Project Report
on
Minor Project

BACHELOR OF COMPUTER APPLICATIONS (BCA)

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2025

Declaration

I do hereby declare that this project work entitled “My Minor Project Report” submitted by me for the partial fulfillment of the requirement for the award of BACHELOR OF COMPUTER APPLICATIONS (BCA) is a record of my own work. The report embodies the findings based on my study and observation and has not been submitted earlier for the award of any degree or diploma to any Institute or University.

Signature

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Date: 15

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INTRODUCTION

This report details the design and implementation of a minor project: a Task Management System developed using Python. In today's fast-paced environment, effective organization and prioritization are essential for both personal productivity and team efficiency. Task management tools serve as crucial aids by providing a structured digital environment to define, track, and complete required activities.

Purpose & Objectives

Why build this?

Because productivity suffers when tasks are unorganized. A simple application can make a noticeable difference in efficiency.

Core Objectives

- Build a responsive task-tracking system
- Allow users to create, edit, update and delete tasks easily
- Store tasks permanently using browser storage
- Keep the UI clean, fast and beginner-friendly

Learning Goals

- Improve practical coding & debugging skills
- Understand state flow and rendering behavior
- Build something real that solves an everyday problem

Technologies Used

- Frontend -HTML, CSS, JavaScript, python
- Data Storage - localStorage
- Version Control - Git + GitHub
- Deployment - GitHub Pages

System Overview

The application follows a simple yet effective structure:

User → Creates Task → Task gets stored → UI updates instantly → User tracks progress

Key Features

- ❖ Add task with description
- ❖ Mark task as completed
- ❖ Edit tasks anytime
- ❖ Delete tasks if unnecessary
- ❖ Uses localStorage — data never disappears on refresh

System Design

When designing the application, I wanted the user experience to feel fast and smooth.
A task should take *seconds* to enter, not minutes.

So I structured the UI like this:

- A clear input area to enter a task
- A list view showing all tasks
- Buttons for `edit`, `delete`, `mark complete`

- Completed tasks visually look different (strikethrough or faded)
- Data saves automatically without asking the user

Implementation Summary

I began by setting up the interface — a task input box and display container.
Once the UI skeleton was ready, I implemented logic for:

