

Life Buddy: A Web-Based Personal Life Management System for Planning and Daily Productivity

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Abstract - LifeBuddy is a web-based application designed to help users manage their daily academic, professional, and mental well-being activities through three modes: Study Mode, Work Mode, and Yog Mode. The system aims to improve productivity, time management, and emotional balance by providing structured planning and personalized task management within a unified digital platform. Existing applications mainly focus on basic task scheduling, to-do lists, or standalone study planners and wellness applications. Most of these systems do not account for the user's daily working capacity, pending or missed tasks, or emotional state. They also lack intelligent features such as automatic task rescheduling, fine-grained progress tracking, and functional integration between productivity management and mental wellness modules. LifeBuddy addresses these limitations by incorporating capacity-based task assignment, rule-based automatic rescheduling using deadlines and priority parameters, and progress monitoring at subject, chapter, and daily levels. Additional features include revision notes with notification control, previous year question-based topic prioritization, YouTube-assisted learning support, and emotion-driven yoga recommendations, making the system adaptive and user-focused.

Key Words: AI Productivity System, Study Mode, Work Mode, Hybrid Mode, Yog Mode, Kanban Board, Time Tracking, Performance Analytics

1. INTRODUCTION

Students and professionals often face difficulty managing multiple responsibilities efficiently. Academic commitments, professional tasks, deadlines, and personal health compete for attention. Existing productivity tools usually provide static to-do lists or reminders but lack intelligent planning, real performance tracking, and well-being integration.

Modern advancements in Artificial Intelligence allow systems to analyze user behaviour, optimize scheduling, and provide data-driven suggestions. However, most systems still separate productivity from personal wellness, leading to imbalance and burnout.

Life Buddy is developed as a comprehensive multi-mode system that integrates structured task management with mental balance. The platform includes:

- Study Mode – Focused academic planning and tracking
- Work Mode – Professional task execution and analytics

- Both Mode – Combined management of study and work
- Yog Mode – Integrated wellness and focus enhancement

The objective is not only to increase productivity but also to maintain mental clarity, discipline, and long-term performance growth.

2. Proposed System

LifeBuddy is an AI-driven web-based productivity ecosystem designed to adapt to different life roles. Instead of offering a single task board, it introduces multiple operational modes.

[1] Study Mode

This mode is designed for academic productivity. Users can create subject-wise tasks, track study hours using a start/stop timer, and organize topics using a Kanban board layout. The Smart AI Planner suggests daily study distribution based on deadlines and workload.

[2] Work Mode

Work Mode focuses on professional task management. It includes drag-and-drop priority sorting within a Kanban board, edit/delete task functionality, automated overdue red card highlighting, and real-time hour tracking. Weekly analytics generate real productivity graphs based on tracked hours.

[3] Both Mode (Hybrid Mode)

Both Mode allows users to manage study and work simultaneously within one structured dashboard. Tasks from both domains are organized intelligently, helping users maintain balance without confusion. AI planning adapts by distributing time across both categories efficiently.

[4] Yog Mode (Integrated Across All Modes)

Yog Mode is embedded within Study, Work, and Both Mode. It encourages mental reset, short mindful breaks, focus improvement, and stress reduction. Instead of being a separate feature, Yog Mode acts as a stabilizing layer to prevent burnout and improve sustained productivity.

3. System Overview

Life Buddy operates as a modular system combining productivity management, time tracking, AI-based planning, and performance analytics.

3.1 Task Management & Kanban Module

Each mode includes a Kanban board structure with columns representing workflow stages. Users can drag and drop tasks to reorder priorities. Tasks can be edited or deleted dynamically. Overdue tasks are automatically moved to a red-highlighted status to ensure visibility.

3.2 Time Tracking & AI Planner Module

The system includes a real-time timer that records actual hours spent on study or work tasks. This eliminates estimation errors and provides accurate productivity measurement.

The Smart AI Planner analyzes pending tasks, deadlines, and workload distribution. It generates structured daily schedules tailored to the selected mode (Study, Work, or Both).

3.3 Performance & Archive Module

Weekly analytics are generated using real tracked data and displayed through performance graphs. Animated progress bars replace static percentage indicators for a dynamic user experience. The Archive module stores weekly and monthly records for performance reflection.

3.4 Yog Mode Integration

Yog Mode functions as a balance mechanism. It encourages short structured breaks, mental resets, and discipline alignment. It enhances concentration and prevents productivity fatigue.

