Hackathon Scenario: Build a Bullet Journal Companion App Background

A Bullet Journal (BuJo) is a popular productivity method used to manage daily tasks, events, notes, and emotions in one physical notebook. People usually write everything by hand using simple symbols and marks.

Some common symbols used in Bullet Journaling are:

• (Dot) for tasks

O (Alphabet "O") for scheduled events

X for completed tasks

/ for tasks in progress

Filled O for event completed

Notes, emotions, and journal entries are also written in free text.

Example :

Everything stays inside a paper notebook, and this companion app is meant to bring that experience into the digital world.

Your Challenge

Your goal is to build a Companion App for the Bullet Journal system. The app should work with handwritten pages from a physical notebook.

Core Requirements

1. **Scan a Handwritten Bullet Journal Page**

   - The user takes a photo or scans a page from their notebook.
   - The app should detect:
     - ❖ Tasks / To-dos
     - ❖ Scheduled events
     - ❖ Notes

- ❖ Emotions
- Based on the symbols used, the app should understand the status:
  - ❖ X → Completed
  - ❖ / → In Progress**
  - ❖ O → Scheduled
  - ❖ Filled O → Event completed

2. Convert and Store the Data Digitally

After scanning, the app must convert the handwritten content into the following:

a. Tasks / To-dos

- Should be exported to any task management system (your choice Eg: Microsoft To Do, Google Tasks, Notion etc.).
- Should also be saved in TaskPaper format (a common text-based format for tasks).

b. Notes & Emotions

- Must be converted into Markdown format.
- Should be stored in your app or a simple file system.

3. Ability to Query the Data

Your app should allow users to:

- Search for any task, note, or entry that was scanned earlier.
- Retrieve the stored markdown notes or TaskPaper tasks.

4. Update Existing Entries

When users scan the same page again after updating it:

- The app should update existing tasks, notes, or entries.
- It must NOT create duplicate entries for the same scanned items.
- For example, if a task was "in progress" earlier and now has an "X" mark, the status must be updated to "completed".

Optional Features (Bonus Points)

These are not mandatory, but add value:

Threading Support

If a journal entry is continued across multiple pages, the app should:

- Identify the continuation
- Link related notes together as a single thread

You may research more on "threading in journaling."

Hackathon Flow

1. Build the Minimum Viable Product (Bujo Companion App):

   Scan → Extract → Convert → Store → Query → Update

2. End of Day Submission:

   Share your progress with your coordinator and publish your work in the group.

3. Jury Review:

   Hackathon judges will give suggestions.

4. Next Day Enhancements:

   Implement improvements based on the feedback.

All the best!

This challenge is designed to be fun, creative, and hands-on. Explore, experiment, and enjoy building your Bullet Journal Companion App!