

## Topic and Group Selection Template

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Group name: AR<sup>3</sup>

CCIS GitHub location: <https://github.ccs.neu.edu/rochen/CS3520-2017FA-PROJ.git>

Provide a high-level prose description of your project.

We will be making a turn-based 2D RPG with a combat, stats, and item system. The game will follow a hero on a journey to defeat evil and save the world. They will make friends along the way who will be able to fight alongside them and help them on their journey.

Describe the major features of your project. Provide this in a “checklist” format. Be as specific as possible, and provide at least five distinct features.

- 2D Graphics
- A semi-advanced combat system with damage types and critical strikes
- Dynamic Music
- Phase-shifting between live movement in the real world, and turn-based movement in combat
- Unique Animations

Describe the advanced feature(s) of your project, and the library/SDK/API you plan to use.

We will be implementing SDL and all of its imaging and audio capabilities. This will be used to implement the unique visuals and

Describe plans for what kind of user input your program will take and how it will affect the state of the program.

We will just be taking commands from the keyboard. The commands will primarily be used for combat UI navigation, and 2D movement in the open world.

Briefly describe plans for dynamic memory management and class inheritance structure.

For class structure, we will have an overarching “unit” class, from which character, friend, and enemy classes derive their stats, attacks, and other aspects. There will be an “ability” class, which will contain all attacks, healing moves, and utility moves that “units” can use. In addition to

this, there will be an item class, which will hold all drops and equipments in the game. Also, there will be a "terrain" class which is used by the game board. Each of these terrains will have aesthetic or functional impacts in the game (e.g. grass makes the ground green, while a wall is yellow and prevents the main character from going walking through it). In terms of making the game dynamic, we will implement map scrolling while the character is moving, and live-inventory management.