

# Finance Tracker

## Overview

The Finance Tracker app helps users manage their finances efficiently. It provides features such as tax calculation, EMI calculation, currency conversion, expense tracking, saving suggestions, personalized dashboards, custom notifications, tax reminders, budget tracking, financial goals, and product analysis.

## Market Requirement

With the increasing complexity of personal finance management, there is a need for tools that simplify financial planning and management. The Finance Tracker app meets this demand by offering comprehensive features to track and manage finances effectively.

### 1 . Tax Calculation with Both Regimes

- **Description:** Allow users to calculate their taxes under different tax regimes (e.g., old and new tax regimes in India). Calculate Tax based on the users exp like if the user has medical exp or he has bought any land, the tax rate should get differ.
- **Purpose:** Helps users understand the most beneficial tax regime for their financial situation.
- **User Benefit:** Simplifies tax planning and ensures users optimize their tax payments.

## 2 . EMI Calculation

- **Description:** Calculate Equated Monthly Installments for various loans (e.g., home loans, personal loans).
- **Purpose:** Provides users with detailed payment plans and helps them manage their loan repayments.
- **User Benefit:** Users can plan their finances better by knowing their monthly commitments.

## 3 . Currency Converter (Real-time Data)

- **Description:** Convert currencies using real-time exchange rates.
- **Purpose:** Assists users who deal with multiple currencies in managing their expenses and investments.
- **User Benefit:** Ensures accurate financial planning for international transactions.

## 4 . Expense Tracking

- **Description:** Track daily, weekly, and monthly expenses across different categories.
- **Purpose:** Helps users monitor their spending habits and identify areas where they can save money.
- **User Benefit:** Provides insights into spending patterns, aiding in better budget management.

## 5 . Saving Suggestions

- **Description:** Provide personalized suggestions for saving money based on spending habits and financial goals.

- **Purpose:** Encourages users to save more effectively and meet their financial goals.
- **User Benefit:** Users receive actionable advice to improve their financial health.

## 6 . Personalized Dashboard

- **Description:** Customizable dashboard showing relevant financial information, such as account balances, recent transactions, and financial goals.
- **Purpose:** Offers a comprehensive overview of the user's financial status.
- **User Benefit:** Users get a quick snapshot of their finances, making it easier to manage their money.

## 7 . Custom Notifications

- **Description:** Set up reminders and notifications for bill payments, due dates, and other financial tasks.
- **Purpose:** Ensures users never miss important financial deadlines.
- **User Benefit:** Helps users stay organized and avoid late fees or missed payments.

## 8 . Tax Reminders

- **Description:** Remind users of upcoming tax filing deadlines and other tax-related tasks.
- **Purpose:** Helps users stay compliant with tax regulations and avoid penalties.
- **User Benefit:** Reduces the stress associated with tax filing by providing timely reminders.

## 9 . Budget Tracking

- **Description:** Track adherence to budgets set for different spending categories.
- **Purpose:** Encourages disciplined spending and helps users stick to their financial plans.
- **User Benefit:** Enables users to achieve their financial goals by controlling their spending.

## 10 . Financial Goals

- **Description:** Set and track progress towards financial goals (e.g., saving for a vacation, buying a car).
- **Purpose:** Provides a structured approach to achieving financial milestones.
- **User Benefit:** Keeps users motivated and focused on their long-term financial objectives.

## 11 . Product Analysis

- **Description:** Analyze and compare financial products like savings accounts, credit cards, and loans to find the best options.
- **Purpose:** Helps users make informed decisions about financial products.
- **User Benefit:** Ensures users choose the most suitable financial products, optimizing their benefits.

## Competitors and Their Features :

### Mint :

Mint is a popular personal finance app known for its comprehensive range of features. Some key features include:

#### 1. Expense Tracking

- Automatically categorize transactions.
- Track spending across different categories.

#### 2. Budgeting

- Create custom budgets.
- Set limits for spending categories.

#### 3. Bill Tracking

- Track and pay bills from within the app.
- Receive bill reminders.

#### 4. Credit Score Monitoring

- Free credit score updates.
- Insights into factors affecting the credit score.

#### 5. Goal Setting

- Set and track financial goals.
- Visual progress tracking.

#### 6. Investment Tracking

- Track investment accounts and portfolio performance.

#### 7. Alerts and Notifications

- Customizable alerts for bills, low balances, unusual spending, etc.

## **Personal Capital**

Personal Capital is another robust financial management tool, focusing on wealth management and investment tracking. Key features include:

### **1. Investment Tracking**

- Monitor investment accounts and analyze performance.
- Fee analyzer to highlight hidden fees in investment accounts.

### **2. Net Worth Tracking**

- Track assets and liabilities to calculate net worth.

### **3. Retirement Planning**

- Retirement planner tool to help users plan for retirement.
- Simulation of different retirement scenarios.

### **4. Budgeting**

- Basic budgeting tools for tracking income and expenses.

### **5. Cash Flow Management**

- Monitor cash flow in and out of accounts.

### **6. Financial Dashboard**

- Comprehensive view of all financial accounts in one place.

## **Extra Features Provided by Finance Tracker App :**

While Mint and Personal Capital offer robust financial management features, the Finance Tracker app distinguishes itself with several unique and advanced features:

### **1. Tax Calculation with Both Regimes**

- Detailed tax calculation based on different tax regimes (e.g., old and new tax regimes in India).

### **2. EMI Calculation**

- In-built tool to calculate Equated Monthly Installments for various loans.

