Project Title: Lich Lord1.0

1. **Introduction:**

Welcome to **Lich Lord**, an immersive text-based adventure game where players embark on a perilous journey through dungeons filled with monsters. The ultimate goal is to defeat the Lich Lord and restore peace to the realm. Players will encounter various challenges, battle fierce monsters, and make strategic decisions as they progress through each dungeon.

2. **Design and Implementation:**

Design: The game is designed to provide players with an engaging and challenging experience. Key features include:

- **Player Customization:** Players can choose their character's name and class from four unique options: Flexor, Warlock, Holy Saint, and Paladin.
- **Exploration:** Players explore five distinct dungeons, each with its own theme and set of challenges.
- **Combat System:** Turn-based combat encounters with monsters require strategic decision-making and efficient resource management.
- **Item Management:** Players can collect items and manage their inventory to aid them in battles and exploration.
- **Progression:** Advancement through dungeons culminates in a final battle against the powerful Lich Lord.

Implementation: The game is implemented in Python using object-oriented programming principles. Key components include:

- **Player Class:** The **Player** class represents the player character and includes attributes such as health, attack, defense, and inventory management.
- **Monster Classes:** Various monster classes, such as **Demon**, **Ghoul**, and **Zombie**, extend the **Monster** base class and define unique characteristics and behaviors for each monster encountered in the dungeons.
- **Game Logic:** The main game loop orchestrates the flow of gameplay, presenting players with options to explore dungeons, engage in battles, and make decisions that impact their progress.
- **User Interaction:** The game interacts with players through text-based menus and prompts, allowing them to navigate the game world and make choices.
- **Error Handling:** The game includes error handling mechanisms to ensure smooth execution and provide informative messages to players in case of invalid inputs or unexpected behavior.

Challenges and Modifications: During the implementation phase, several challenges were encountered, including managing game state transitions, balancing combat encounters, and designing intuitive user interfaces. To address these challenges, modifications were made to the game design and implementation, such as refining combat mechanics, adjusting monster attributes, and optimizing player progression through dungeons.

Screenshots: [Insert relevant screenshots of the game at different stages of play here.]

3. **Conclusions:**

Personal Learnings: Developing **Lich Lord** provided valuable insights into game development, including object-oriented design, python library importing, game mechanics implementation, and user interface design. It also improved my proficiency in Python programming and problem-solving skills.

Best Features and Shortcomings: The game's strengths lie in its engaging narrative, diverse set of monsters, and strategic combat system. However, there are areas for improvement, such as enhancing the graphical user interface, refining game balance, and adding more diverse gameplay mechanics.

Choices in Hindsight: Reflecting on the project, there are certain choices I might have made differently, such as structuring the codebase for easier scalability and modularity, incorporating more comprehensive testing methodologies, and refining the game's pacing and difficulty curve.

Future Additions: In the future, I aim to add new features and content to **Lich Lord** to enhance its replay value and overall experience. These additions may include additional character classes, dungeons, monsters, items, and quests, as well as improvements to the game's user interface and overall polish. I want to add *pygame* functionality for sound.

Overall, developing **Lich Lord** was a tedious yet rewarding experience that allowed for creativity, problem-solving, and learning, and I look forward to continuing to improve and expand the game in the future.