

League of Warriors

Project Overview

League of Warriors is an adventure game implemented in Java, featuring two versions:

1. **Command-Line Interface (CLI):** A text-based version for terminal interaction.
2. **Graphical User Interface (GUI):** A more user-friendly version using Java Swing.

The game revolves around character-driven exploration within a grid-based map, where players encounter enemies, collect rewards, and progress through levels.

Game Features

- **Character Selection:** Choose from unique classes like Warrior, Mage, and Rogue, each with specific abilities and attributes.
- **Dynamic Map:** The game board is a matrix ($n \times m$) where each cell can hold enemies, treasures, sanctuaries, or portals.
- **Combat System:** Engage in turn-based battles with enemies, using either standard attacks or special abilities.
- **Level Progression:** Earn experience points (XP), level up, and enhance character stats (strength, dexterity, charisma).
- **Event-Driven Cells:** Encounter different cell types:
 - **Enemy:** Fight and gain XP or face defeat.
 - **Sanctuary:** Restore health and mana.
 - **Portal:** Advance to the next level with increased difficulty.
 - **Empty:** Neutral cells for movement.

How It Works

1. **Login:** Users authenticate and select an existing character.
2. **Game Loop:**
 - Move through the grid (North, South, East, West).
 - Engage with cells based on their type.
 - Battle enemies with turn-based logic and ability management.
 - Level up upon reaching experience milestones.
3. **Game Over:** The game ends when the character's health reaches zero.

CLI vs GUI

- **CLI Version:**
 - Run directly from the terminal for fast interaction.
 - Command-based navigation and battles.
- **GUI Version:**
 - Built with Java Swing for an intuitive interface.
 - Visual representation of the map and actions.

Design Patterns Used

- **Singleton:** Manages game state to ensure a single instance.
- **Builder:** Constructs complex objects like character profiles.
- **Factory:** Creates characters based on user selection.
- **Visitor:** Applies abilities with different effects depending on entities.

Project Structure

- **/src:** Java source files for both CLI and GUI versions.
- **/resources:** Configuration files and assets.
- **/docs:** Game documentation and user guide.
- **/bin:** Compiled class files for easy execution.

How to Play

1. Run the CLI or GUI version via the provided JAR files or IDE.
2. Log in, choose a character, and start exploring the world.
3. Fight enemies, collect rewards, and progress through levels.