

# CS 242 Final Project Proposal

## Untitled Text RPG

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### 1. Abstract

#### 1.1. Project Purpose

We will create a text-based RPG which utilizes networking so that multiple people can play together and alter the game for the other player(s).

#### 1.2. Background/Motivation

Both people involved with this project enjoy video games, and wanted to create one of their own. In addition, one person has experience creating basic video games using GameMaker (with minimal coding) and in Python, as well as 3D animations. The other has created an educational game in GameMaker as well, no code involved. And Afterworld, the previous final project proposal, had too much code being replaced by Unity's built-in functions, so we needed an alternative for the last two weeks.

### 2. Technical Specifications

2.1. **Platform:** Python file executable via command line or IDLE.

2.2. **Programming Languages:** Python

2.3. **Stylistic Conventions:** Comments on function signatures and non-obvious sections of code, underscored names for functions and CamelCase for variables

2.4. **SDK:** Python SDK (?)

2.5. **IDE:** PyCharm, SublimeText

2.6. **Tools/Interfaces:** Windows laptops

2.7. **Target Audience:** Anyone who plays text-based RPGS, with a focus on coders, since you run it out of the terminal or IDLE.

### 3. Functional Specifications

#### 3.1. Features

- Users can interfere with other players' storylines in the game
- Users can save their progress
- Users can load a saved game
- Users can play through one of multiple possible endings, based on their actions in-game

#### 3.2. Scope of project

The conversation trees will be limited due to the relatively short amount of time we have to create the game.

### 4. Timeline:

#### 4.1. ~~Week 1 – Set up back end and data structures~~

- ~~Margarita:~~
  - ~~Create code for the maps and camera/other objects for use with images later~~
  - ~~Help with player movement code~~
- ~~Alec:~~
  - ~~Create movement/action code~~
  - ~~Create code for the physics~~

#### 4.2. ~~Week 2 – Set up GUI and movement via user input~~

- ~~Margarita:~~
  - ~~Add in images and sounds, and associated animations/scripts~~
  - ~~Join the code from last week together with the GUI~~
  - ~~Create at least one basic level~~
- ~~Alec:~~
  - ~~Unit testing~~
  - ~~Adjusting movement/action code~~
  - ~~Create different puzzles for each level, or basic monsters~~

#### 4.3. **Week 3 – Set up text RPG for use by one person**

- Margarita:
  - Set up data structures and methods
  - Create conversation trees
  - Help with unit testing
- Alec:
  - Create command parsing/input functions
  - In-depth testing
  - Help with dialog trees

#### 4.4. **Week 4 – Expand text RPG for multiplayer use**

- Margarita:
  - Make progress savable and loadable
  - Expand conversation trees and actionable commands
  - Add more tests
  - Alter conversations and maps' code so players can interfere with each other
- Alec:
  - Add networking capabilities so players interfere with each other
  - Add more tests
  - Help with altering the conversation and map code

### 5. **Future Enhancements**

In the future, we could potentially turn this into a full game, extending the plot and making it publicly available. We could also possibly make a terminal-like UI but add sounds or something, for a background atmosphere.