
- Player actions in combat
- Enemy ai in combat
- Enemy ai out of combat
- Map pieces
- Inventory system out of combat
- Equipping stuff to player
- Spells - player
- Spells - enemy

— Sprites

- Basic enemies
- Map sprites
- UI
    - Inventory
    - Combat system
- Boss(es)?
- weapons/armour

— Music

- Combat theme
- Out of combat theme
- SFX?