

Expense Tracker

TRACK & MANAGE YOUR EXPANSE

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Overview

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Internship/Project Summary

Internship Project name is “**Expense Tracker**” is a user-friendly digital solution designed to help individuals manage their personal finances efficiently. By allowing users to **record, categorize, and analyze** their Expenses and Income, the platform facilitates financial discipline and aids in achieving monetary goals. With a focus on simplicity and effectiveness, the Expense Tracker serves as a versatile tool for optimizing budgeting practices.

Expected Outcome

- Increased financial awareness and improved money management skills among users.
- A seamless and structured budgeting process powered by digital tools.
- Reduced impulsive spending and better financial planning.

Tools & Technologies

- **Frontend** : React.js/vite, Javascript, TailwindCSS
- **Backend** : Python, FastAPI
- **Database** : MongoDB
- **Tools** : VsCode, PostMan, MongoDBCompass, PyCharm

Key Features

Expense & Income Tracking

- Users can log daily transactions by entering their income and expenses.
- Provides an intuitive interface to quickly add, edit, or delete financial records.

Categorization & Organization

- Transactions can be categorized into predefined groups such as Food, Transport, Entertainment, Bills, and Savings.
- Users can also create custom categories to match their financial habits.

Key Features

Financial Analysis & Insights

- Provides detailed analytics to help users understand their spending habits.
- Displays monthly, weekly, and yearly financial summaries in charts and graphs.

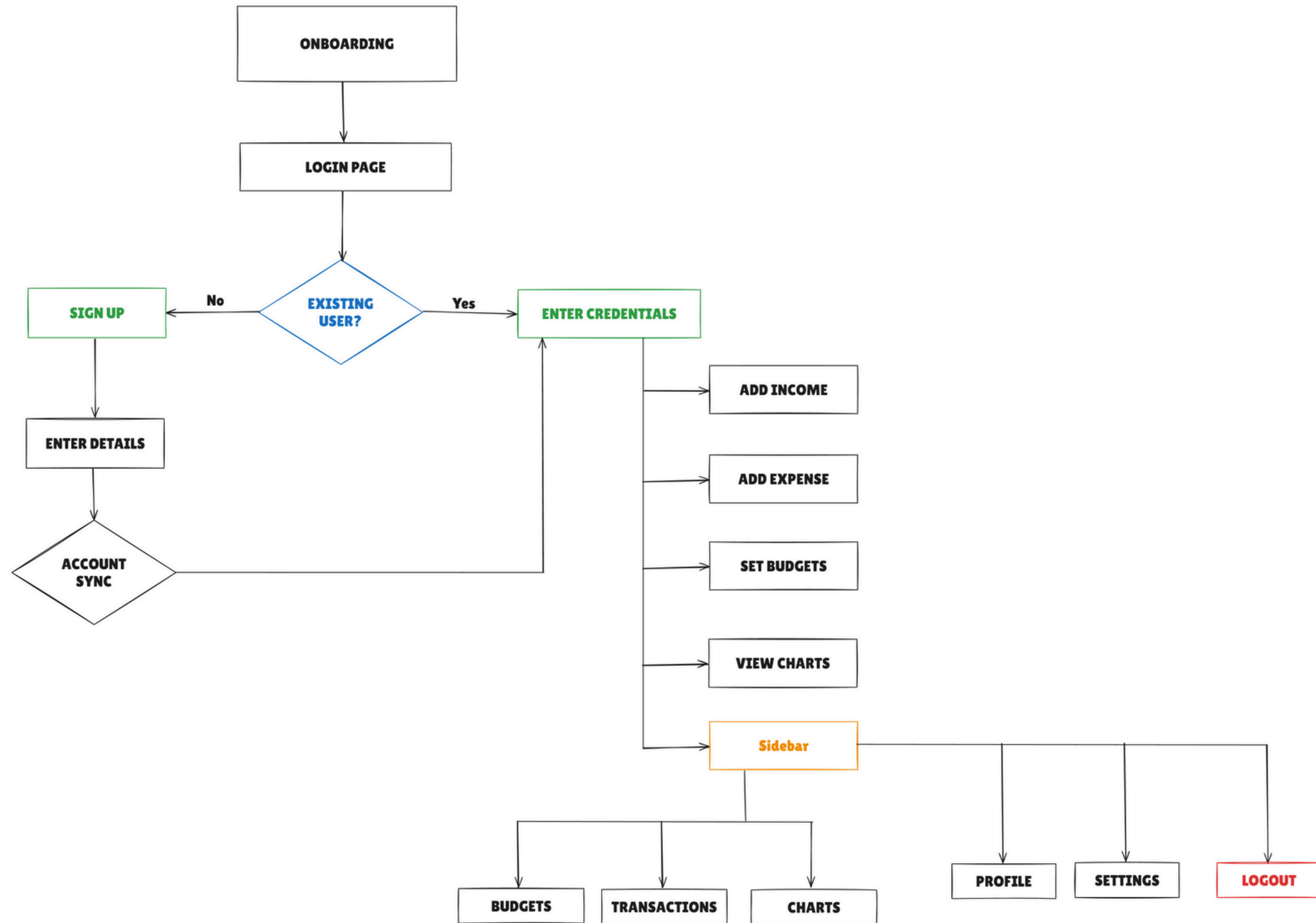
Simplicity & Effectiveness

- Designed with a clean and minimalistic UI for ease of use.
- Ensures quick access to financial data with minimal effort.
- Provides a seamless experience across different devices, including web and mobile platforms.

