Mini Project Report

Project Title: Command-Line To-Do List Manager

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Abstract

The 'Command-Line To-Do List Manager' is a Python-based mini project designed to help users manage daily tasks effectively. It allows users to add, view, update, delete, and mark tasks as completed. SQLite is used as the backend database for permanent storage, ensuring that tasks are preserved even after the program is closed.

Problem Statement

Managing tasks manually on paper or memory often leads to missed deadlines and lack of organization. A simple command-line based application can help users track their daily tasks efficiently.

Objectives

- To provide a lightweight command-line task manager.
- To use SQLite for reliable and permanent storage.
- To implement basic CRUD operations for tasks.
- To enhance productivity and task management.

Tools and Technologies

- Python Programming Language
- SQLite Database
- ReportLab Library for Documentation
- PPTX Library for Presentation

Methodology

The system provides a command-line interface where users can interact with menu-driven options. Users can add new tasks, view all tasks, update task descriptions, mark them as done, or delete them. The data is stored in SQLite database, making it reliable and permanent.

Database Schema

Field	Туре	Description
id	INTEGER (Primary Key)	Unique identifier for each task

task	TEXT	Task description
status	TEXT	Task status (Pending/Done)
created_at	TEXT	Timestamp when task was created

Conclusion

The Command-Line To-Do List Manager is a simple yet effective solution for organizing daily tasks. It provides all necessary CRUD operations and stores tasks permanently. This project demonstrates practical use of Python and SQLite in real-life applications.

Future Scope

- Integration with graphical user interface (GUI).
- Cloud-based synchronization for cross-device access.
- Priority-based task management and reminders.
- Integration with calendar applications.

References

- Python Documentation: https://docs.python.org/
- SQLite Documentation: https://www.sqlite.org/docs.html
- ReportLab Documentation: https://www.reportlab.com/docs/