Project Synopsis

On

"Habit Tracker"

Submitted by

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MCA I (Semester: II)

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❖ **Student Name :**

Jawade Ajay Latari

❖ **Title Of the Project:**

Habit Tracker

❖ **Name of the Company/Client: Self**

❖ **Abstract:**

The **Habit Tracker** is a comprehensive web-based system designed to help users build and maintain daily habits through structured tracking, analytics, and motivational elements. The application enables users to create, categorize, and monitor their habits while providing insights into their progress through interactive reports, streaks, and achievements.
The system ensures an engaging and user-friendly experience, leveraging modern web technologies to deliver a seamless platform for habit formation and personal development. By integrating detailed habit analytics, gamification, and a responsive UI, the application helps users stay motivated and consistent in their routines.

❖ Introduction and Objectives of the Project:

Introduction

The **Habit Tracker Application** addresses the limitations of existing habit management solutions by offering a feature-rich, analytics-driven, and visually appealing platform for users. Many existing systems lack motivational features, detailed insights, or effective customization options.

This application eliminates such limitations by incorporating:

- An intuitive and engaging user interface
- Interactive charts and habit performance analytics
- Customizable habit creation and categorization
- Gamification elements such as badges and streaks
- Secure authentication and data management

Objectives

1. **Simplify** habit tracking with a user-friendly web interface.
2. **Provide insights** into habit adherence and trends through reports.
3. **Encourage consistency** with streaks, badges, and achievements.
4. **Enable customization**, allowing users to categorize and structure their habits.
5. **Support accessibility** through a responsive design that works across devices.
6. **Ensure security** with JWT-based authentication and robust data protection.

❖ Project Category:

Web Application

❖ Tools / Platform, Hardware and Software Requirement specifications:

Operating System:

- Windows 7 or Above

Hardware Requirements:

- **Processor**: Intel(R) Core(TM) i3 or above
- **Hard Disk**: Minimum 40GB
- **RAM**: Minimum 4GB

Software Requirements:

- **Frontend**: React.js, Tailwind CSS, Framer Motion
- **Backend**: Node.js, Express.js
- **Database**: MongoDB
- **Authentication**: JWT (JSON Web Tokens)
- **Development Environment**: VS Code
- **Version Control**: Git
- **Server**: Any cloud-based platform supporting Node.js applications

❖ Scope of the Project

- **User Registration and Authentication:**
  Secure signup, login, and authentication system with JWT support.
- **Profile Management:**
  Allows users to update and personalize their profile information.
- **Habit Creation and Categorization:**
  Users can create, categorize, and manage habits based on their goals.
- **Daily Habit Tracking:**
  Enables users to mark habits as completed on a daily basis.
- **Progress Visualization:**
  Interactive charts and graphical reports display habit progress over time.
- **Achievement System:**
  Unlockable badges and streak counters motivate consistent habit-building.
- **Statistical Analysis:**
  Provides insights into habit consistency, success rates, and trends.
- **Responsive Design:**
  Optimized UI for both desktop and mobile devices using Tailwind CSS and Framer Motion.

❖ Proposed system

Client-Side (Frontend):

- **React.js** for dynamic UI components and responsive design.
- **Tailwind CSS** for styling and seamless layout customization.
- **Framer Motion** for smooth animations and enhanced user experience.
- **React Router** for seamless page navigation.

Server-Side (Backend):

- **Node.js & Express.js** for handling API requests.
- **MongoDB** with Mongoose for efficient data storage and retrieval.
- **JWT Authentication** for secure user login and session management.
- **Bcrypt** for password encryption and security.

Database:

- Stores user information, habit records, and tracking data.
- Maintains logs of daily habit completion and performance trends.

❖ Module Specification:

User Modules:

1. **Authentication Module**
    - User registration with email verification
    - Secure login/logout with JWT authentication
    - Password reset functionality
2. **Habit Management Module**
    - Create, update, delete, and categorize habits
    - Set habit frequency (daily, weekly, etc.)
    - Add descriptions, notes, and custom reminders
3. **Habit Tracking Module**
    - Mark daily habits as complete
    - Maintain habit streaks and progress history
    - Visualize performance through interactive charts
4. **Analytics and Reporting Module**
    - Generate habit performance reports
    - View weekly/monthly completion rates
    - Track habit consistency and improvement trends

5. **Gamification Module**
    - Earn badges for habit completion milestones
    - Maintain streaks for consistent habit tracking

❖ Bibliography:

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Place: Pune **Signature of Student**