Security & Data Protection

- OTP-Based Authentication: Ensures secure login with a one-time password verification system.
- Data Encryption: Sensitive financial data is encrypted to protect user privacy.

Activity Diagram



Database Schemas (MongoDB)

User Collection

- Stores User Credentials with timestamps
- Fields Consist of **id,name,email,password,isAdmin,status,updated_at,created_at**

Transactions Collection

- Stores Transaction Data, Tracks User's Expenses and Incomes with timestamps
- Fields Consist of **id,user_id,amount,category_id,description,type,date,status**

Category Collection

- Stores Transaction's Categories with timestamps
- Fields Consist of **id,user_id,name,status**

Budget Collection

- Stores Transaction's Categories with timestamps
- Fields Consist of **id,user_id,name,status**

Backend APIs (FASTAPI)

User EndPoint

- All the user related apis endpoints start with
- **/api/users**
- for Authentication :
- **/api/login**
- **/api/signup**

Transactions EndPoint

- All the transactions related apis endpoints start with
- **/api/transactions**

Category EndPoint

- All the category related apis endpoints start with
- **/api/category**

Backend APIs (FASTAPI)








Analytics EndPoint

- All the analytics related apis endpoints start with
- **/api/analytics**

Budget EndPoint

- All the budget related apis endpoints start with