1. Adding a Task
   A new object pushes into an array → stored in localStorage → rendered live.

2. Editing a Task
   Fetch task → update text → save again → re-render everything.

3. Marking as Completed
   Toggle `status = done` → change display style → saved permanently.

4. Deleting a Task
   Remove object from list → update storage → refresh UI.

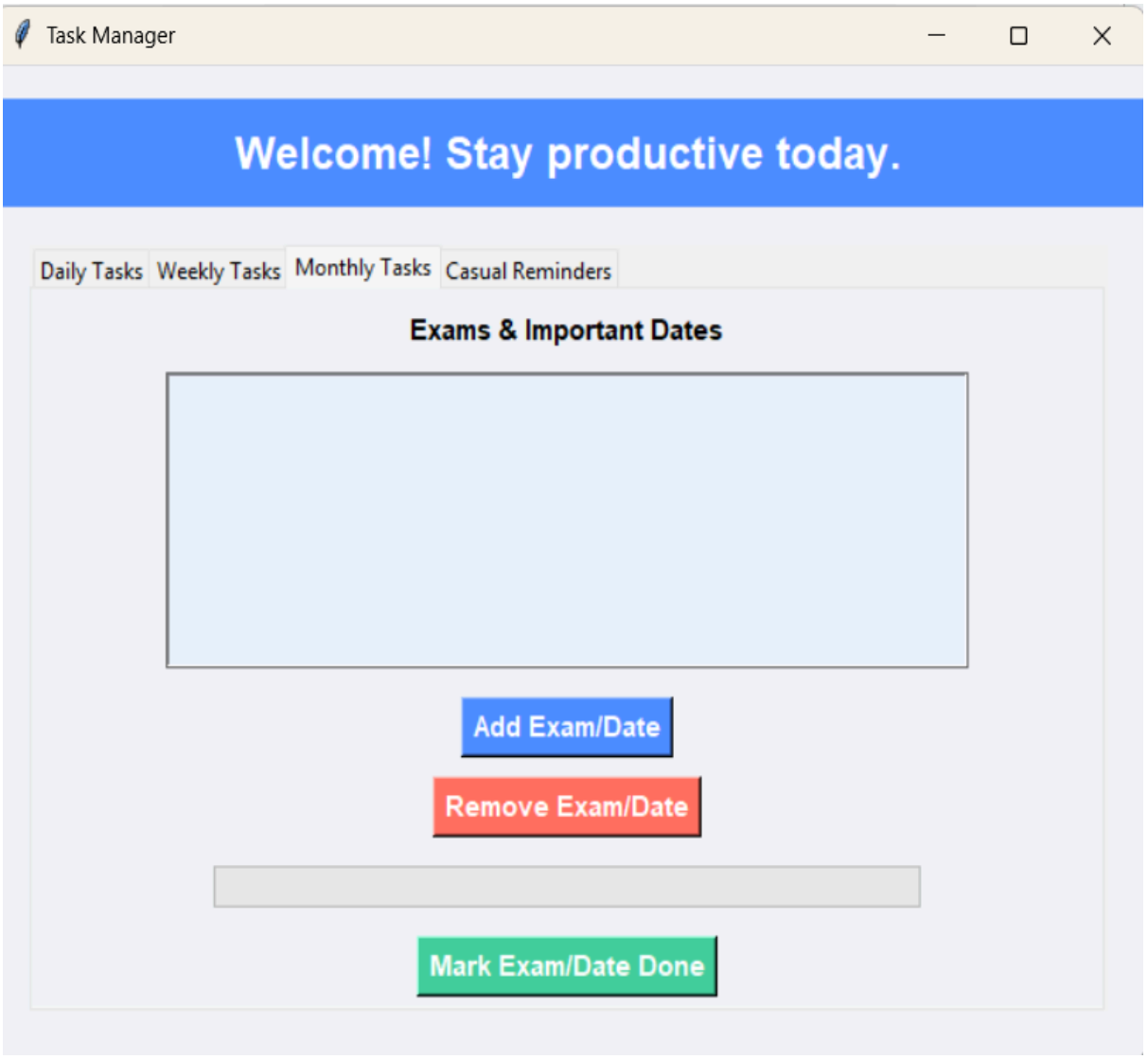
Every update is instant — no reload needed.

