

# ExpenseMate

**AN EXPENSE TRACKER**

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Grownited  
Private Limited



# Overview

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# Internship/Project Summary

Internship Project name is “**ExpenseMate – An 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.

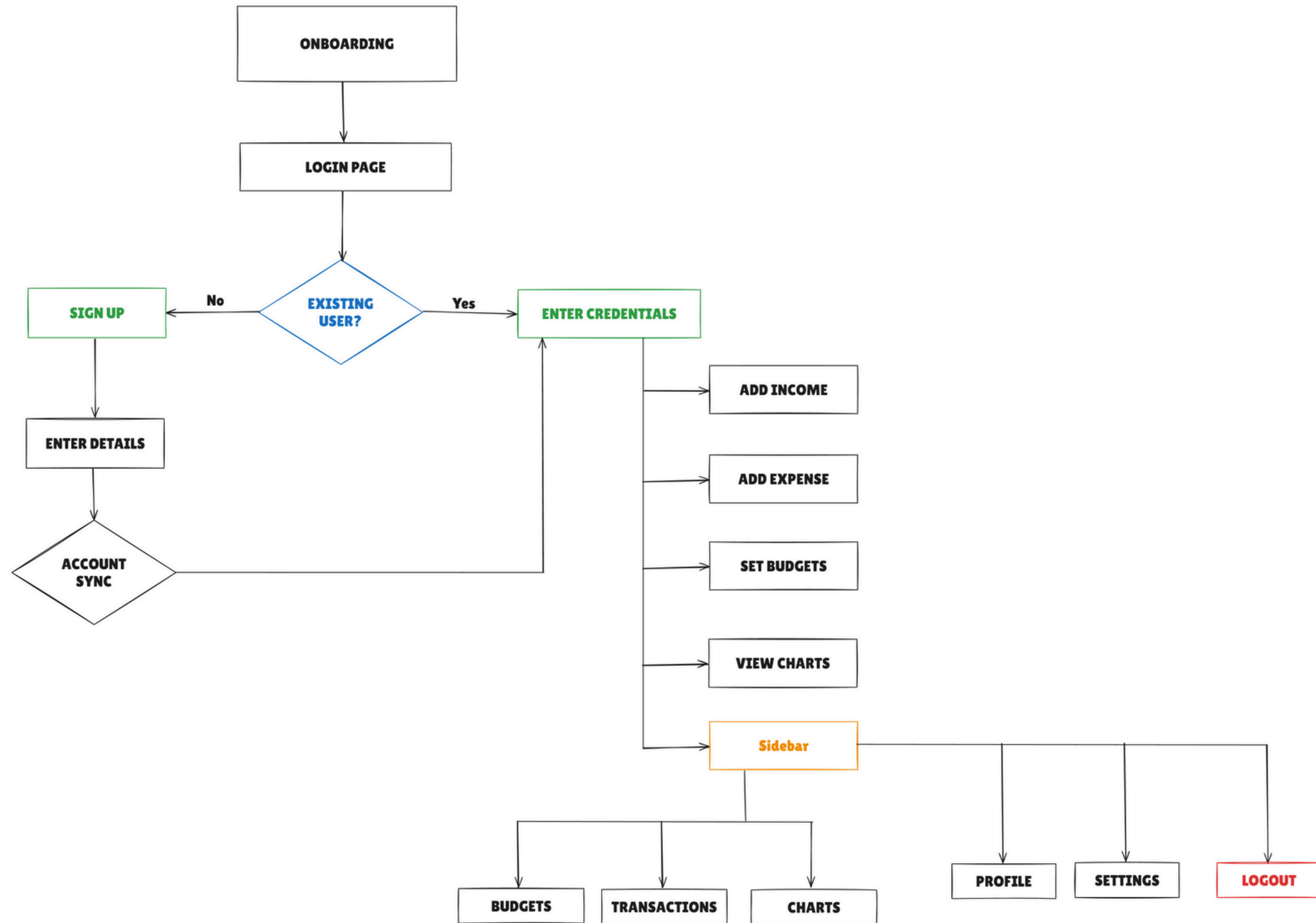
## Simplicity & Effectiveness

- 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**

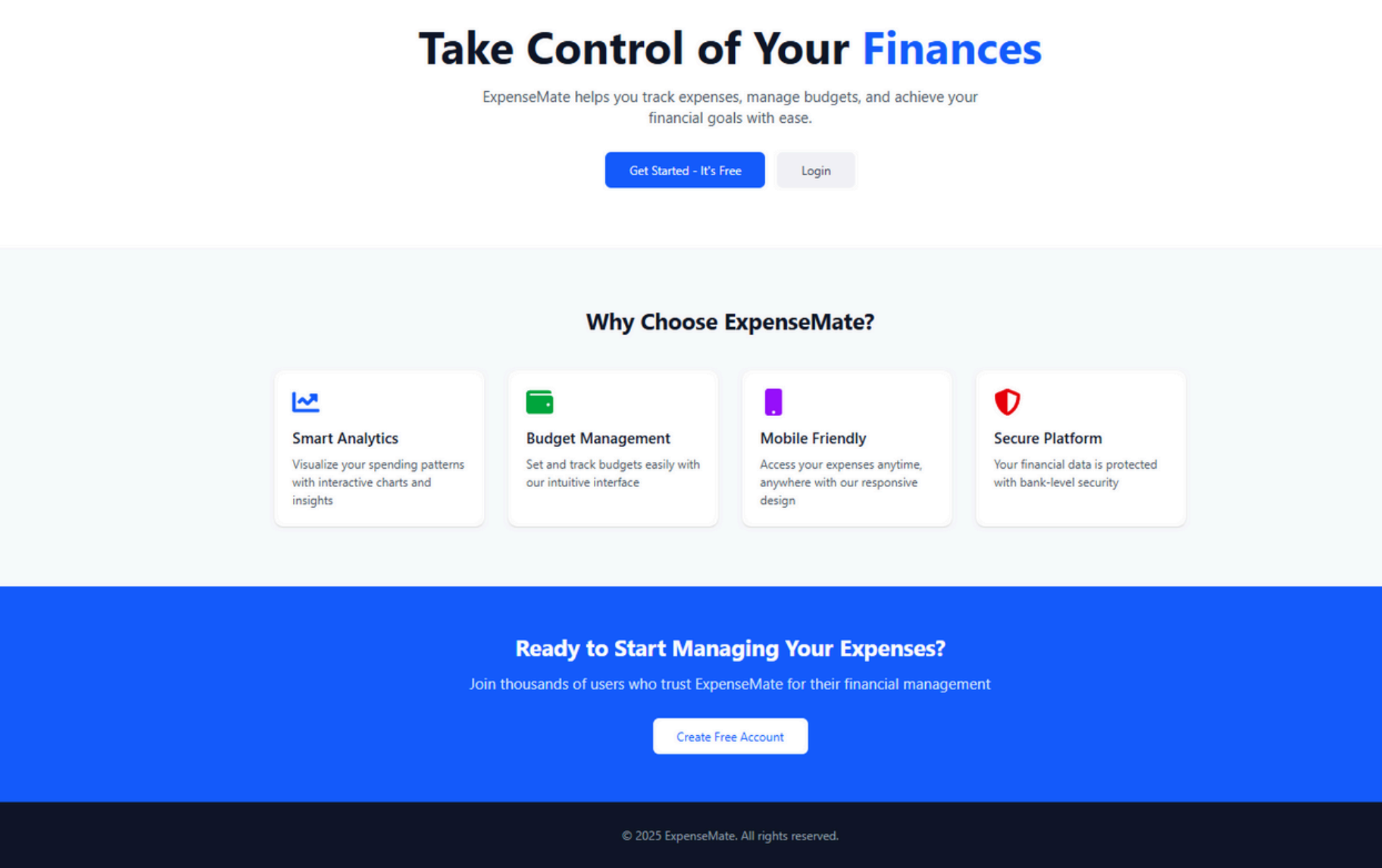
# Backend Packages

-  **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.