4. System Architecture

LifeBuddy follows a layered architecture model consisting of:

1. User Interface Layer
2. Application Logic Layer
3. AI Processing Layer
4. Data & Analytics Layer

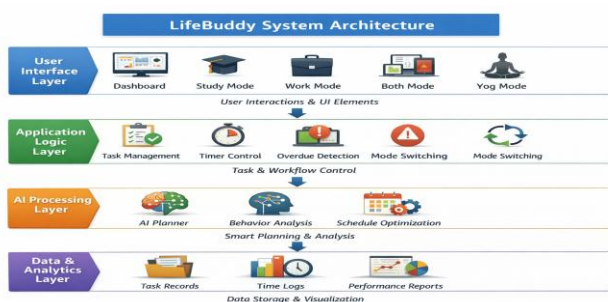


Fig 4.1: LifeBuddy Architecture

The **User Interface** includes the Dashboard, Study Mode, Work Mode, Both Mode, Yog Mode panel, Performance Analytics, and Archive sections.

The **Analysis Logic Layer** manages task operations, drag-and-drop functionality, overdue detection, timer controls, and mode switching.

The **AI Processing Layer** handles smart daily planning logic and workload distribution across study and work domains.

The **Data & Analytics Layer** stores tracked hours, task status, performance metrics, and archived records. It generates real-time graphs and animated progress indicators.

This modular architecture ensures scalability, structured workflow management, and efficient performance analysis.

5. Implementation and results

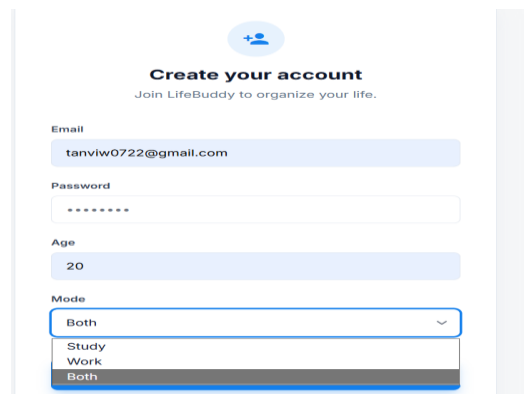


Fig. 5.1 Sign up Page Interface

This screen shows the **Life Buddy account registration interface**, where users enter their email, password, age, and select their preferred mode (Study, Work, or Both).

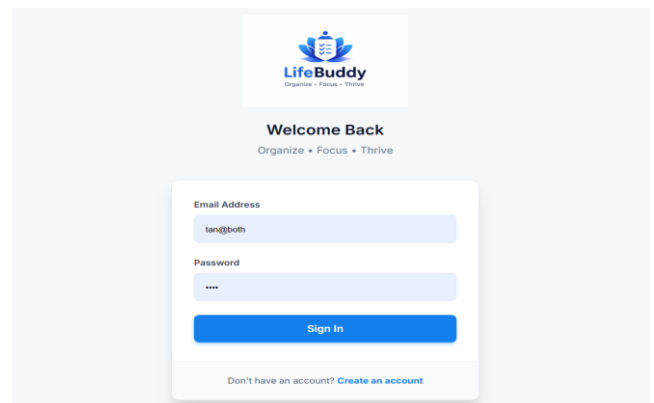


Fig. 5.2 Document Upload Interface

This screen represents the **LifeBuddy login interface**, where existing users securely enter their email and password to access their personalized dashboard. It ensures authenticated access to Study Mode, Work Mode, Both Mode, and Yog Mode features for a structured productivity experience.

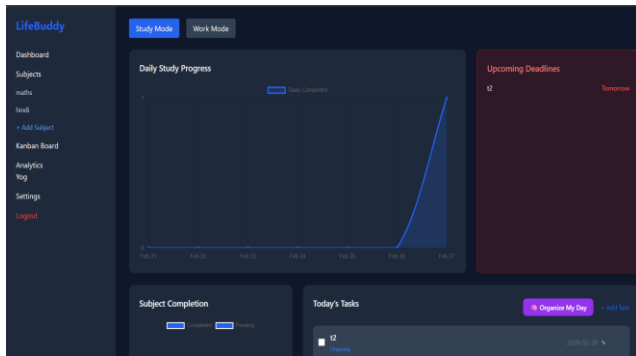


Fig. 5.3 Study mode dashboard

This screen shows the **LifeBuddy Study Mode dashboard**, displaying daily study progress, subject completion status, and upcoming deadlines.

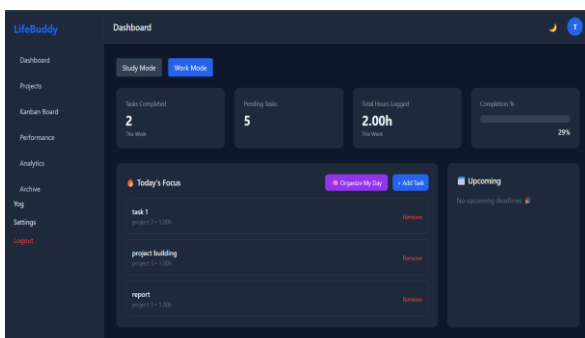


Fig. 5.5 Work mode dashboard

This screen displays the **LifeBuddy Work Mode dashboard**, showing weekly task statistics, total hours logged, and completion percentage with progress tracking.