- **/api/budgets**

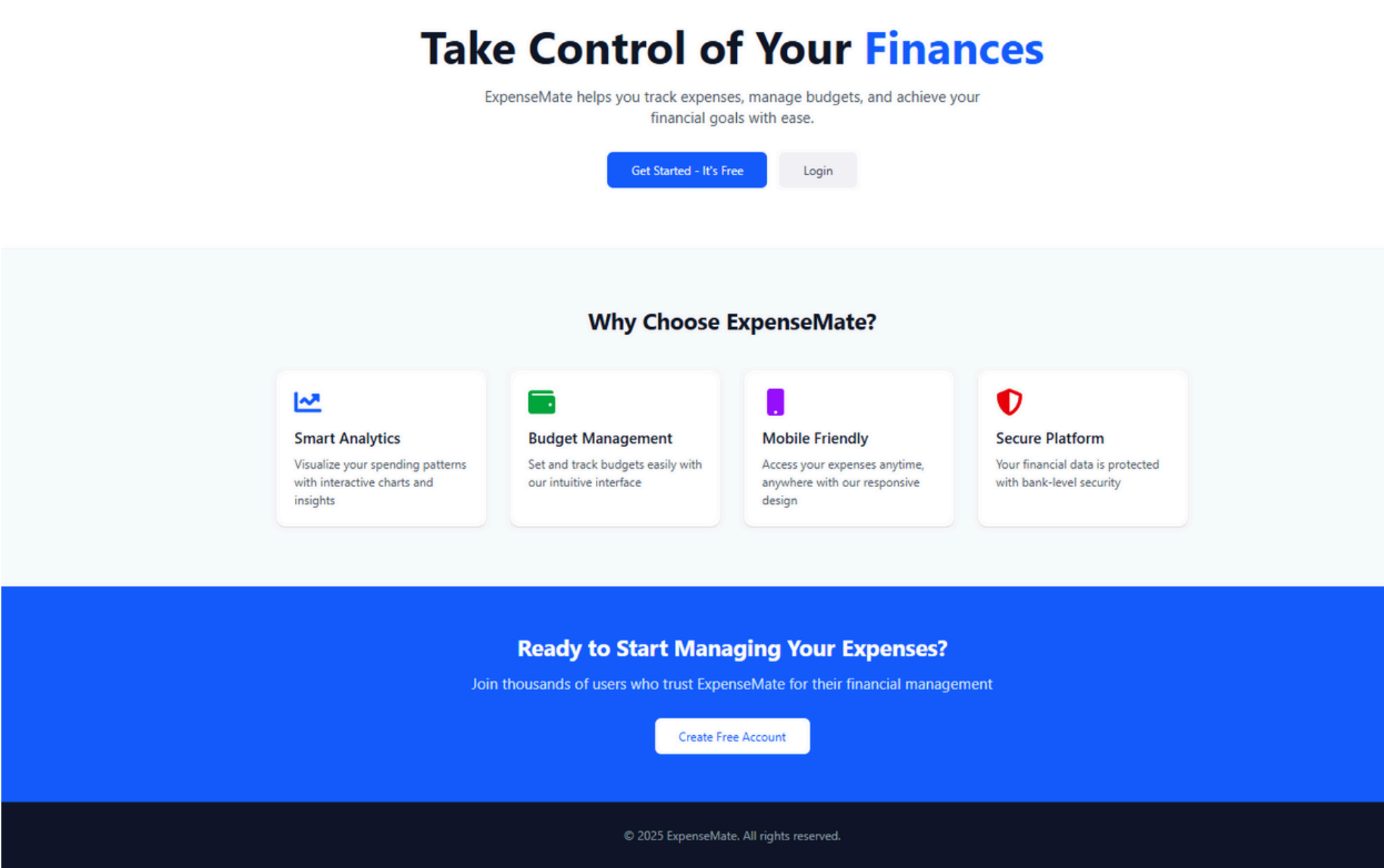
Backend Packages

-  **FastAPI** – High-performance Python web framework for building APIs.
-  **Uvicorn** – ASGI server for running FastAPI apps efficiently.
-  **bcrypt** – Secure password hashing for authentication.
-  **Pydantic** – Data validation and settings management.
-  **Motor** – Async MongoDB driver for handling database operations.
-  **Datetime** – Built-in Python module for managing dates and times.
-  **Typing** – Provides type hints for better code readability and safety.

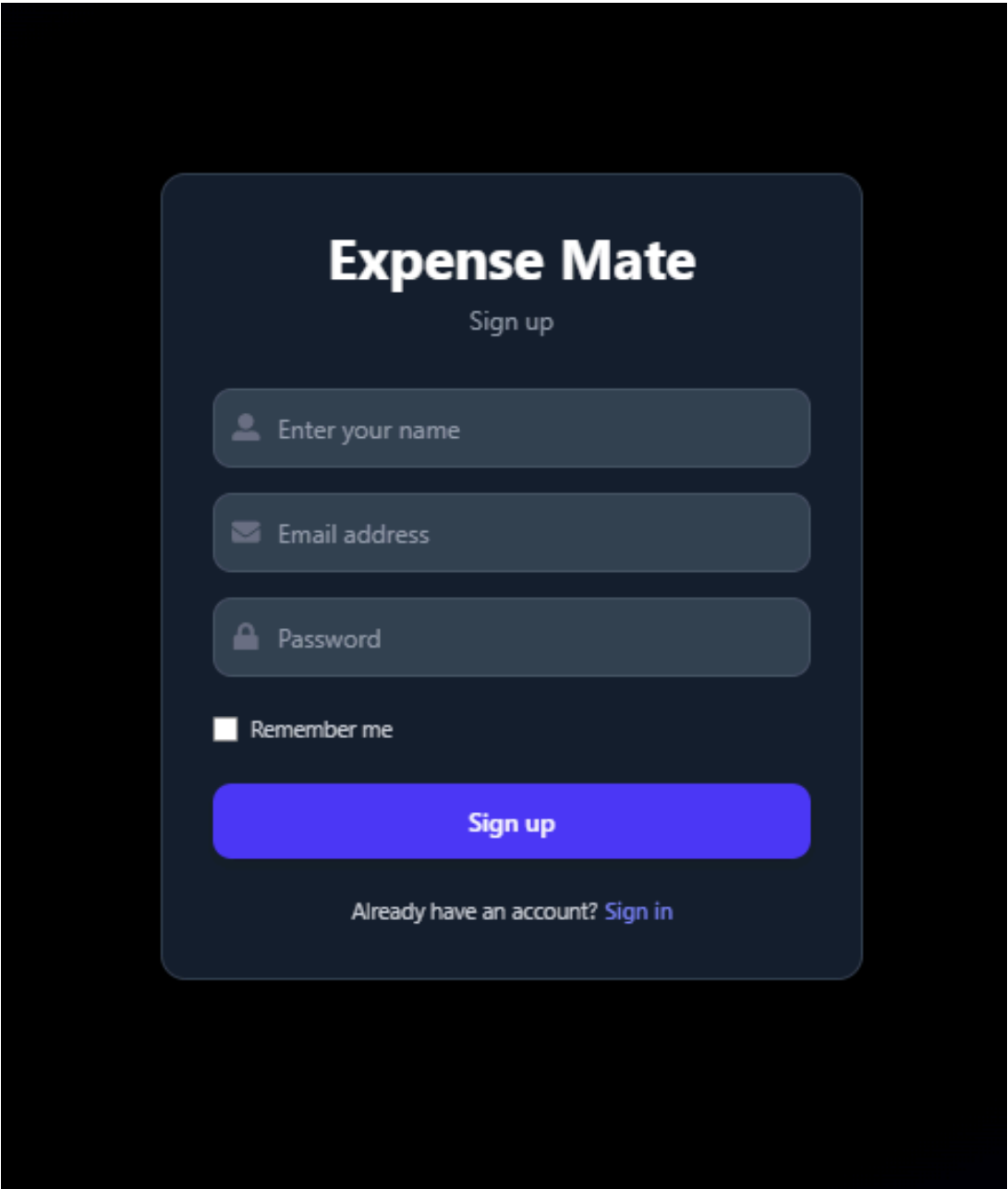
Frontend

- ⚡ **Vite** – Super-fast frontend build tool for a smooth dev experience.
- ⚛️ **React.js** – Component-based UI framework for efficient development.
- 🎨 **Tailwind CSS** – Utility-first CSS for fast and responsive styling.
- 🌐 **Axios** – Handles API requests easily with built-in error handling.
- 🔄 **React Router DOM** – Enables seamless client-side navigation.
- 📝 **React Hook Form** – Efficient form management with built-in validation.
- 🎬 **Framer Motion** – Adds smooth animations and UI transitions.
- 📅 **Date-fns** – Lightweight library for date handling and formatting.
- 🎨 **React Icons** – Collection of customizable icons for React apps.
- 📊 **react-chartjs-2** – Easy-to-use charting library for data visualization.