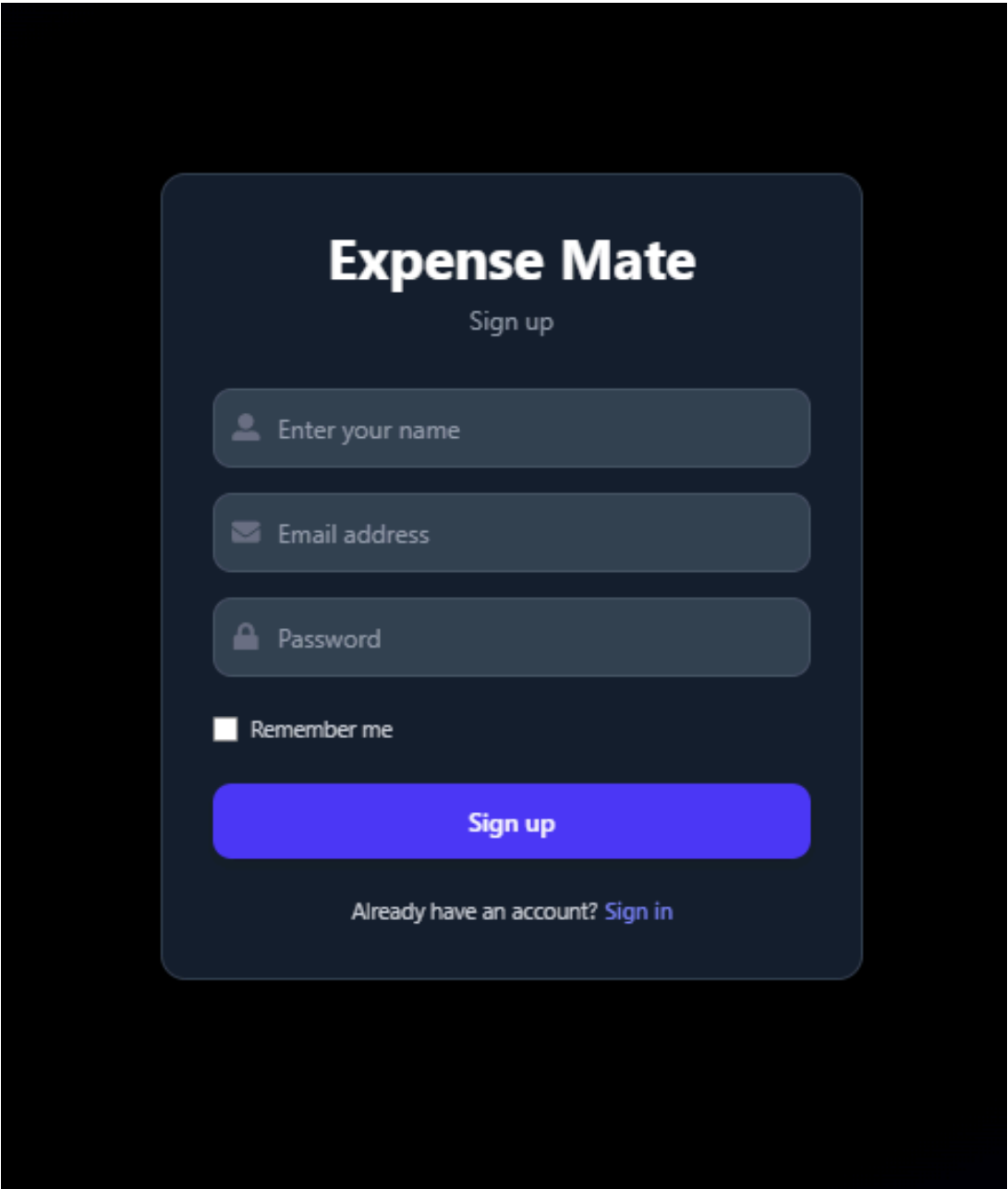
# Frontend

- ⚡ **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)

