A

Practical Activity Report

Submitted for

UI & UX SPECIALIST-(UCS542)

END-Semester Lab Evaluation

Personal Dashboard

Submitted to-

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BE Third Year

Submitted by-

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INTRODUCTION

Task management and personal productivity tools have become an important part of everyday life, helping users organize their work, track progress, and maintain consistent habits. With increasing workloads and responsibilities, there is a need for a simple, efficient, and responsive system that works smoothly across devices. This project, titled "Personal Productivity Dashboard Using HTML, CSS, and JavaScript," focuses on creating an easy-to-use platform that allows users to manage daily, weekly, and monthly tasks without the need for any complex backend systems.

The application is built using basic web technologies, where HTML forms the structure, CSS creates a clean and modern interface, and JavaScript handles interactions, logic, and data management. The dashboard provides a multi-section layout for tasks, history, goals, and profile, all within a single file that behaves like a multipage interface. It uses the browser's localStorage to save user data, ensuring that tasks, goals, and profile details remain available even after closing the browser, without requiring a server or database.

The system includes core features such as adding tasks with categories, priorities, reminders, and frequency settings. Tasks automatically reset based on time periods—daily, weekly, or monthly—allowing users to maintain an ongoing routine. It also includes a streak counter, thought of the day, and a complete history of completed tasks, helping users monitor their consistency and progress. The interface is designed to be responsive, making it suitable for both desktop and mobile use.

This project demonstrates how a functional and user-friendly productivity tool can be developed using simple front-end technologies. It offers an accessible solution for users who want a lightweight, offline, and customizable dashboard for managing their daily workflow and long-term goals.

PROBLEM STATEMENT

Managing daily routines, tasks, and personal goals has become increasingly challenging as individuals balance work, studies, and personal responsibilities. Many existing productivity tools are either too complex, require user accounts, or depend on internet connectivity and backend servers. This creates barriers for users who simply need a lightweight and accessible system to organize their tasks without unnecessary complications.

Most task management applications also lack proper customization and do not offer features like automatic resetting of daily, weekly, and monthly tasks. As a result, users often struggle to maintain consistency or track their long-term habits. In addition, many platforms do not provide features such as streak tracking, a dedicated history log, personalized goals, or a simple reminder system, leaving users with incomplete solutions that do not fully support their productivity needs.

Another challenge is device compatibility and ease of access. A large number of users prefer tools that work instantly on any device, without installation or sign-up. Traditional applications that rely on cloud databases or external frameworks may slow down performance or fail to run in offline environments. For users who want a simple yet powerful tool, these limitations reduce efficiency and discourage regular use.

This project addresses these challenges by creating a responsive, single-file productivity dashboard that runs entirely in the browser using HTML, CSS, and JavaScript. By storing data locally and offering features such as recurring task resets, reminders, history tracking, a streak counter, and a clean interface for goals and profile management, the system provides a complete and user-friendly solution. The aim is to deliver a tool that is easy to use, requires no installation, and supports users in managing their daily workflow effectively.

SPECIFIC REQUIREMENTS

a) Functional Requirements:

i) Task Management:

Users can add, edit, and delete tasks.

Tasks include title, optional description, priority level, category, and frequency (daily, weekly, monthly).

ii) Automatic Recurring Task Reset:

Daily tasks reset at the start of each new day.

Weekly tasks reset every Monday.

Monthly tasks reset at the beginning of a new month.

Tasks continue appearing every cycle until deleted by the user.

iii) Search and Filter Options:

Users can search tasks by name.

Filters include frequency, priority, category, and completion status.

iv) Reminders:

A single-time reminder can be set for any task using date and time.

The reminder displays an alert on the dashboard when the scheduled time arrives and the page is open.

v) Task Completion and History Tracking:

Users can mark tasks as completed.

Every completed task is saved in the history section with timestamp, category, and priority.

History remains even if the original task is deleted.

vi) Goals Management:

Users can create a list of personal goals.

Goals can be added or removed and are saved for long-term reference.

vii) Profile Management:

Users can enter their name and bio.

The profile page displays the user's details along with a fixed personal quote.

viii) Streak Tracking:

A streak counter tracks how many consecutive days the user completes at least 4 tasks.

ix) Responsive Design:

The entire dashboard layout is fully responsive and works smoothly on desktop, tablet, and mobile devices.

b) Non-Functional Requirements:

i) Data Persistence:

All information (tasks, history, goals, profile, streaks, resets) is stored using browser localStorage, allowing offline use.

ii) Performance:

The application loads quickly and runs efficiently since it uses only HTML, CSS, and JavaScript without external frameworks.

iii) Usability:

The interface is simple, clean, and intuitive, allowing users to interact with tasks, history, and goals without confusion.

iv) Reliability:

Data remains intact across browser refreshes and sessions. Recurring tasks are reset accurately based on date, week, and month changes.

v) Maintainability:

The code is organized into small functions and structured clearly, making it easy to update or extend features in the future.

vi) Cross-Browser Compatibility:

