

## Personal Diary Management System

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### Abstract

This project introduces a Personal Diary Management System built with C programming. It allows users to manage diary entries, providing options to add, view, edit, delete, and search entries. The program runs in the terminal and uses functions to make the code clear and simple to follow.

### Objectives

1. Develop a diary management system to facilitate recording and organizing diary entries.
2. Ensure user-friendliness by offering menu-driven options for each task.
3. Prepare the program structure for future expansion, including secure data storage.

### Methodology

The program has several main functions, each handling a specific diary task. Users can choose options from a menu, and the program stores entries temporarily during the session using simple data structures.

### Code Structure

Main Code Features:

- `addEntry()`: Allows users to create a new diary entry.
- `viewEntries()`: Displays all saved entries.
- `editEntry()`: Provides a way to modify existing entries.
- `deleteEntries()`: Clears all stored entries in the session.
- `searchEntry()`: Enables keyword-based searching of diary entries.

The `main()` function runs a loop displaying the menu options and taking user input to call the respective functions based on the user's choice.

### Future Improvements

To enhance the functionality of the Personal Diary Management System, the following updates are planned:

1. **Persistent Storage:** Add file handling for permanent storage, allowing entries to be saved across sessions.
2. **Data Security:** Introduce encryption to protect sensitive information within each entry.
3. **Improved Search & Edit:** Refine search and edit functions for easier entry retrieval and modification.

### Conclusion

This initial version of the Personal Diary Management System serves as a prototype, showcasing the foundational structure and basic functionality. The planned improvements will provide durability, security, and convenience for users in future versions.