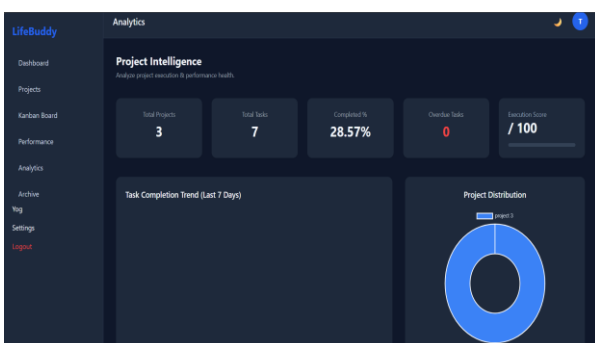


Fig. 5.5 Analytics

This screen represents the **LifeBuddy Analytics dashboard**, providing insights into project performance, task completion percentage, and execution score.

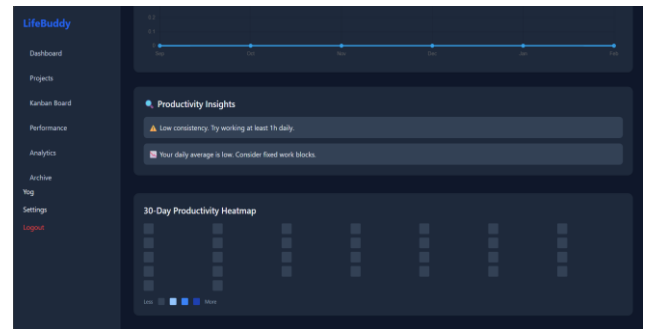


Fig. 5.6 Performance

This screen shows the **Life Buddy Performance dashboard**, highlighting productivity insights based on user activity and consistency. It includes intelligent suggestions and a 30-day productivity heatmap to help users analyze work patterns and improve performance.

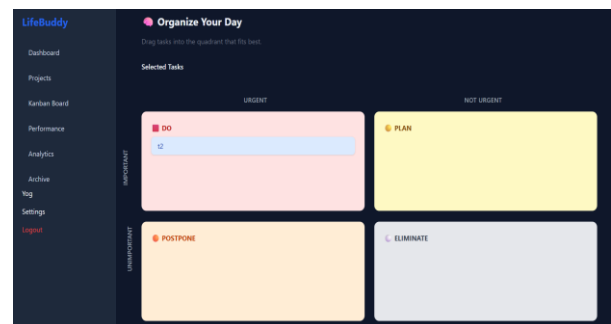


Fig. 5.6 Task organizer

This screen shows the **LifeBuddy "Organize Your Day" feature**, based on the Eisenhower Matrix for smart task prioritization.

Users can drag tasks into Do, Plan, Postpone, or Eliminate categories to manage urgency and importance effectively.

6. CONCLUSIONS

Life Buddy introduces a multi-dimensional approach to productivity management by integrating Study Mode, Work Mode, Both Mode, and Yog Mode within a unified system. By combining AI planning, real-time time tracking, Kanban workflow management, and performance analytics, the system improves accountability and consistency. Unlike traditional productivity tools, Life Buddy balances execution and mental wellness. The integration of Yog Mode ensures sustainable performance rather than short-term output spikes.

The project demonstrates how AI-powered structured systems can significantly improve productivity, discipline, and overall growth.

7. Future Scope

- 1] Personalized AI behavioral analysis for adaptive productivity insights.
- 2] Mobile application development for cross-device accessibility.
- 3] Voice-assisted task creation and timer control.
- 4] Team collaboration features for group study or workplace projects.
- 5] Advanced burnout detection using work pattern analytics.

8. REFERENCES

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Ahmad, M. O., Markkula, J., & Oivo, M. (2013). "Kanban in software development: A systematic literature review." EUROMICRO Conference on Software Engineering and Advanced Applications (SEAA), IEEE. <https://ieeexplore.ieee.org/document/6624436>

Relevance: Supports LifeBuddy's Kanban board layout and drag-and-drop task prioritization workflow.

[2] Productivity Measurement Using Activity Data

Meyer, A. N., Fritz, T., Murphy, G. C., & Zimmermann, T. (2017). "Software Developers' Perceptions of Productivity." IEEE Transactions on Software Engineering. <https://ieeexplore.ieee.org/document/7572962>

Relevance: Provides empirical foundation for LifeBuddy's real-hours tracking and weekly analytics dashboard.

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Relevance: Justifies LifeBuddy's Yog Mode and productivity insight system for improving focus and reducing stress.

[4] Personal Informatics & Self-Tracking Systems

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Relevance: Supports LifeBuddy's time tracking, performance visualization, and self-reflection archive module.