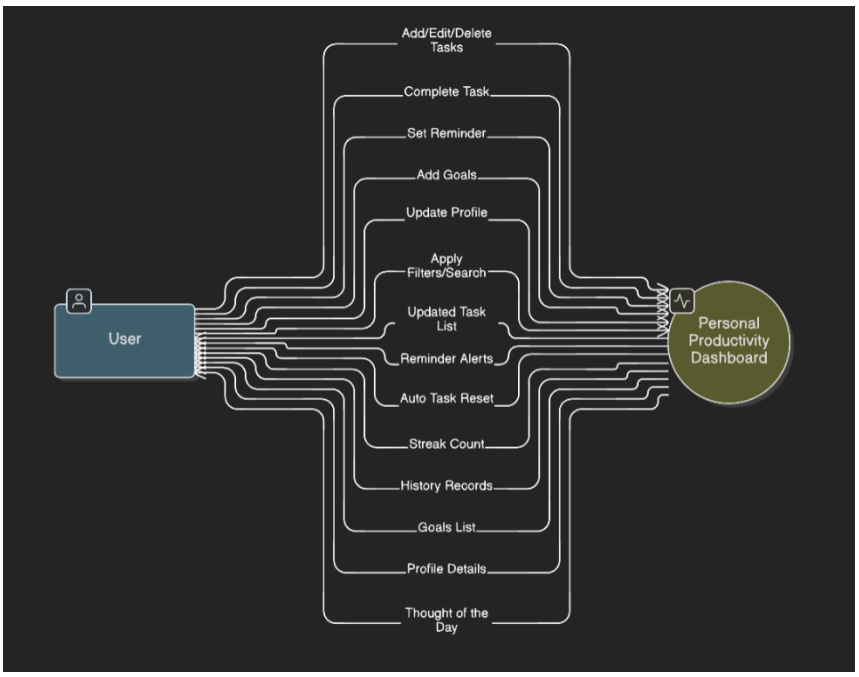
The dashboard works consistently across major browsers such as Chrome, Edge, Firefox, and Brave.

vii) Offline Availability:

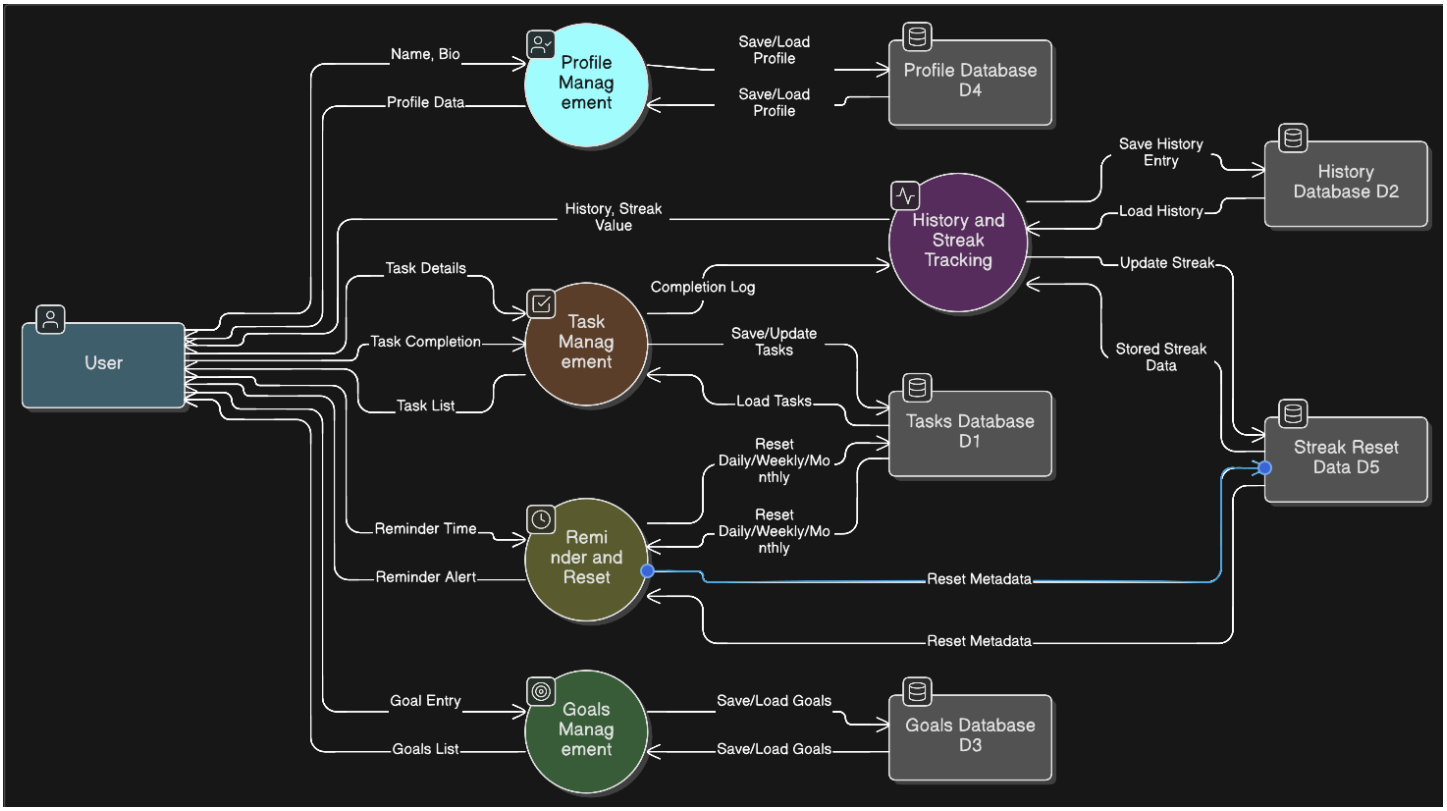
Since the system uses no backend and relies on localStorage, it works fully without an internet connection.

CONTEXT LEVEL AND DATA FLOW DIAGRAM

Context Level Diagram -(Level 0)



Data Flow Diagram -(Level 1)



SYSTEM SPECIFICATION

1. Hardware Specifications

Development Environment:

- **Processor**: AMD Ryzen 7 6800HS with Radeon Graphics
- **RAM:** 16 GB
- **Storage:** 512 GB SSD
- **Graphics:** NVIDIA GeForce RTX 3060 Mobile
- **Display**: 2K (2560 × 1440) resolution monitor.