Frontend UI (User)

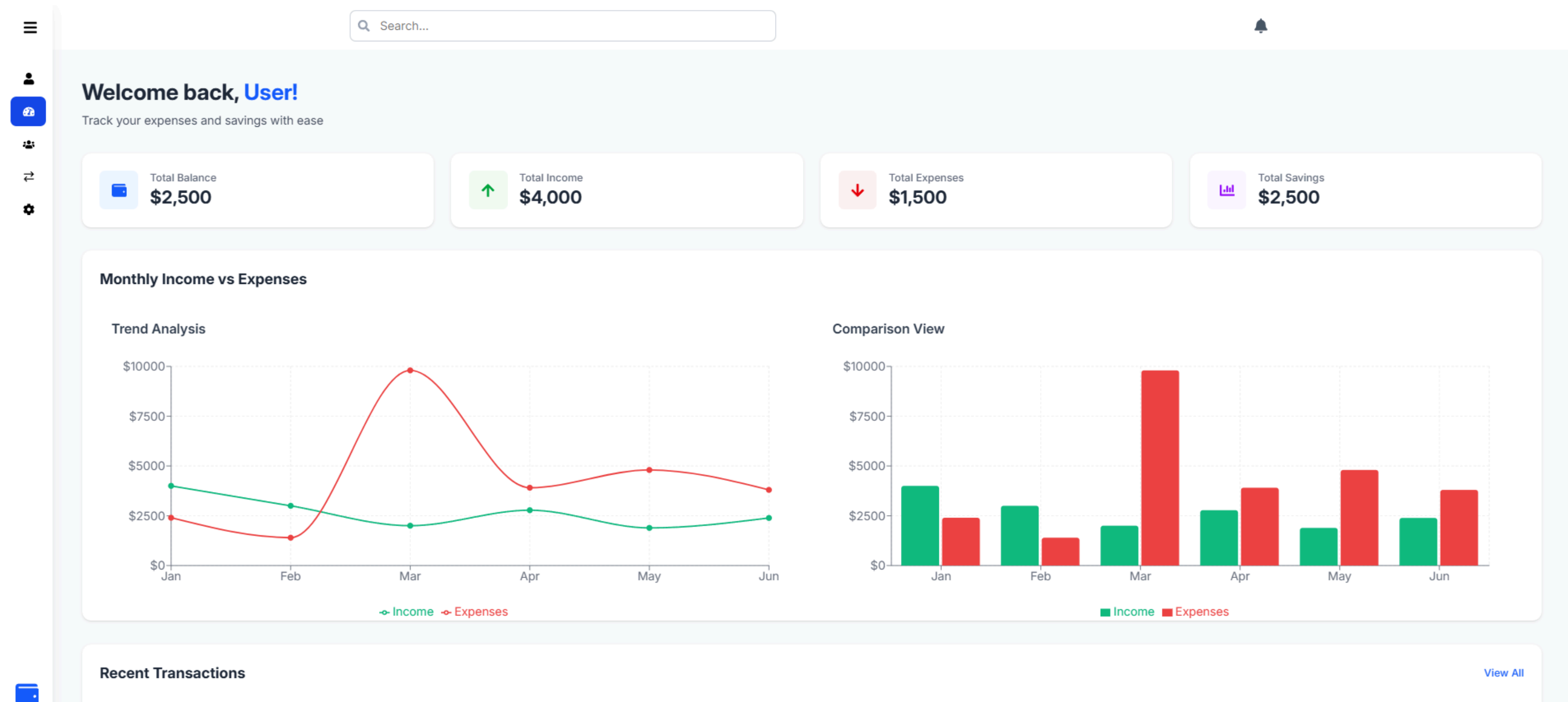


Landing Page



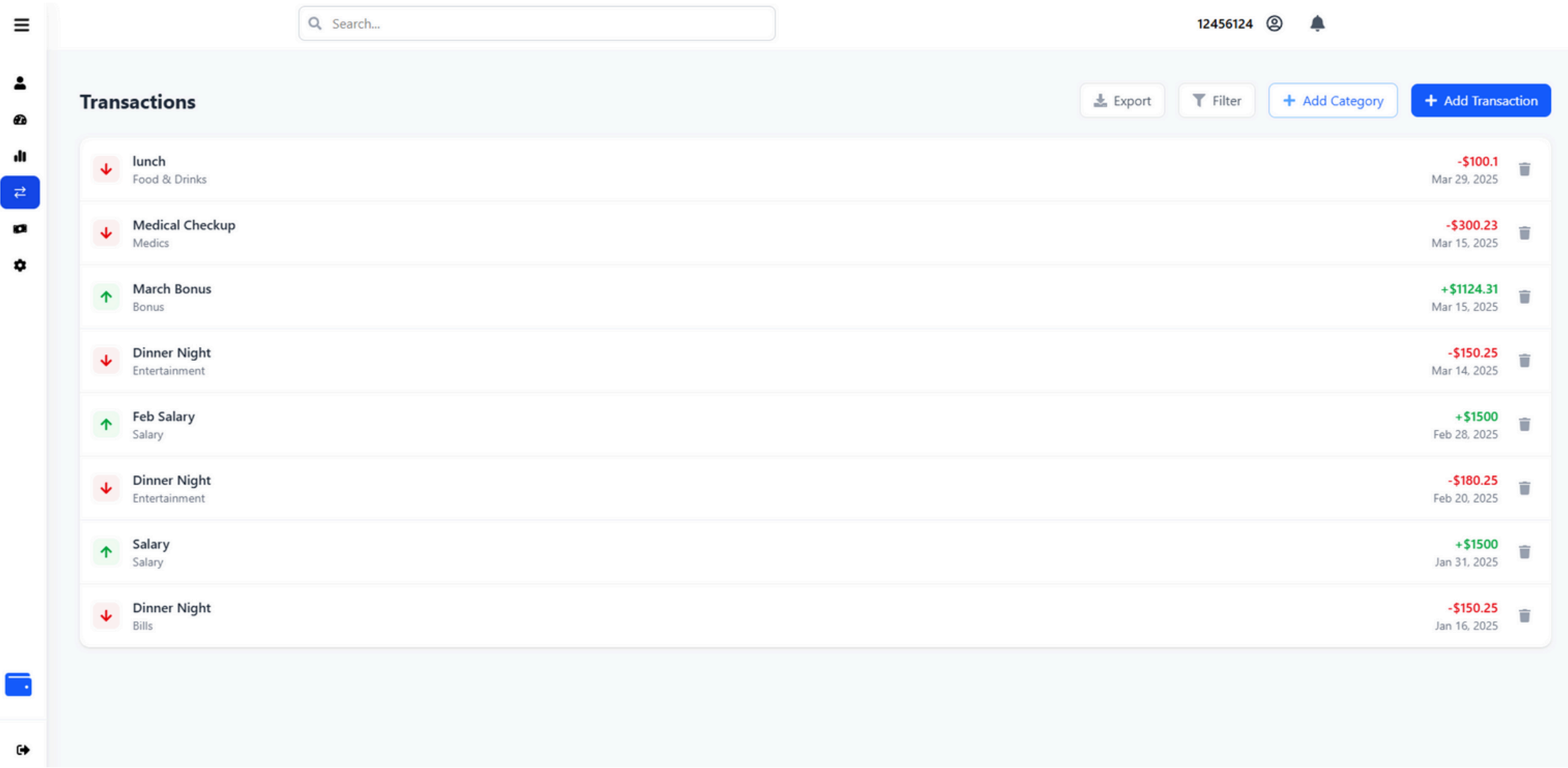