### **3. Real-time Currency Converter**

- Real-time currency conversion feature to aid users dealing with multiple currencies.

### **4. Saving Suggestions**

- Personalized saving suggestions based on spending habits and financial goals.

### **5. Custom Notifications**

- Highly customizable notifications for bill payments, due dates, and other financial tasks.

### **6. Tax Reminders**

- Specific reminders for upcoming tax filing deadlines and other tax-related tasks.

### **7. Product Analysis**

- Analyze and compare financial products like savings accounts, credit cards, and loans to find the best options.

### **8. Enhanced Authentication and Security**

- Two-factor authentication (2FA) using OTP.
- Secure login options with email ID, phone number, and encryption for data protection.

### **Summary of Additional Features**

- **Tax Calculation with Both Regimes:** Unique feature for comprehensive tax planning.
- **EMI Calculation:** Helps users plan and manage loan repayments efficiently.
- **Real-time Currency Converter:** Useful for users dealing with multiple currencies.
- **Saving Suggestions:** Provides actionable advice to improve financial health.
- **Custom Notifications:** More flexible and user-defined notifications compared to competitors.
- **Tax Reminders:** Ensures compliance with tax regulations.
- **Product Analysis:** Informed decision-making on financial products.
- **Enhanced Security:** Ensures users' data and accounts are secure with advanced authentication mechanisms.



## Authentication Module: Brief Detail of Features

The Authentication Module is a critical component of the Finance Tracker app, ensuring that users can securely access their accounts and personal financial information. Here's a brief overview of its features:

### 1. 2FA (Two-Factor Authentication) Using OTP

- **Description:** Adds an additional layer of security by requiring users to verify their identity using a one-time password (OTP) sent to their registered mobile number or email.
- **Purpose:** Prevents unauthorized access even if the user's password is compromised.
- **User Benefit:** Enhances security and provides peace of mind by significantly reducing the risk of account breaches.
- **Tool:** Twilio (for SMS) and SendGrid (for email).

### 2. Create ID

- **Description:** Allows new users to create an account using their email address or phone number.
- **Purpose:** Facilitates user registration and account creation.
- **User Benefit:** Simple and user-friendly process to onboard new users, ensuring they can quickly start using the app.
- **Tool:** Firebase Authentication for user management and account creation.

### 3. Email ID, Phone Login

- **Description:** Enables users to log in using either their registered email address or phone number.
- **Purpose:** Provides flexibility and convenience in choosing the preferred method of login.
- **User Benefit:** Enhances user experience by offering multiple login options.
- **Tool:** Firebase Authentication.

### 4. Forgot Password

- **Description:** Allows users to reset their password if they forget it. The reset link or OTP is sent to their registered email address or phone number.
- **Purpose:** Ensures users can regain access to their account without hassle.
- **User Benefit:** User-friendly feature that helps maintain account access even if the password is forgotten, reducing frustration.
- **Tool:** Firebase Authentication for password management and SendGrid for sending emails.

### 5. Encryption

- **Description:** Encrypts all user data to protect it from unauthorized access and ensure privacy.
- **Purpose:** Safeguards sensitive user information from potential breaches and cyber-attacks.
- **User Benefit:** Builds trust by ensuring that personal and financial data is securely stored and transmitted.
- **Tool:** AES (Advanced Encryption Standard) for data encryption, HTTPS for secure communication, and **bcrypt** for hashing passwords.

## Development Tools and Technologies for Enhanced Security

### Frontend

- **React:** JavaScript library for building user interfaces.
- **Redux:** State management library.
- **Axios:** For making secure HTTP requests.
- **Material-UI:** For UI components.

### Backend

- **Node.js:** JavaScript runtime for backend development.
- **Express:** Web framework for Node.js.
- **Firebase:** For authentication and real-time database.
- **JWT (JSON Web Tokens):** For secure token-based authentication.
- **BCrypt:** For hashing passwords.
- **Twilio:** For sending OTPs via SMS.
- **SendGrid:** For sending OTPs via email.
- **crypto:** Node.js built-in module for encryption.

### Database

- **Firestore:** NoSQL database provided by Firebase with built-in security features.

### Security Tools

- **HTTPS:** Secure communication over the internet.
- **AES:** For encrypting sensitive data.
- **JWT:** For secure token-based authentication.
- **BCrypt:** For hashing passwords.

# Figma Links

**Sharique :**

- <https://app.uizard.io/templates/PjXBoyAKjWFnZZK7AnA5/preview>
- <https://www.figma.com/community/file/977500202909795677/dashboard>
- <https://www.figma.com/community/file/1192792837534412333/dashboard-finance-bank-fintech>

**Vignesh :**

- [https://www.figma.com/design/uEKNAggxHU4L6ak6Qg6pnW/Dashboard-Design-\(Community\)?node-id=0-1&t=RMwTC32S6XjuR7MF-0](https://www.figma.com/design/uEKNAggxHU4L6ak6Qg6pnW/Dashboard-Design-(Community)?node-id=0-1&t=RMwTC32S6XjuR7MF-0)
- [https://www.figma.com/design/ImxCuOJgZTna7SXJ2rKrxM/Free-Finance-Dashboard-UI-\(Community\)?node-id=0-1&t=eKblUChg4apL1ncE-0](https://www.figma.com/design/ImxCuOJgZTna7SXJ2rKrxM/Free-Finance-Dashboard-UI-(Community)?node-id=0-1&t=eKblUChg4apL1ncE-0)

**Nandhini :**

- <https://design4users.com/case-study-home-budget-ui-for-finance/>