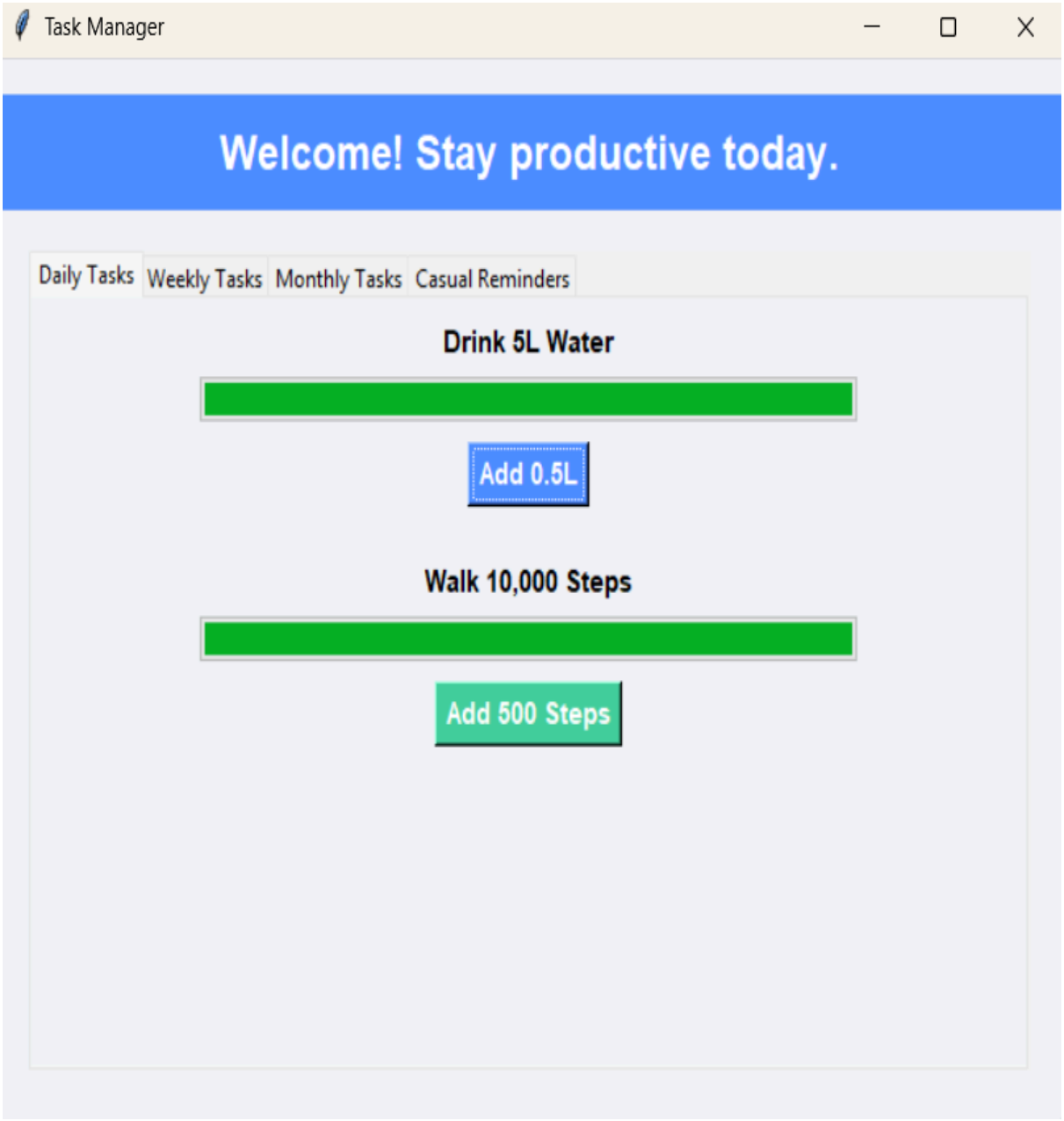
Testing & Observations