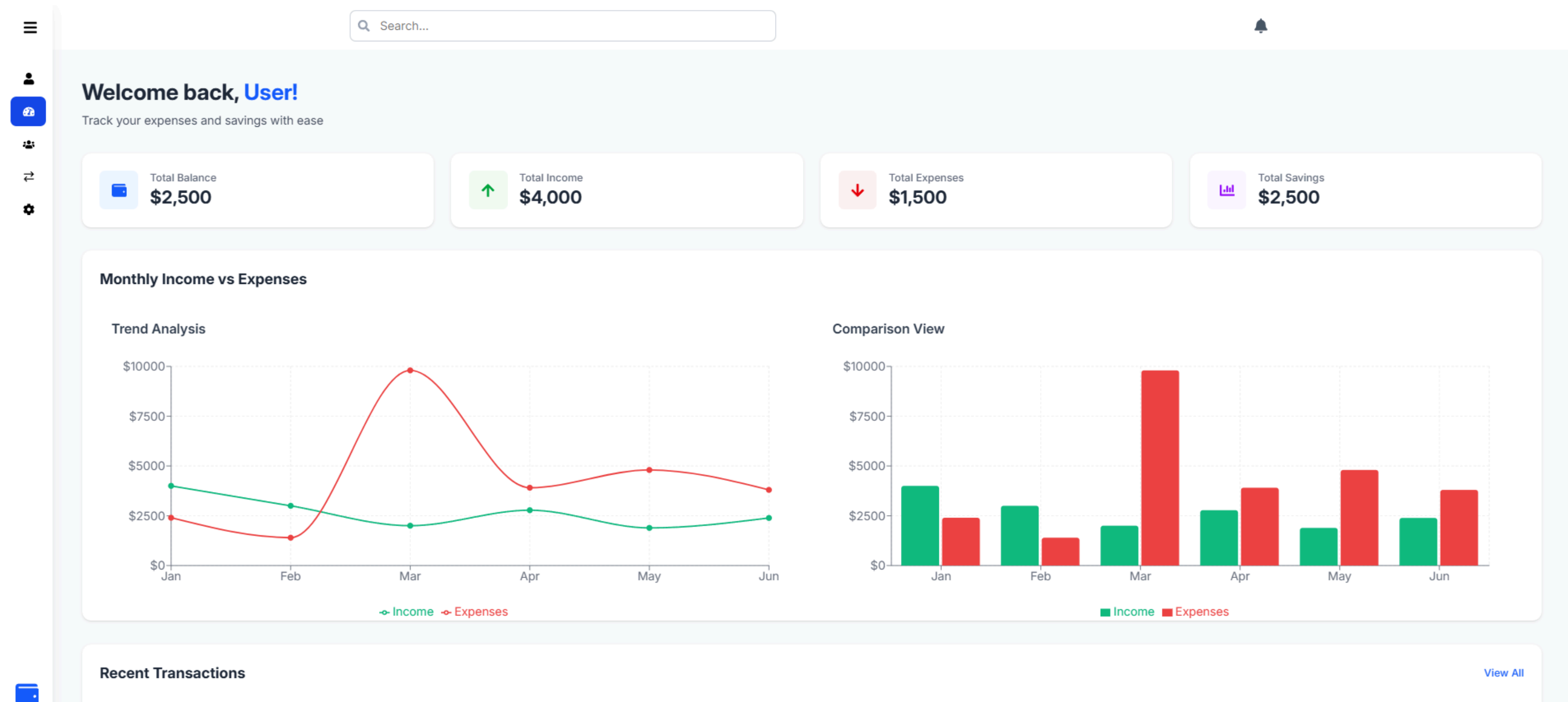


Landing Page



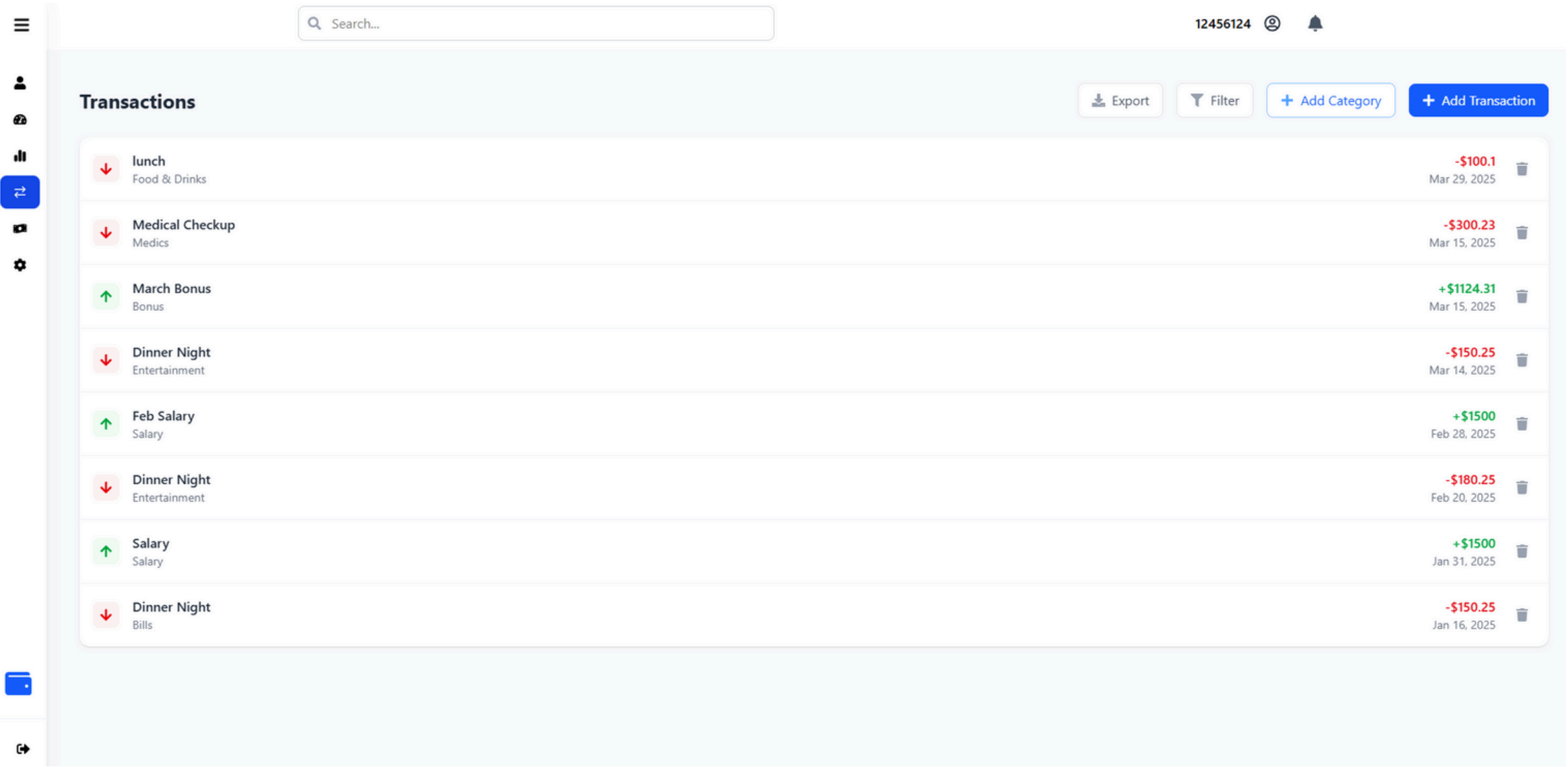
Signin/Signup Page

# Frontend UI (User)