Signin/Signup Page

Frontend UI (User)

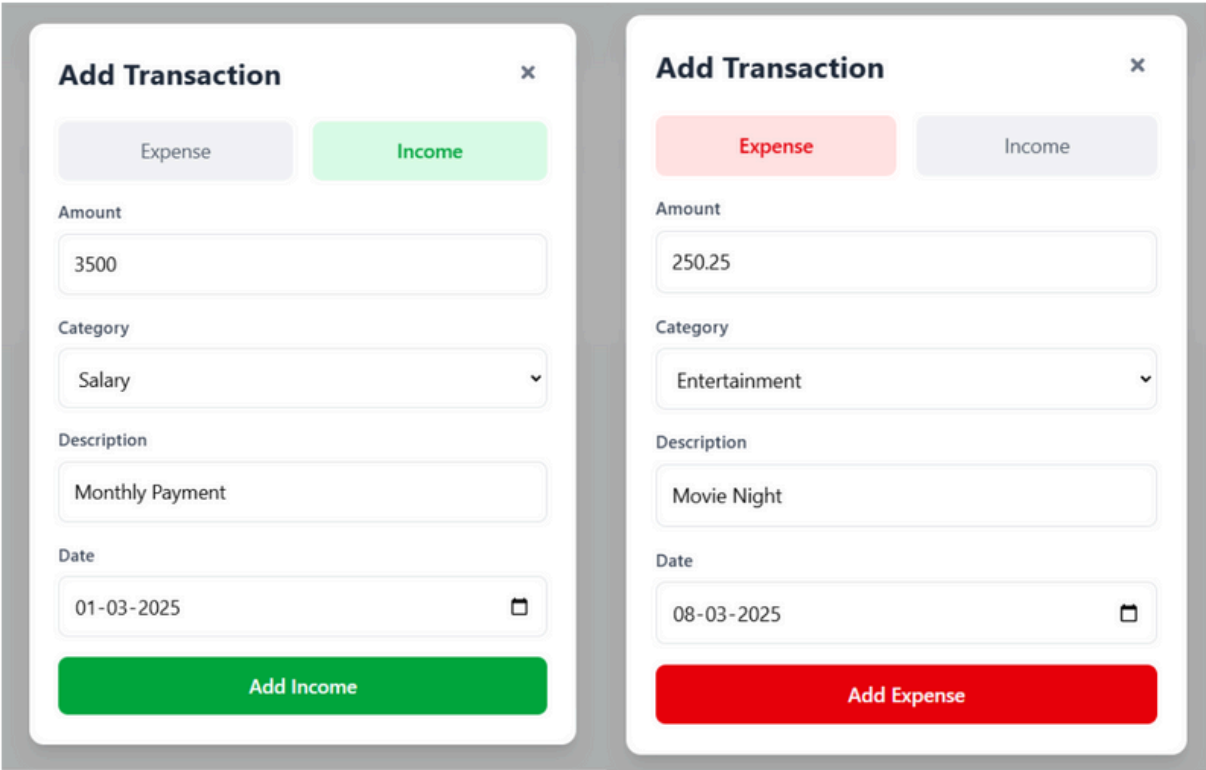


User Dashboard

Frontend UI (User)