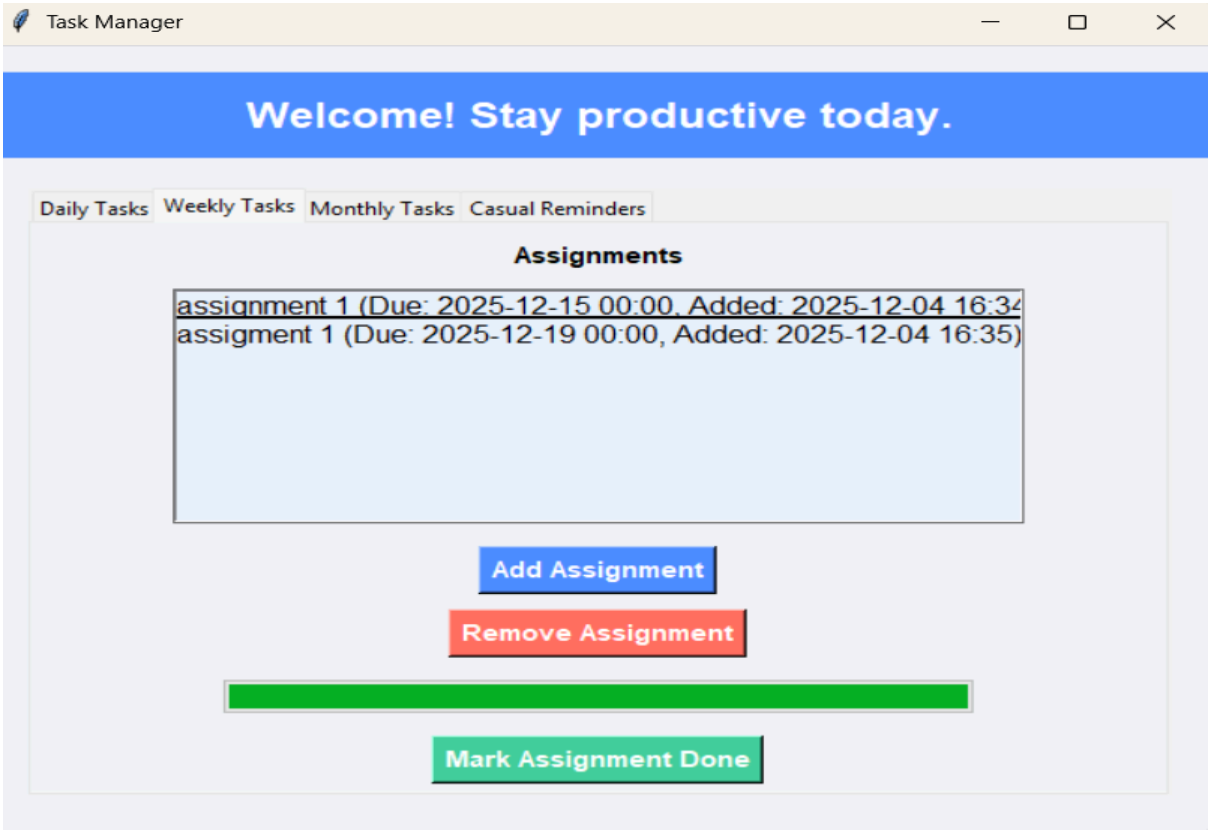
1. Add Task - Successfully stored & displayed