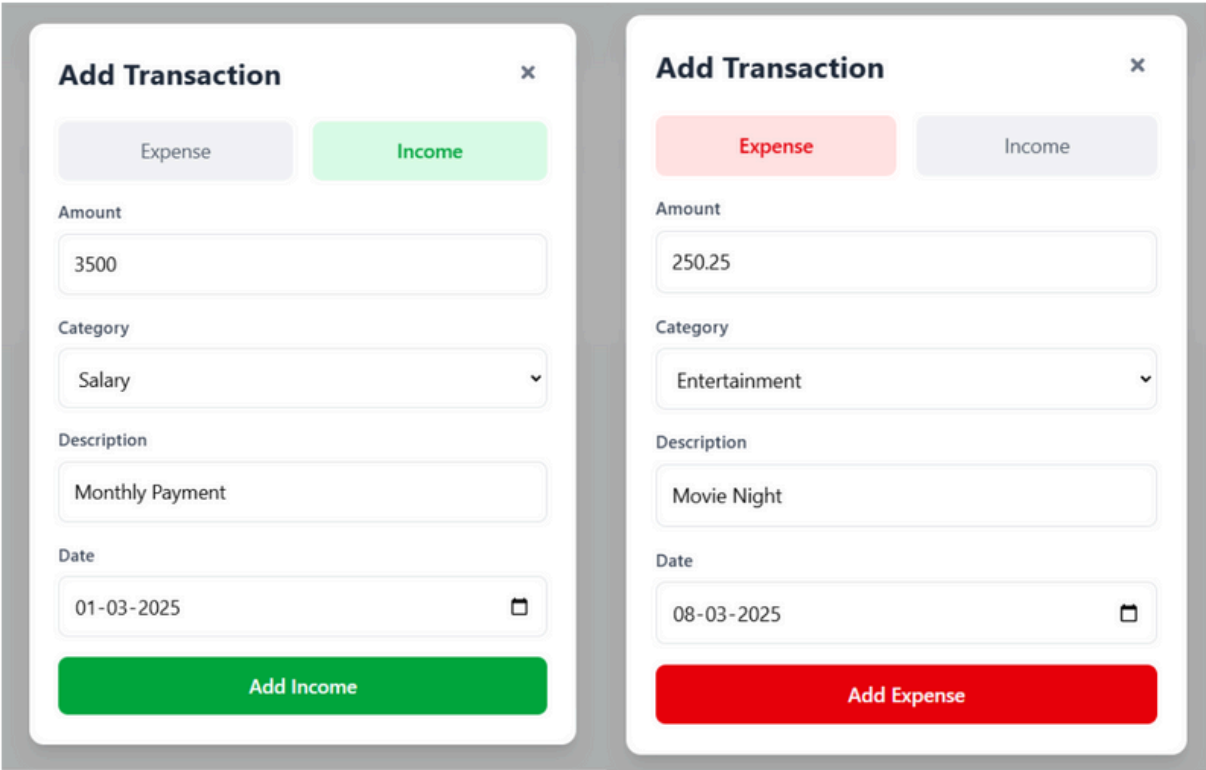


# User Dashboard

# Frontend UI (User)



Transactions Page  
With Export Feature



Add Transaction



# Frontend UI (User)

### Current Budgets

TITLE	AMOUNT	PERIOD	ACTIONS
<b>March Budget</b> 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

Search...

user1

Welcome back, user1 !