Transactions Page
With Export Feature



Add Transaction

Frontend UI (User)

Current Budgets

TITLE	AMOUNT	PERIOD	ACTIONS
March Budget Spend Wisely in March	\$1500.00	Mar 01, 2025 - Mar 31, 2025	

Create New Budget

Budget Title

e.g., Monthly Budget

Budget Amount

0.00

Start Date

dd-mm-yyyy

End Date

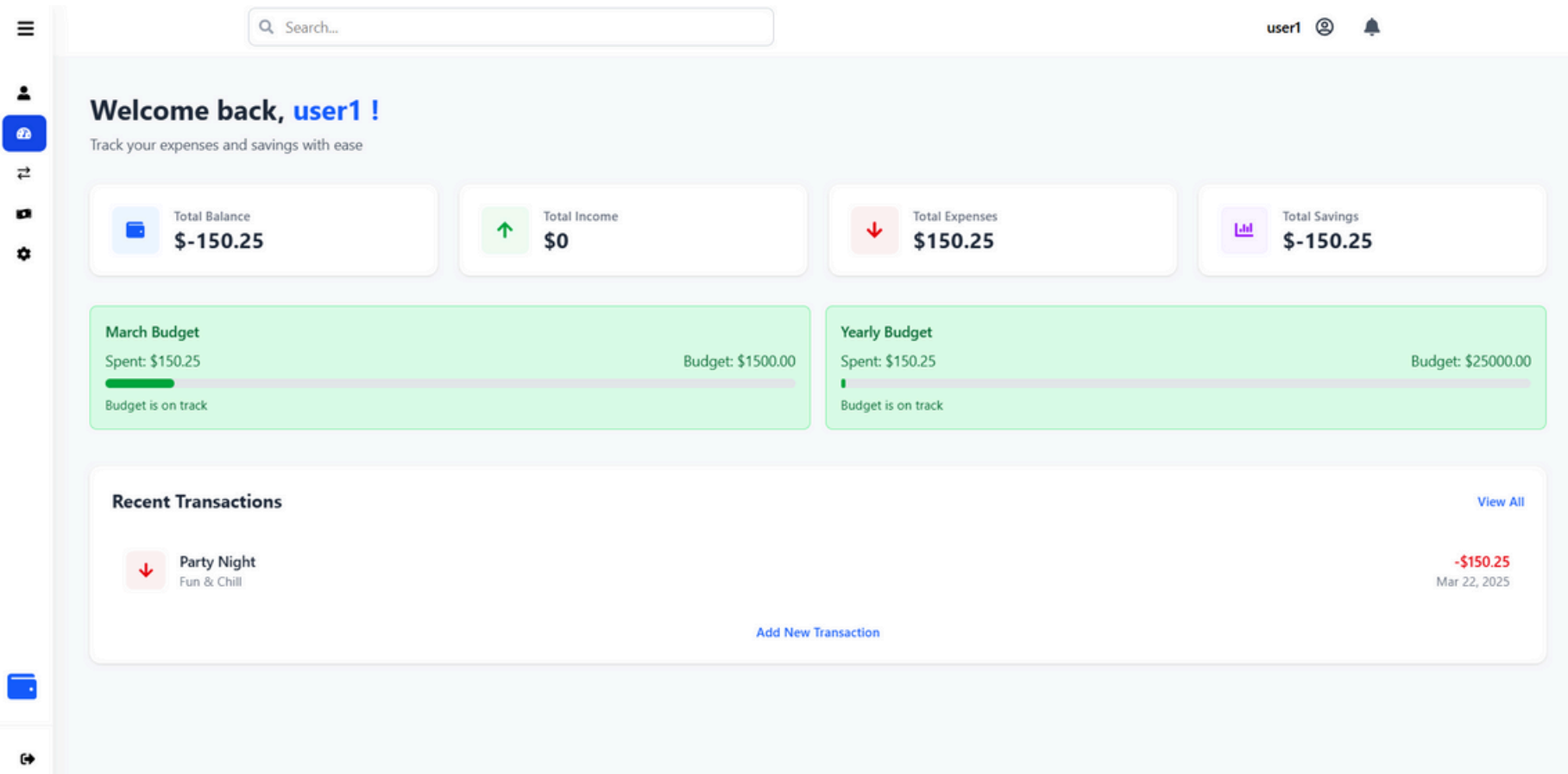
dd-mm-yyyy

Description

Budget description (optional)

