RESIT Assignment For COMP10050: Roleplaying Game Development

Overview

In this assignment, you are tasked with developing a basic functional roleplaying game (RPG) in C that utilizes various data structures to manage game elements. Your game should allow a player to explore a virtual world, interact with characters and objects, and experience a coherent gameplay experience. The assignment will be graded based on the criteria of Structures Used, Display, Interaction, and Functional Game, each weighted equally at 25% of the total grade.

Requirements

1. Structures Used

- Implement a structure to support a roleplaying character with attributes like name, health, attack, defense, and position.
- Manage an inventory using a linked list.
- Track the character's position within the game world.
- Use an array within a structure to manage the game world.

2. Display

- Display the player's position on an ASCII-generated map, representing different elements in the game world.
- Provide a visual representation of the player, NPCs, and the environment.

3. Interaction

- Allow the player to move around the map using keyboard inputs.
- Enable interactions with NPCs, including combat and item pickup.
- Provide commands for viewing the inventory and other game actions.

4. Functional Game

- Ensure the game is fully functional, allowing exploration and interaction within the game world.
- Implement a rogue-like feature where the player can die and restart, retaining some elements for the next play-through.
- Provide a seamless gameplay experience, handling user inputs and game logic effectively.

Submission Guidelines

- Submit the complete source code of your game by email on the morning of the submission deadline.
- Provide a README file with instructions on how to run the game and a brief description of its features.
- Ensure your code is well-documented, highlighting the key structures and their purposes.

- You will be graded by an interview with two Q&A Sessions beforehand to get feedback open to all.

Evaluation

Your submission will be evaluated based on how well it meets the criteria outlined above. Strive to create a cohesive and engaging RPG that leverages data structures effectively to manage the game's various elements. Please examine the Assignment 1 rubric to understand the requirements.

Reference to Rogue and Zork

As these are quite od games over 40 years old, here is some information about them. Rogue https://en.wikipedia.org/wiki/Rogue_(video_game), you can still pass writing a roleplaying game similar to ZORK (https://en.wikipedia.org/wiki/Zork) . If you think about current roleplaying games like Dungeons and Dragons or Fallout you get the idea.