Track your expenses and savings with ease

Total Balance

\$-150.25

Total Income

\$0

Total Expenses

\$150.25

Total Savings

\$-150.25

March Budget

Spent: \$150.25

Budget: \$1500.00

Budget is on track

Yearly Budget

Spent: \$150.25

Budget: \$25000.00

Budget is on track

Recent Transactions

Party Night

Fun & Chill

\$-150.25

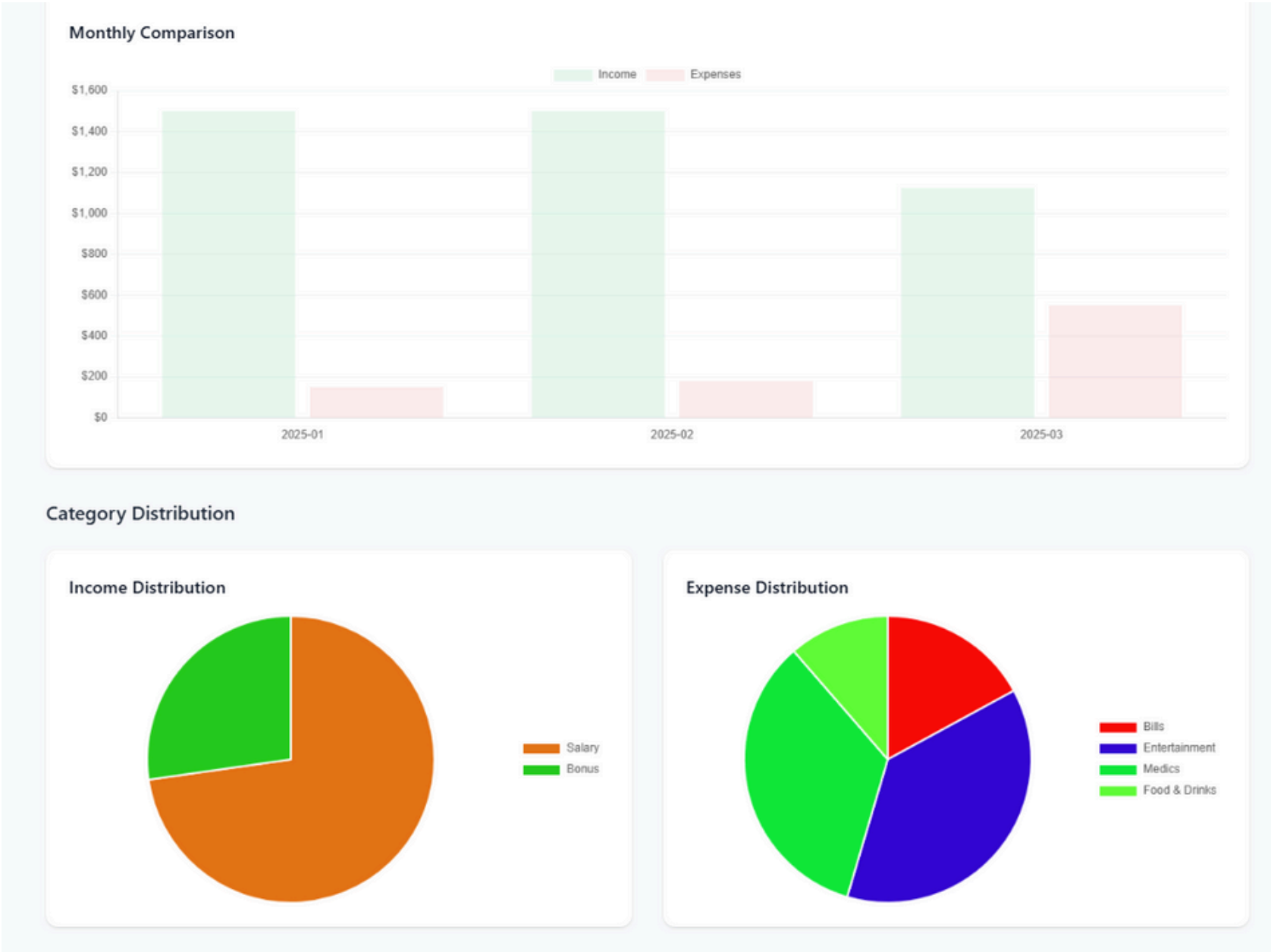
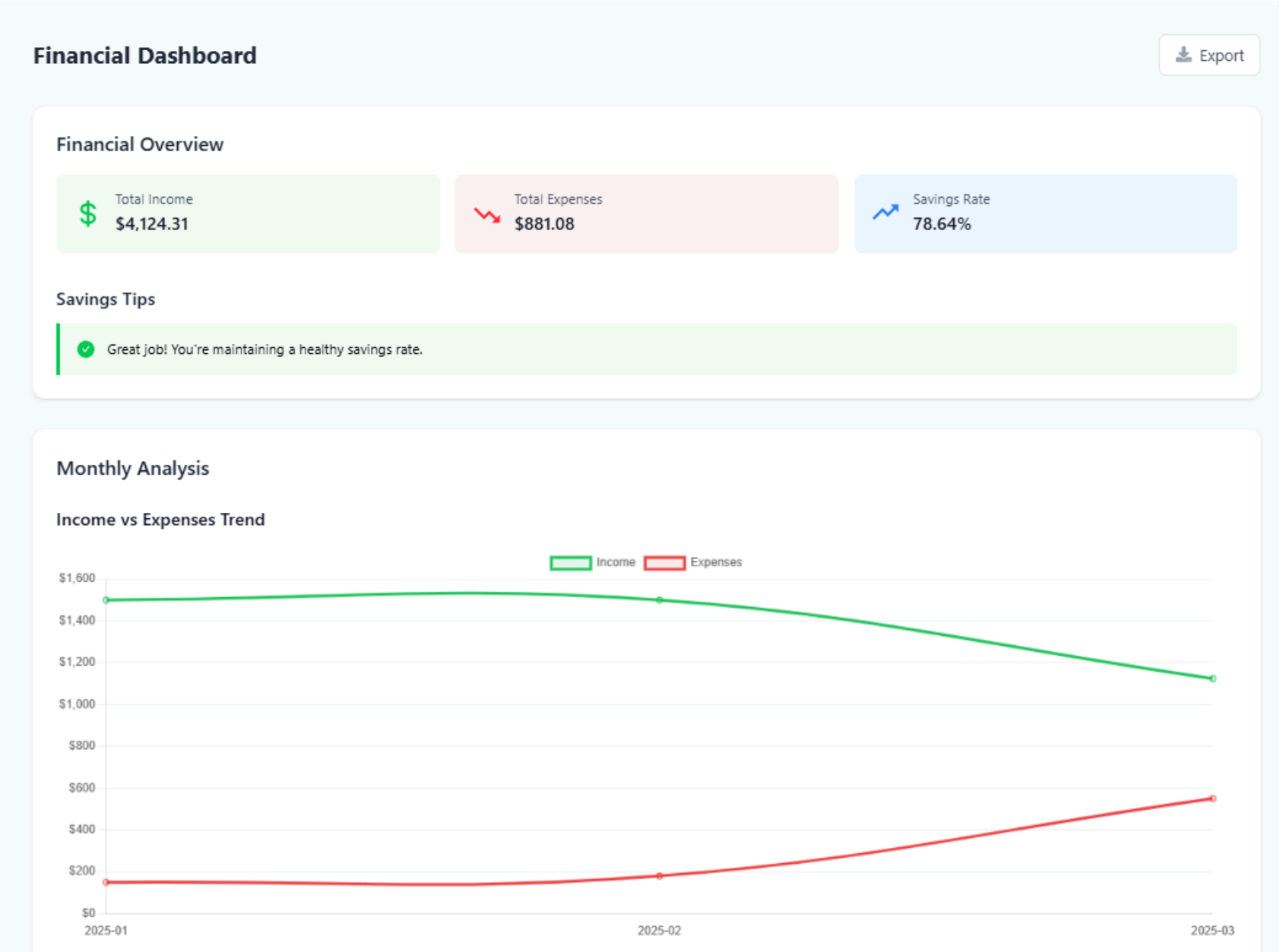
Mar 22, 2025

Add New Transaction

View All

Dashboard After Setting Budgets

# Frontend UI (User)



# Financial Dashboard

admin1

## Admin Dashboard

Total Users  
**7**

Active Users  
**7**

Total Transactions  
**12**

Flagged Transactions  
**1**

Name	Email	Status	Actions
malhar	malharchauhan02@gmail.com	active	Edit
user85269	user85269@yopmail.com	active	Edit
johndoe	johndoe5182@yopmail.com	active	Edit
user4568	user4568@yopmail.com	active	Edit
user5729	randomuser5729@yopmail.com	active	Edit
user10976	user10976@yopmail.com	active	Edit
user1	user1@gmail.com	active	Edit

# 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**