2. Software Specifications:

Development Tools:

- **Operating System**: Windows 10/11 or any OS supporting a modern browser.
- **IDE/Editor**: Visual Studio Code (preferred) or any text editor.
- **Version Control**: Git with GitHub/GitLab for code management.

Technologies Used:

- **Frontend**:HTML5, CSS3, JavaScript (Vanilla JS)
- UI/UX: Responsive layout using Flexbox and CSS Grid.
- Storage: Browser LocalStorage for data persistence.

Browsers:

- Google Chrome, Firefox, or Edge (latest versions for development and testing).

TOOLS USED

The successful development of the Personal Productivity Dashboard was achieved by using a set of tools that supported efficient design, testing, and deployment. These tools were selected to ensure simplicity, responsiveness, and ease of maintenance. Below is a detailed explanation of the tools used and their roles in the project:

1. **Frontend Technologies**
   - **HTML5:** Used to structure the entire dashboard, including pages for tasks, history, goals, and profile. It forms the base layout for the application.
   - **CSS3:** Used to design the user interface, implement responsive layouts, and style components such as cards, buttons, grids, and navigation. CSS Flexbox and Grid were utilized to ensure proper alignment across devices.
   - **JavaScript (Vanilla JS):** Handles all dynamic functionality, including task creation, reminders, streak logic, automatic task resets, filtering, history tracking, and localStorage operations.

2. **LocalStorage**
   - Used for storing all user data (tasks, goals, history, profile, streaks).
   - Ensures that the dashboard works completely offline and preserves user data across sessions without requiring a backend or database.

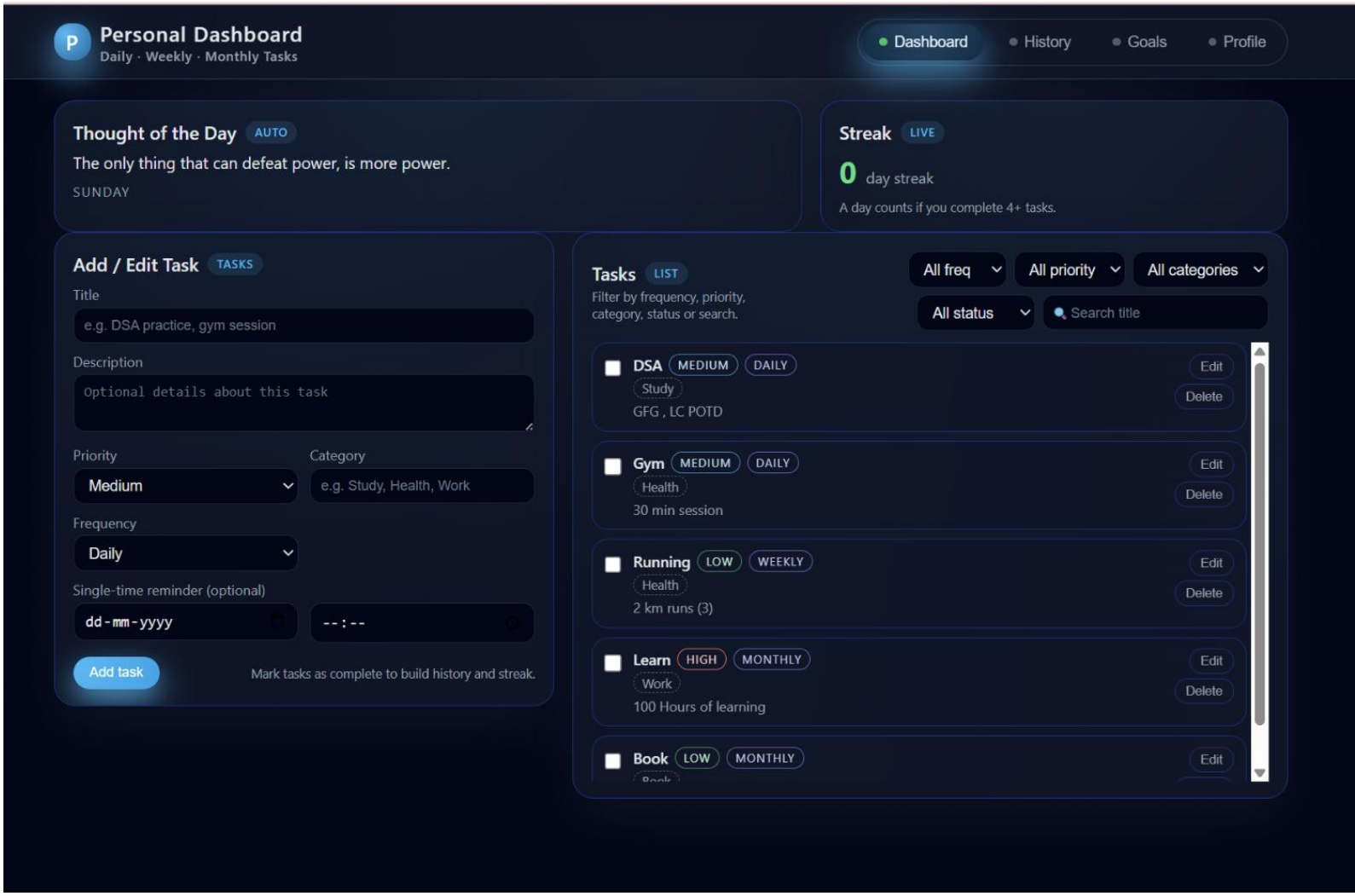
3. **Visual Studio Code**
   - The primary code editor used for developing the project.
   - Extensions like "Live Server" were helpful for previewing changes instantly during development.

4. **Web Browsers (Chrome/Edge/FireFox)**
   - Used for running and testing the dashboard.
   - Developer tools assisted in debugging layout issues, JavaScript functions, and responsiveness across device sizes.