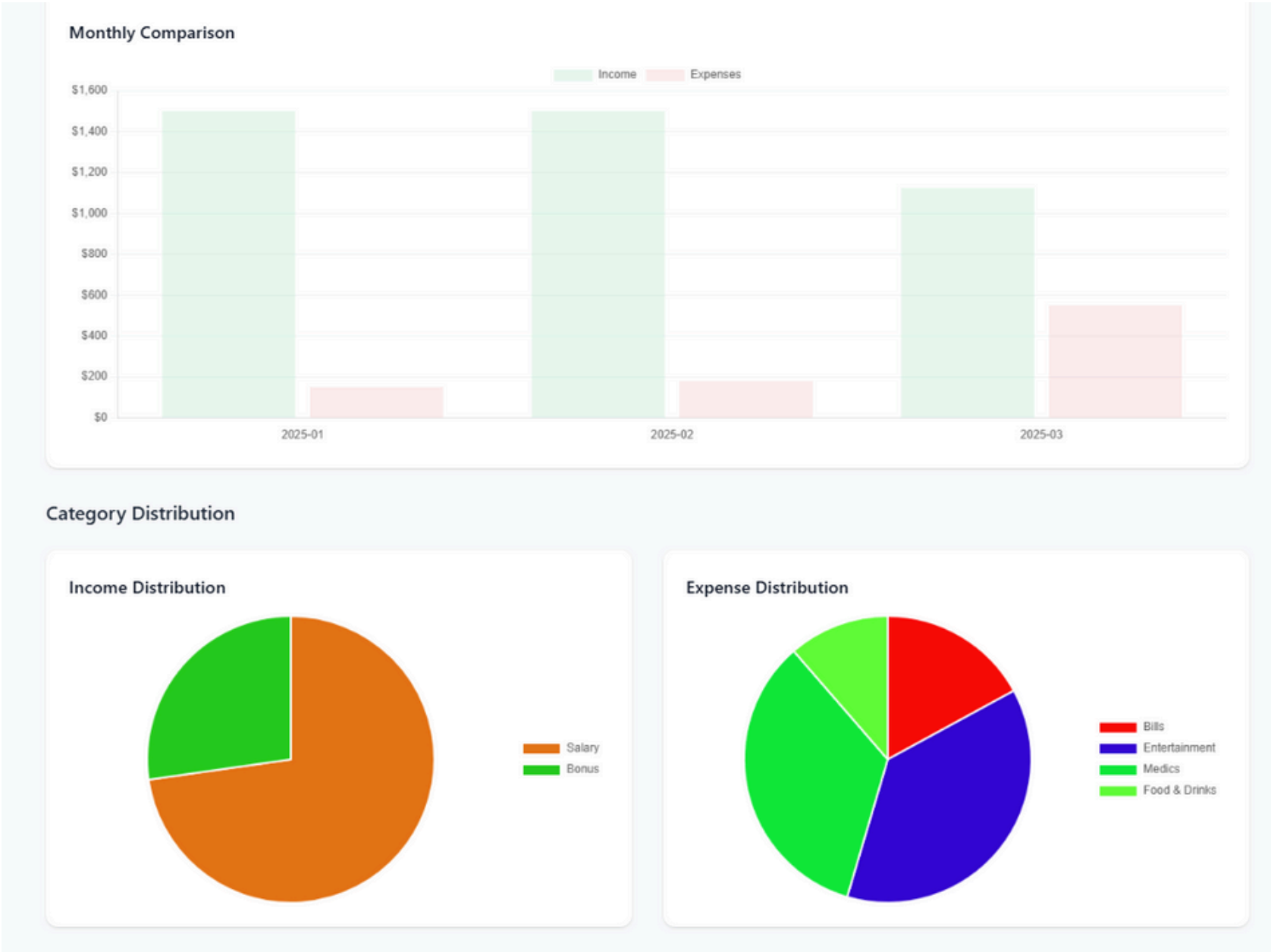
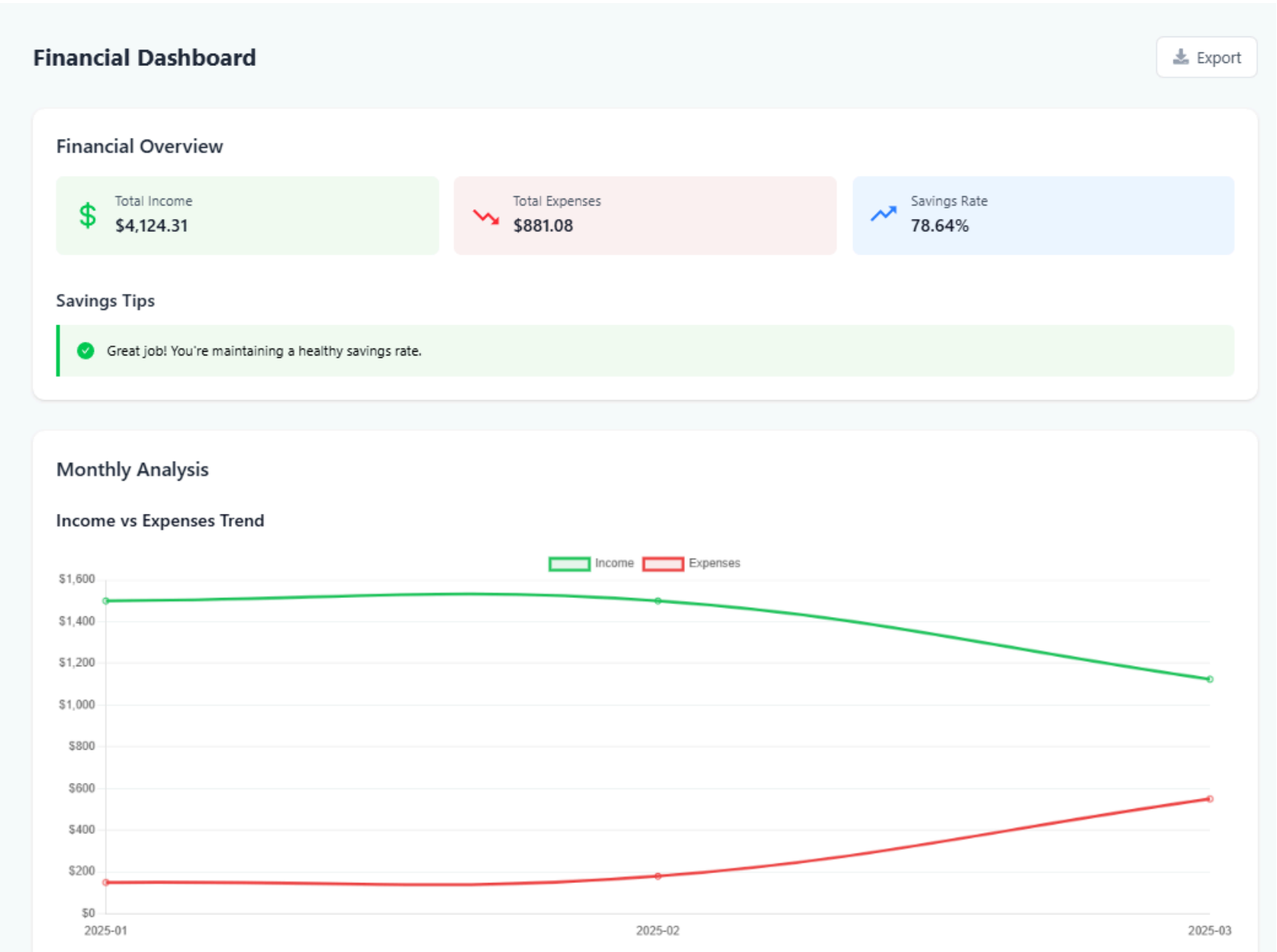
Create Budget