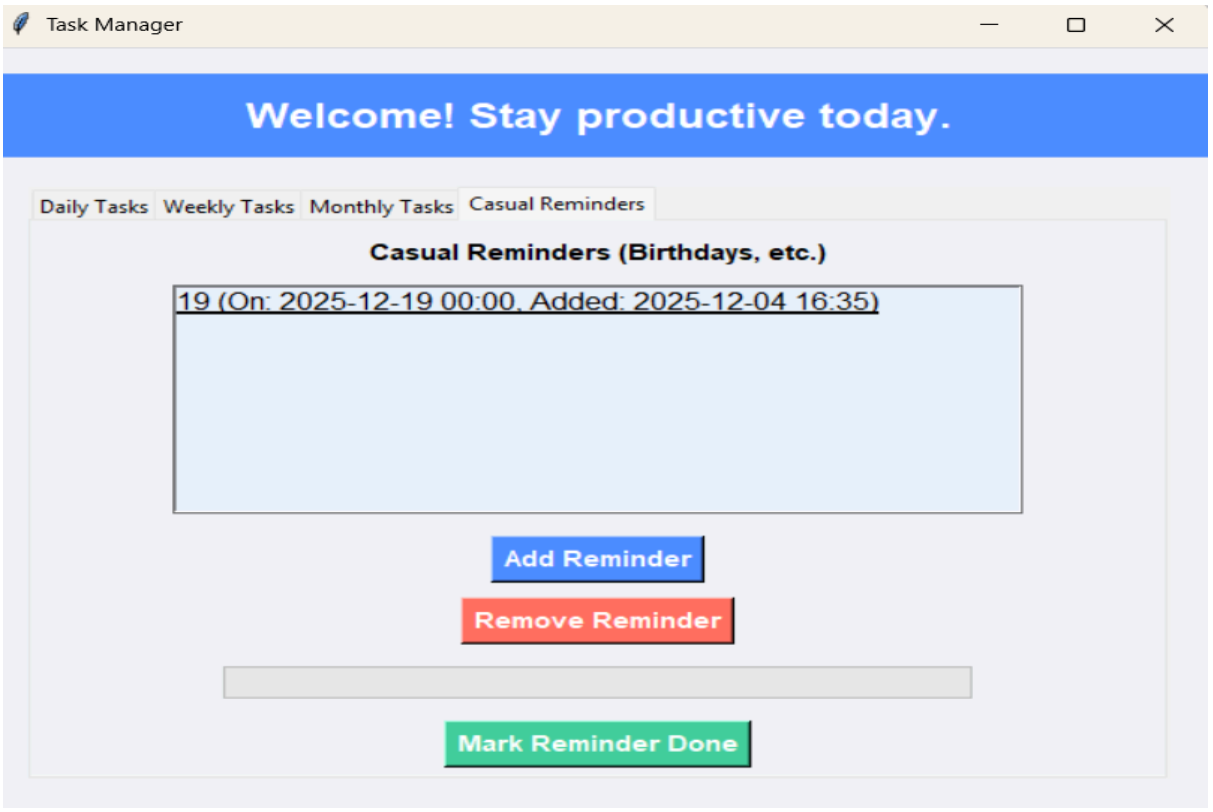
2. Edit Task - Updates correctly in interface & storage
3. Delete Task - Task disappears immediately
4. Refresh Browser - Data remains — localStorage works perfectly
5. Multiple Edits - No conflicts or overwrites