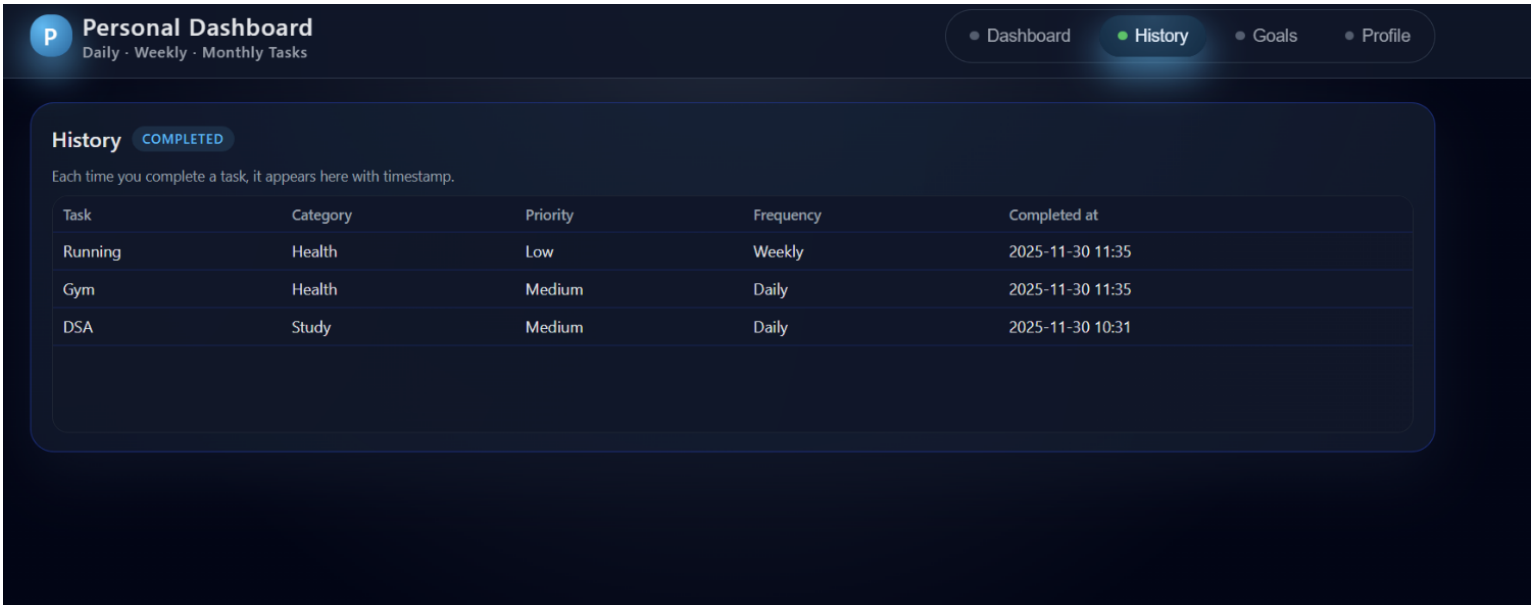
5. **Git and GitHub (Optional)**
   - Can be used to store the project code and maintain version control.
   - Helpful for tracking updates and keeping a backup of the single-file application.

SAMPLE SCREENSHOTS

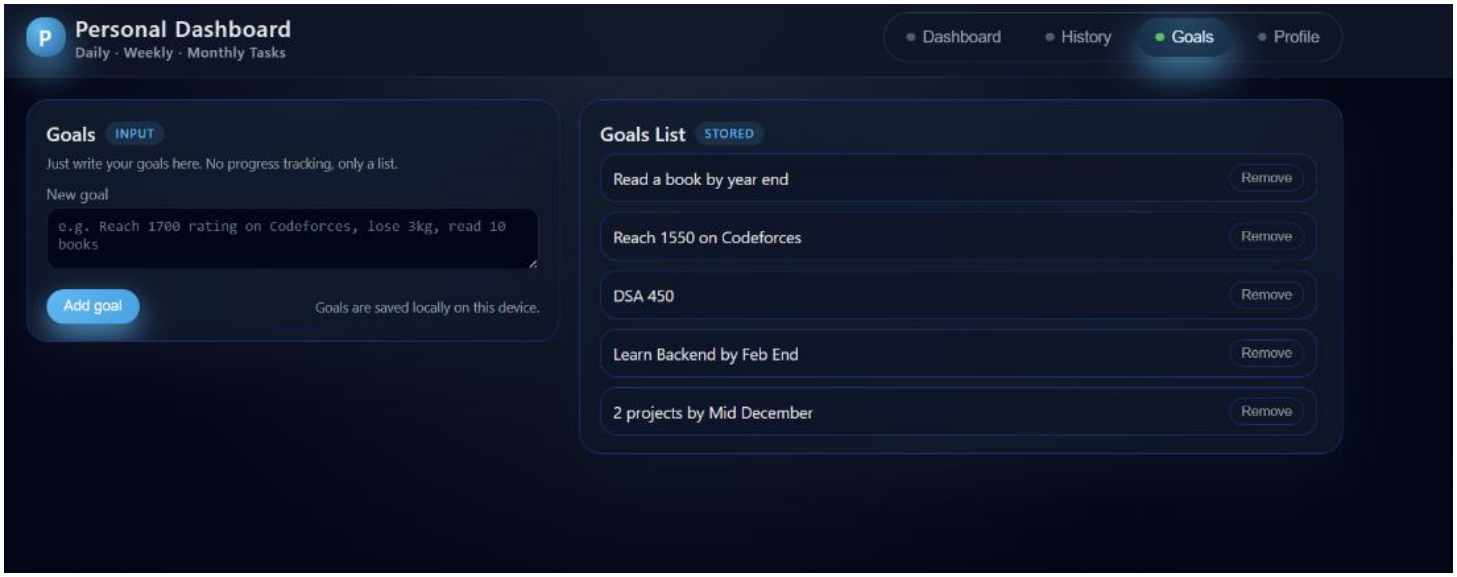
1) Main Page:



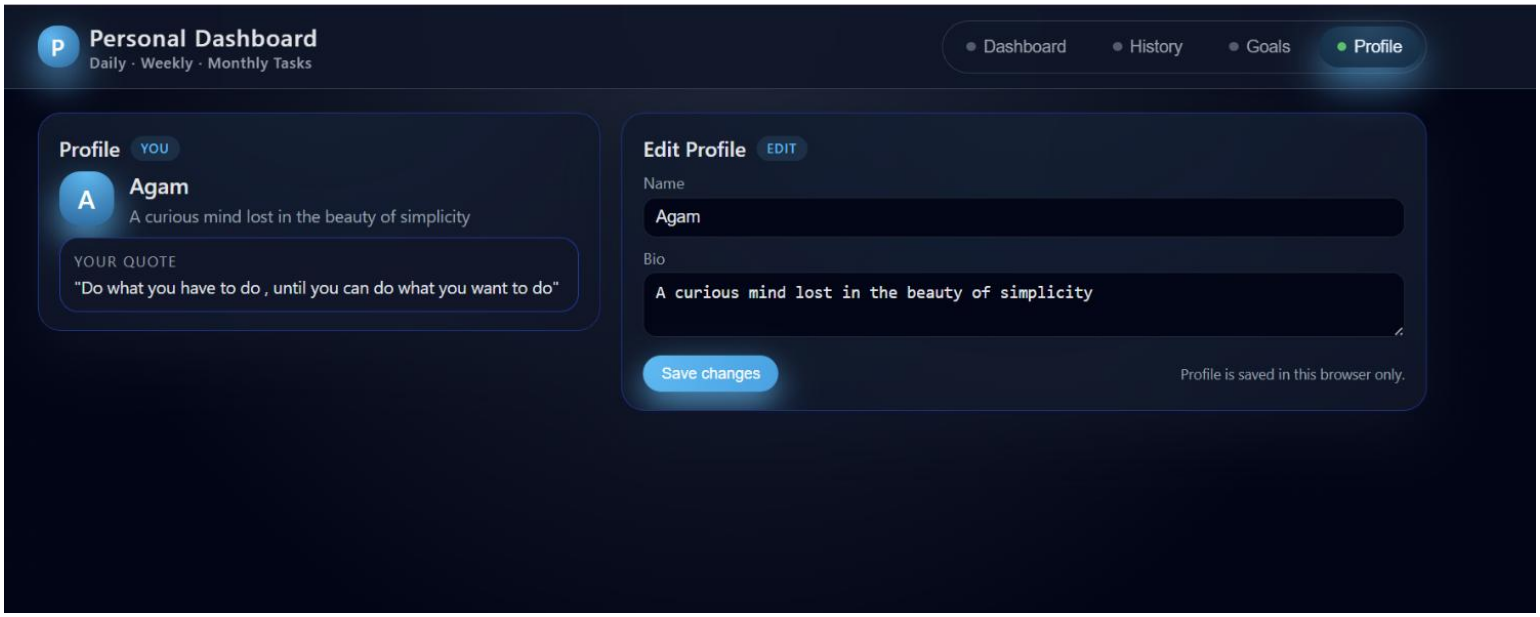
2) **History Page –**



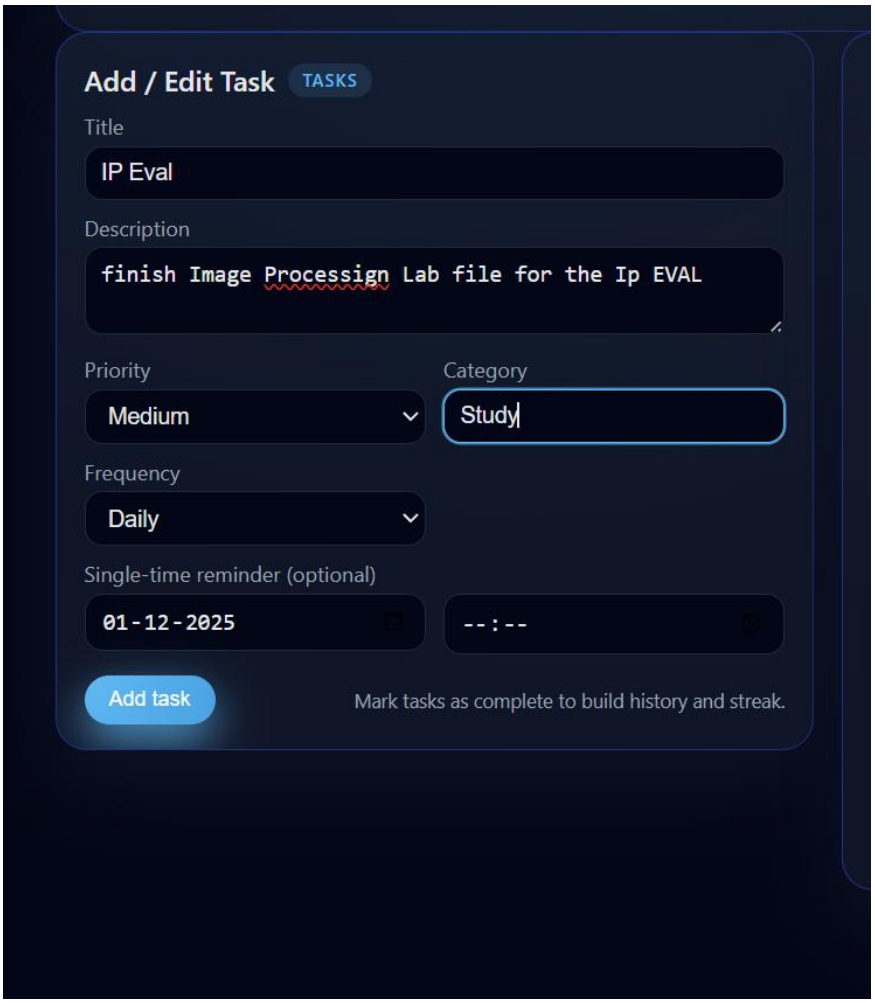
3) **Goals** –



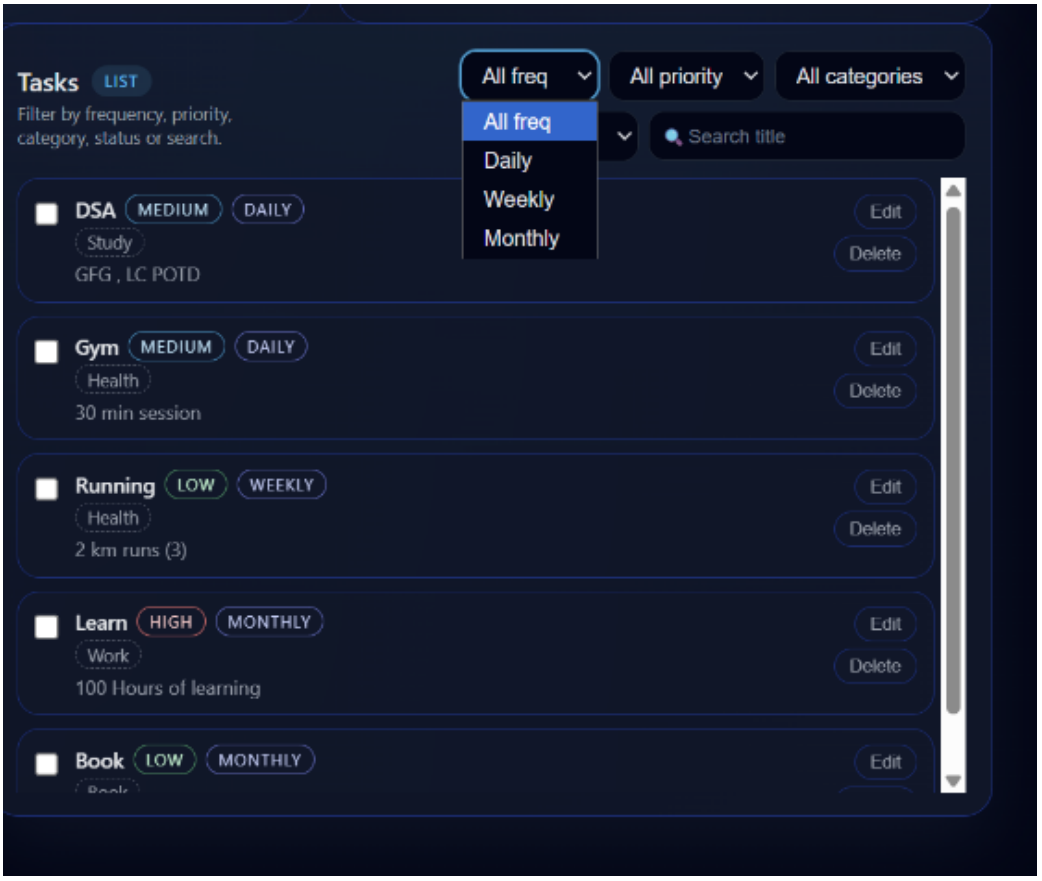
4) **Profile Page** –

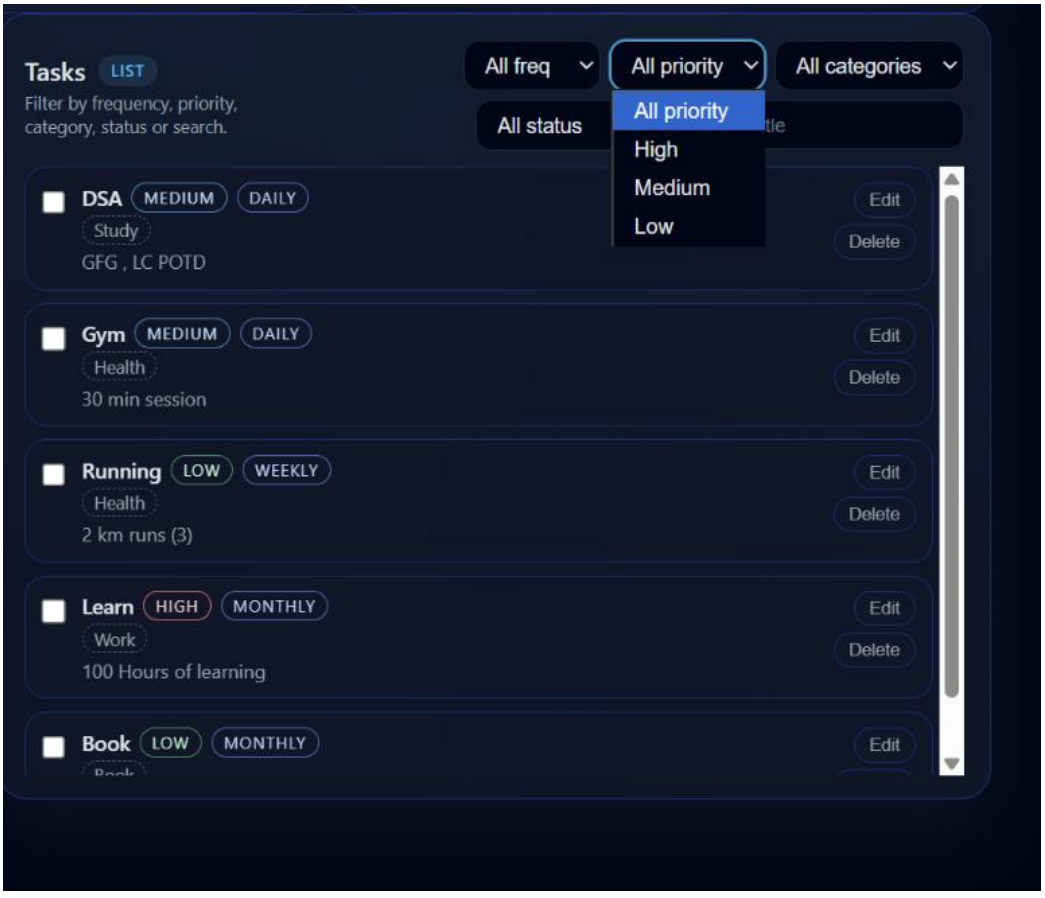


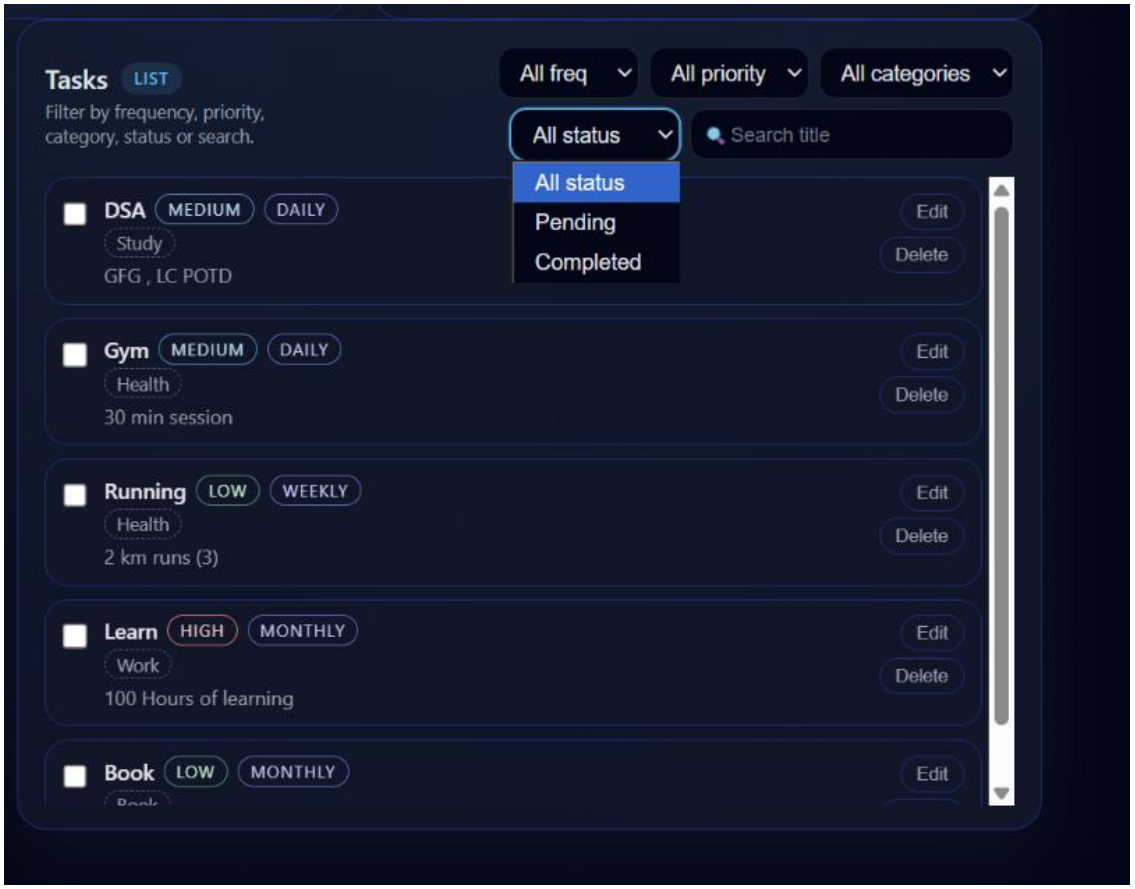
5) **Adding a Task** –

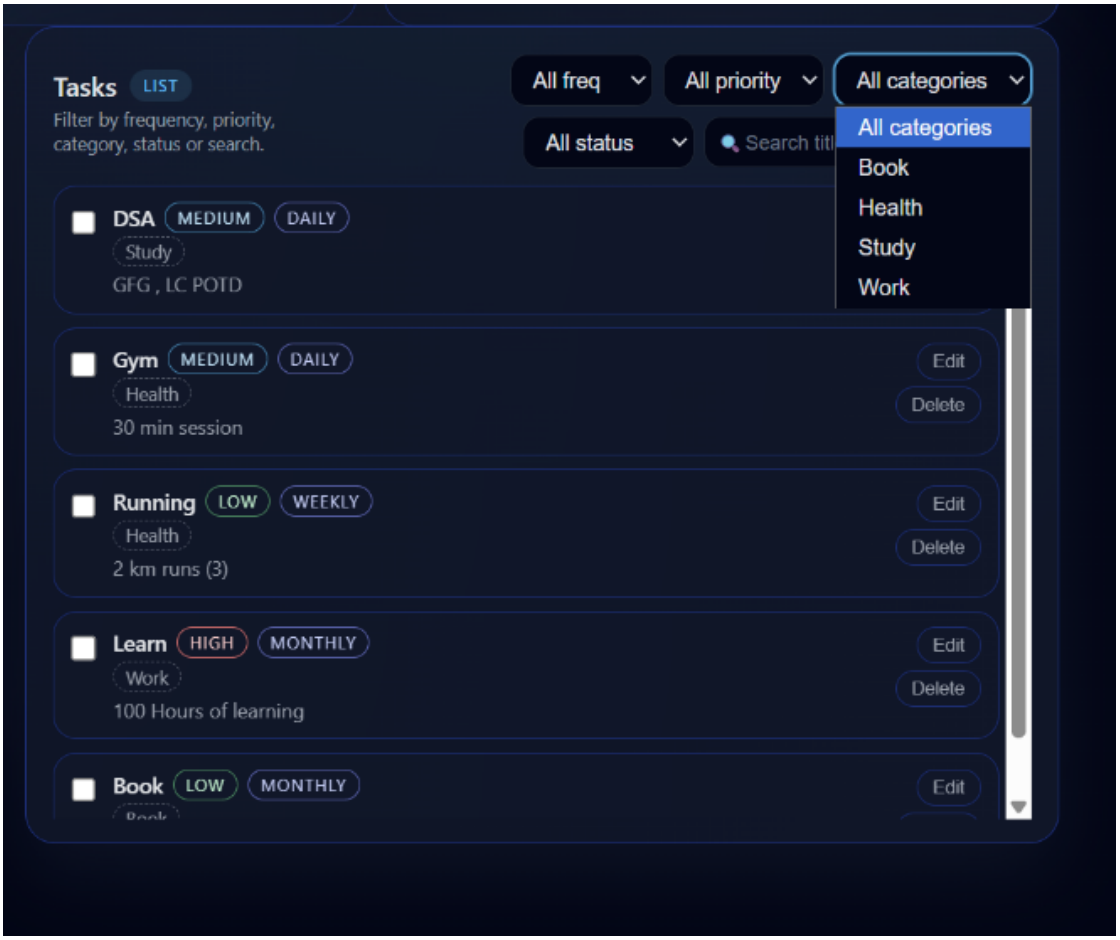


6) **Filter Task by Different Criterias -**






Tasks
LIST
Filter by frequency, priority, category, status or search.
All freq
All priority
All categories
All status
Search title
All status
Pending
Completed
DSA
MEDIUM
DAILY
Study
GFG , LC POTD
Edit
Delete
Gym
MEDIUM
DAILY
Health
30 min session
Edit
Delete
Running
LOW
WEEKLY
Health
2 km runs (3)
Edit
Delete
Learn
HIGH
MONTHLY
Work
100 Hours of learning
Edit
Delete
Book
LOW
MONTHLY
Edit


Tasks
LIST
Filter by frequency, priority, category, status or search.
All freq
All priority
All categories
All status
All categories
Book
Health
Study
Work
DSA
MEDIUM
DAILY
Study
GFG , LC POTD
Gym
MEDIUM
DAILY
Health
30 min session
Edit
Delete
Running
LOW
WEEKLY
Health
2 km runs (3)
Edit
Delete
Learn
HIGH
MONTHLY
Work
100 Hours of learning
Edit
Delete
Book
LOW
MONTHLY
Edit

OUTPUT REPORTS