Budget Page



Dashboard After Setting Budgets

Frontend UI (User)



Financial Dashboard

[illegible]

Admin Dashboard

Frontend UI (Admin)

Q Search...

admin1 @ 🔔

Admin Dashboard

Total Users
7

👤

Active Users
7

👤

Total Transactions
12

📁

Flagged Transactions
1

🚨

OverviewUsersTransactions

Q Search...

User	Type	Amount	Category	Date
malhar	expense	\$350.76	Bills	Mar 22, 2025
malhar	income	\$2100.9	Salary	Mar 01, 2025
malhar	expense	\$280.27	Food & Drinks	Mar 20, 2025
malhar	expense	\$1124.31	Bills	Mar 15, 2025
user1	expense	\$150.25	Fun & Chill	Mar 22, 2025
user4568	expense	\$15000	Medics	Mar 17, 2025
user4568	expense	\$1124.31	Medics	Mar 14, 2025
user4568	income	\$15000	Uncategorized	Mar 01, 2025
user4568	income	\$18000	Uncategorized	Mar 01, 2025
user4568	expense	\$1150	Uncategorized	Mar 08, 2025
user10976	expense	\$1150	Uncategorized	Mar 08, 2025

Admin Dashboard

Frontend UI (Admin)

Users Management


All Users

Search users...


NAME	EMAIL	STATUS	JOIN DATE	TRANSACTIONS	ACTIONS
user1	user1@gmail.com	active	Mar 10, 2025	1	<div></div> <div></div>
user10976	user10976@yopmail.com	active	Mar 10, 2025	1	<div></div> <div></div>
user5729	randomuser5729@yopmail.com	active	Mar 11, 2025	0	<div></div> <div></div>
user4568	user4568@yopmail.com	active	Mar 12, 2025	5	<div></div> <div></div>
johndoe	johndoe5182@yopmail.com	active	Mar 15, 2025	0	<div></div> <div></div>
user85269	user85269@yopmail.com	active	Mar 17, 2025	0	<div></div> <div></div>
malhar	malharchauhan02@gmail.com	active	Mar 22, 2025	4	<div></div> <div></div>

User Management

Future Enhancements

 **Bank & Card Integration** – Sync with bank accounts and credit cards for automatic transaction tracking.

 **Smart Notifications & Reminders** – Alerts for bill payments, budget limits, and upcoming expenses.

 **Multi-Currency Support** – Convert and track expenses in different currencies for global users.

 **Enhanced Security** – Implement biometric login, two-factor authentication (2FA), and encryption.

Thank You