Introduction to Java CS9053 Java Final Project Proposal

Tri-Wizard Quest

Project Overview:

Tri-Wizard Quest is a Java-based interactive game designed to challenge players through a series of complex mazes. Players must navigate through mazes, collect items, and avoid enemies to progress. The game uses Java Swing for its graphical interface and incorporates advanced data structures for creating intriguing maze layouts that increase in difficulty across levels.

Features:

- Dynamic Maze Generation: Unique mazes for each level with increasing complexity.
- Interactive Game Elements: Collectibles such as coins, keys, and powerups materials and spells.
- Progressive Difficulty: Levels become progressively harder, enhancing gameplay.
- Hint Option: Available for guidance when players are stuck.

Technologies:

- Java Swing: For the game's graphical user interface.
- Data Structures & Algorithms: For efficient maze generation and gameplay logic.
- Multithreading: To manage game dynamics and real-time interactions.
- User Controls: Intuitive controls for easy navigation and interaction.