Input/Output Form Design

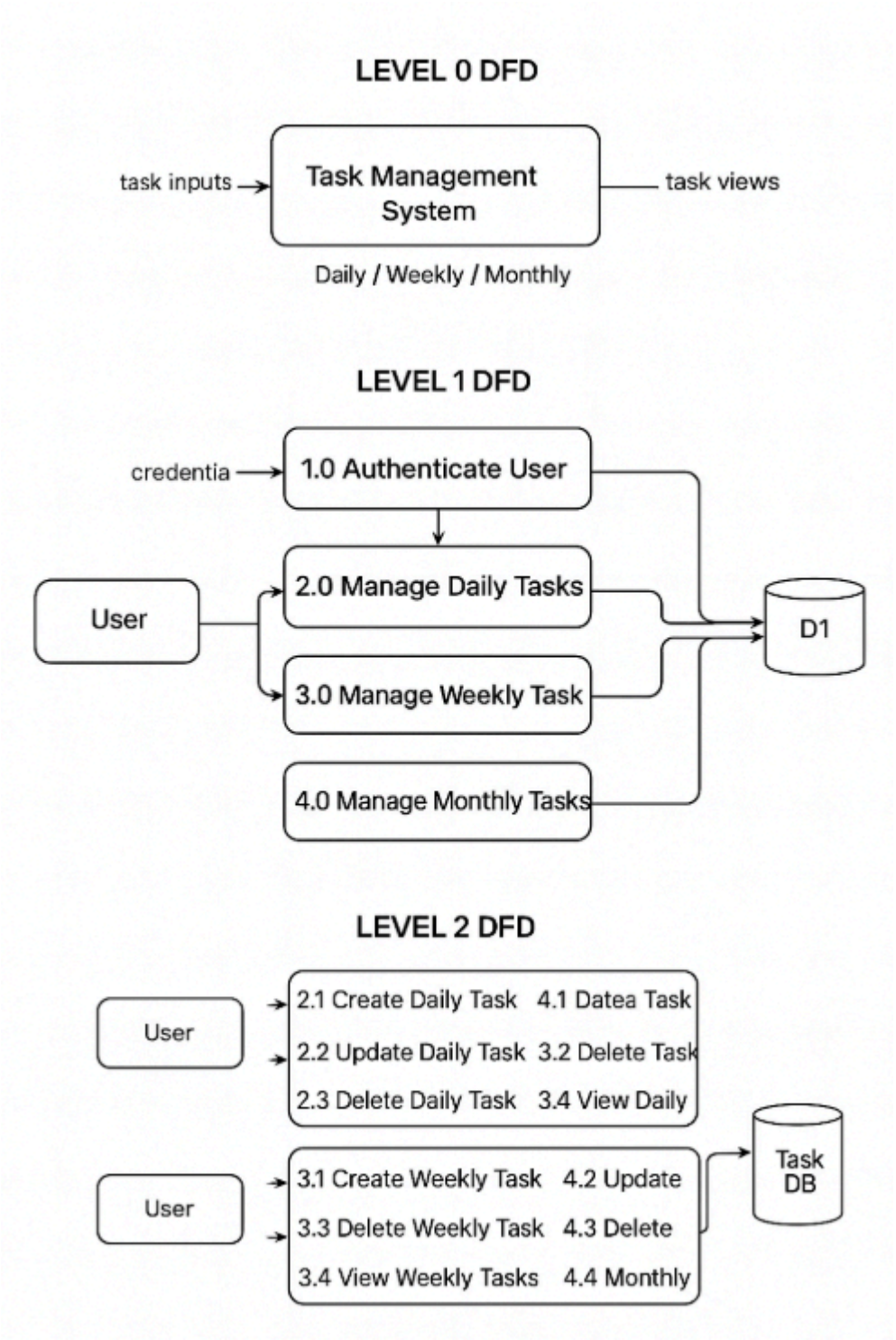



Task Manager
Welcome! Stay productive today.
Daily Tasks
Weekly Tasks
Monthly Tasks
Casual Reminders
Drink 5L Water
Add 0.5L
Walk 10,000 Steps
Add 500 Steps


Task Manager
Welcome! Stay productive today.
Daily Tasks
Weekly Tasks
Monthly Tasks
Casual Reminders
Assignments
assignment 1 (Due: 2025-12-15 00:00, Added: 2025-12-04 16:34
assigment 1 (Due: 2025-12-19 00:00, Added: 2025-12-04 16:35)
Add Assignment
Remove Assignment
Mark Assignment Done


Task Manager
Welcome! Stay productive today.
Daily Tasks
Weekly Tasks
Monthly Tasks
Casual Reminders
Casual Reminders (Birthdays, etc.)
19 (On: 2025-12-19 00:00, Added: 2025-12-04 16:35)
Add Reminder
Remove Reminder
Mark Reminder Done

DFD Figure


LEVEL 0 DFD
task inputs
Task Management System
task views
Daily / Weekly / Monthly
LEVEL 1 DFD
credentia
1.0 Authenticate User
User
2.0 Manage Daily Tasks
3.0 Manage Weekly Task
4.0 Manage Monthly Tasks
D1
LEVEL 2 DFD
User
2.1 Create Daily Task
4.1 Datea Task
2.2 Update Daily Task
3.2 Delete Task
2.3 Delete Daily Task
3.4 View Daily
User
3.1 Create Weekly Task
4.2 Update
3.3 Delete Weekly Task
4.3 Delete
3.4 View Weekly Tasks
4.4 Monthly
Task DB

Future Upgrades

I plan to enhance this application further with:

- Notifications & remainder alerts
- Calendar view integration
- Cloud sync & login system
- Task analytics (productivity graph)
- Mobile app version using React Native
- Dark mode, drag-and-drop sorting, voice add command

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4. Your GitHub Project Repository. *Task Manager App Source Code — Development, Logic & UI Implementation.*
5. Link: github.com/Riaz1909/task-manager-app