This section summarizes the key outputs generated during the development and testing phases of the Personal Productivity Dashboard. While the actual screenshots and logs are not included here, the following points highlight the process and the outcomes observed during testing.

a. Task and Feature Testing Report:

Testing was carried out directly in the browser to validate all functional features of the dashboard. The following areas were tested:

● **Task Creation and Editing**: Verified that users can add new tasks with title, description, priority, category, and frequency. Checked that updates reflect correctly in the UI and in localStorage.
● **Task Reset Logic:** Confirmed that daily, weekly, and monthly tasks automatically reset based on date, week start, and month changes.
● **Reminder Trigger:** Tested single-time reminders to ensure alerts appear at the scheduled date and time when the tab is open.
● **History Logging:** Ensured every completed task is correctly saved in the history section with timestamp and metadata.
● **Streak Counter:** Validated that the streak increments only when the user completes 4 or more tasks per day and resets upon missed days.
● **Filtering and Search:** Tested all filters including frequency, priority, category, status, and search functionality to confirm accurate results.

b. Debugging Logs:

During development, debugging was primarily done using browser developer tools:

● **Console Logs**: Used to monitor task creation, reset operations, reminder triggers, and localStorage updates.
● **Error Messages:** Any unexpected behavior such as invalid dates, undefined values, or rendering issues were captured and resolved through console outputs.
● **UI Inspection:** CSS and layout issues were tracked using the Inspect Element tool to ensure proper responsiveness across devices.

CONCLUSION

The development of the Personal Productivity Dashboard using HTML, CSS, and JavaScript has been a complete learning experience covering essential aspects of front-end application design. This project was created with the objective of providing a simple, responsive, and efficient tool to help users manage their daily routines, ongoing tasks, and long-term goals. By using only client-side technologies, the dashboard functions smoothly in any modern browser and does not require a backend or external dependencies.

One of the major achievements of this project is the clean and user-friendly interface that allows users to add tasks, set reminders, track history, and manage goals with ease. Features such as automatic resetting of daily, weekly, and monthly tasks, along with a streak counter and thought of the day, contribute to improving consistency and motivation. The use of localStorage ensures that all user data is saved securely on the device, enabling the application to work completely offline while maintaining fast performance.

The project also highlights good practices in UI/UX design and code organization, making it easy to maintain and expand. Future improvements could include cloud backup support, theme customization, or integration with mobile notifications for reminders. Despite being lightweight, the dashboard successfully demonstrates how much functionality can be achieved using core web technologies alone.

In conclusion, this productivity dashboard meets its intended goals of providing an accessible, flexible, and offline-ready task management system. It stands as a practical example of how simple front-end technologies can be used to build effective real-world applications that support better planning, tracking, and personal development.