

Project Title:

To-Do List Manager with GUI and SQLite Database

Introduction:

The project aims to design and implement a Graphical To-Do List Application using Python. It will provide users with a simple, user-friendly interface to manage daily tasks. The system will allow users to add, delete, and view tasks with different priority levels (High, Medium, Low).

All tasks will be saved in an SQLite database, ensuring persistent storage and data management. The project combines Object-Oriented Programming (OOP), database interaction, and GUI programming with Tkinter.

Scope:

The project focuses on developing a desktop-based To-Do List Manager that stores all tasks locally in a database.

Objectives:

1. Create a Tkinter-based GUI for managing daily tasks.
2. Use SQLite3 for local data storage
3. Implement OOP principles to model tasks and database interactions.
4. Allow users to add, delete, and view tasks dynamically in the interface.
5. Provide priority filtering and display options for tasks.
6. Maintain clean, well-commented, and modular code.

Tasks:

1. Design Task and ToDoDatabase classes.
2. Build the Tkinter GUI with entry fields, dropdowns, buttons, and listbox.
3. Implement database connection and CRUD operations (Create, Read, Update, Delete).
4. Connect GUI events (button clicks) to database functions.
5. Test data persistence and application usability.
6. Document the code and prepare a demo video.

Libraries and Tools:

- tkinter , GUI framework.
- sqlite3 , for database management.
- os , file handling (optional).
- Datetime, for task creation timestamps (optional).

Expected Output:

A GUI-based task manager that lets users manage tasks visually and stores all data permanently in a local SQLite database.