Version 1 Review – Cognitive Wellness & Memory Aid App

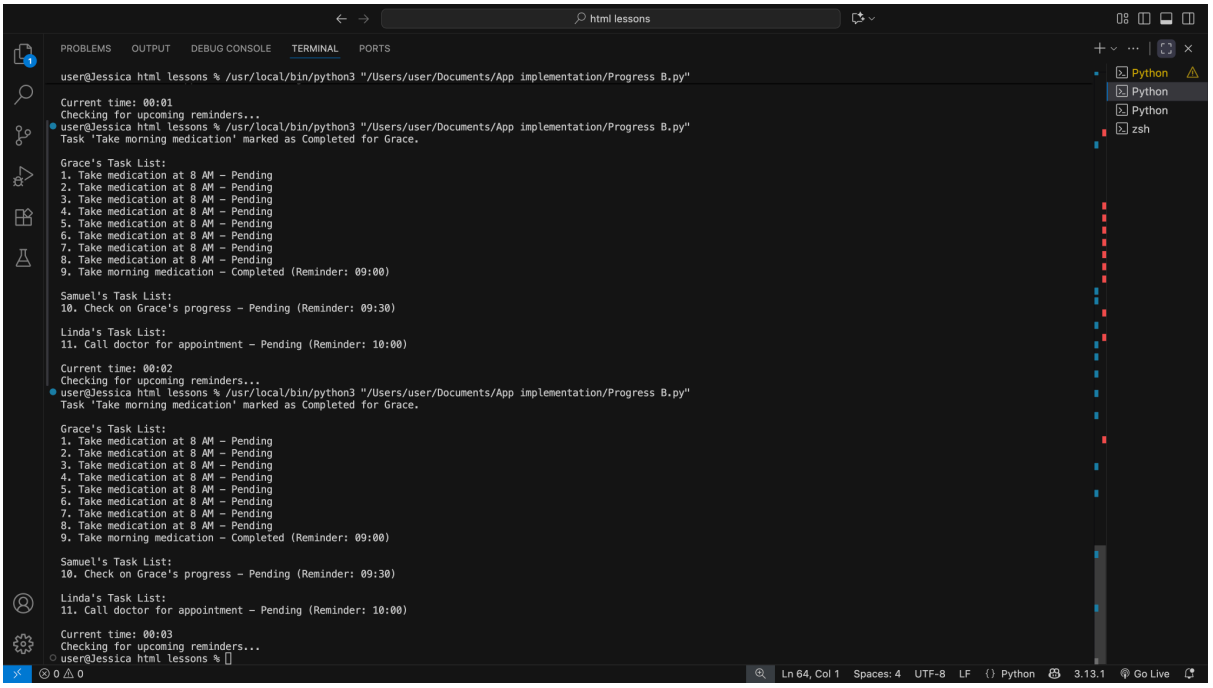
Overview

The project aims to develop a Cognitive Wellness and Memory Aid App designed for elderly users and their caregivers. The app supports task management, daily reminders, and caregiver tracking to help older adults maintain routines and independence.

Version 1 focuses on the non-GUI (CLI) foundation, establishing data handling, core features, and reminder logic before transitioning to a visual interface in later versions.

Implemented So Far

- Core functions for adding, viewing, and updating tasks for each user.
- Roles: elderly user and caregiver.
- Basic reminder system that checks tasks by time and notifies through console messages.
  Caregiver dashboard that lists all elderly users' tasks and statuses.
- Data persistence handled through a CSV file using pandas.
- CLI interaction flow to simulate a working app experience.



Current Functionality Demonstration

- Elderly users can add or mark tasks as *Completed*, *Skipped*, or *Deferred*.
- Caregivers can see users' task lists and check progress.
- The system can store and reload tasks between sessions via CSV.

Issues Encountered and Solutions

Issue	Description	Status / Solution
Data not persisting	Early version used in-memory lists	Replaced with pandas + CSV
CLI input loop design	Needed way to test functions easily	Created standalone test functions
Reminder timing	Real-time scheduling complex in CLI	Currently simulated; real scheduling planned for V2

Help Needed

- Some scripts still show `ModuleNotFoundError` or `SyntaxError` even though pandas is installed.
- Feedback on best way to simulate or test notifications without GUI or continuous running loop.
- Advice on input validation structure for the CLI before moving to GUI version.

Milestones for Next Weeks (Version 2 Plan)

Milestone	Description
M1 – Enhanced Data Handling	Add editing/deleting tasks and improve file structure.
M2 – User Input Loop (CLI Menu)	Create a main interactive loop (1–add task, 2–view tasks, 3–mark done, 4–quit).
M3 – Notification Prototype	Implement timer-based reminders using `datetime` or `schedule` library.
M4 – Basic GUI Transition	Begin experimenting with a simple Tkinter or Streamlit interface.

M5 – Testing & Documentation	Add inline documentation and prepare for the final demonstration.

Self-Reflection

- **Progress:** Satisfied with progress, core logic and persistence are working.
- **Feasibility:** I'm not so confident the project can be completed in the remaining time
- **Expectations vs Reality:** Project seems harder than expected. Setting up data persistence with pandas took longer than expected, but simplified future development.

Revised Project Spec (Summary)

Revision Notes:

- Added: CSV/pandas-based data persistence.
- Deferred: Full real-time reminder scheduling until Version 2.
- Added "Proposed" feature: simple GUI using Tkinter or Streamlit once CLI core is stable.

Core Features to Keep:

1. Task creation, viewing, and marking.
2. Caregiver dashboard.
3. Audio/text reminder options (tentative).

Proposed "Nice-to-Have" Features:

- Daily summary report for caregivers.
- Voice-based task input for elderly users.
- Calendar-style task view.