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Computer programming Semester Project

FINAL REPORT

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* **Introduction:**

This report is a brief overview of our project. The project was about making a game and adding different functionality to it. We took 2 and half weeks’ time and with consistent effort we completed the game by keeping in mind the main objective of the project.

* **Tools Used:**

The tool that was used to develop the game was Visual Studio.

* **Brief Overview:**

The "Leap of Quests" game is a text-based RPG adventure written in C++. The player embarks on a journey through different quests, battling various bosses and monsters etc... The game features a dynamic storyline, character selection, and challenging quests with increasing difficulty levels. We took help from all the instructions and points that were given in the project file and made the code of the game relevant to the instructions. We tried our best and made the code as efficient and optimized as we could using different C++ functions, structures, conditions etc.

A brief overview of the code structure, highlights and key features is given below.

* **Code Structure Overview**

1. Structs for Characters and Quest Bosses:

Characters and quest bosses are represented using structs, encapsulating relevant information such as health, level, and damage.

1. Main Menu and Game Loop:

The main menu provides options to start the game, exit, or play again after completing a round.

The game loop ensures continuous gameplay until the player decides to exit.

1. Character Selection and Quest Functionality:

The player can choose from three unique characters, each with its own class, weapon, and style.

Quests are presented in the main menu, and the player progresses by defeating bosses and completing quests.

1. Quest Functions:

Separate functions handle each quest, managing the battle mechanics, health, and progression.

Quest difficulty increases with each level, adding a layer of challenge to the game.

1. Randomized Combat Mechanics:

Combat mechanics involve randomization for both hero and boss attacks, adding unpredictability to battles.

1. User Input Validation:

Basic input validation is implemented to ensure users provide valid selections during character selection and quest choices.

* **Key Features**

7.Character Variety:

Players can choose from three distinct characters, each offering a unique playstyle and abilities.

8.Quest Progression:

The game offers a linear quest progression system, with each completed quest unlocking the next one.

9. Boss Battles:

Boss battles are a central element of the game, with each boss having its own health, damage, and difficulty level. The combat system is randomized which involves.

randomness, the user must press a key to attack with random damage making each playthrough unique and challenging.

* **Conclusion**

"Leap of Quests" provides an engaging text-based RPG experience with character selection, boss battles, and quest progression making it more enjoyable for players. The game still has the potential for expansion and enhancement. Above all offering a captivating journey for those seeking a challenging and dynamic RPG experience. This project was not only an assignment or semester project but also a fun program(application).

* **FLOWCHART**

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