

Project Proposal – Personal Finance Tracker

Overview:

The Personal Finance Tracker is a web application designed to provide users with a comprehensive tool for managing their personal finances. This application aims to solve the problem of effectively tracking and organizing personal expenses, income, and budgeting. With features such as expense tracking, income management, budget setting, and visualizations, users can gain better control over their finances and make informed decisions.

Why am I doing this?

Managing personal finances effectively is a common challenge faced by many individuals. By developing the Personal Finance Tracker, I aim to provide users with a user-friendly and intuitive solution that simplifies the process of tracking and managing their finances. This project aims to help users improve their financial literacy, optimize their budgeting, and gain a clearer understanding of their financial situation.

Who is the audience?

The target audience for the Personal Finance Tracker includes individuals from various age groups and financial backgrounds who want to take control of their personal finances. The application will cater to both novice users who require basic financial management features and advanced users who seek deeper insights and recommendations for optimizing their financial health.

Major functions of the Application:

1. User Registration and Authentication:
 - Allow users to create an account securely
 - Implement authentication measures to protect user data.
2. Expense Tracking:
 - Enable users to record their expenses and categorize them.
 - Provide options to add details such as date, amount, and description.
 - Allow users to view, edit, and delete expense records.
3. Income Management:
 - Allow users to track their income sources and record income details.
 - Provide options to categorize income.
 - Enable editing and deletion of income records.
4. Budget Setting and Tracking:
 - Enable users to set monthly budgets for different expense categories.
 - Display budget progress and provide alerts when nearing or exceeding set limits.
 - Allow users to modify budget allocations as needed.
5. Data Visualization:
 - Generate visualizations such as charts and graphs to represent expenses, income, and budget data.

- Provide interactive visualizations for better analysis and understanding of financial patterns.
6. Insights and Recommendations:
- Analyze user financial data to provide personalized insights and recommendations.
 - Offer suggestions for budget optimization, expense reduction, and potential investment opportunities.
 - Notify users of potential savings and financial milestones.

Wireframes:

Mobile: <https://wireframe.cc/npDfcm>

Desktop: <https://wireframe.cc/npDfcm>

Data Sources:

The Personal Finance Tracker will utilize a combination of external data sources and local JSON files to handle financial data securely. The following data sources will be used:

- External API: Integrate with a trusted financial API to fetch real-time exchange rates for currency conversion and stock market data for investment tracking.
- Local JSON file: Store user-specific data such as expenses, income, and budget information securely on the user's device.

Initial Module List:

1. Authentication Module: Handles user registration, login, and authentication.
2. Expense Tracking Module: Manages expense records, categories, and related functionalities.
3. Income Management Module: Handles income records, sources, and associated functionalities.
4. Budget Management Module: Manages budget setting, tracking, and related features.
5. Data Visualization Module: Generates visual representations of financial data.
6. Insights and Recommendations Module: Analyzes data and provides personalized insights and recommendations.

Colors/Typography/Specific Element Styling:

- Colors: The color palette will consist of a primary color (blue), secondary color (Green), and accent color (Red-Orange).
- Typography: The application will use a sans-serif font for headings and a serif font for body text. Font sizes will be consistent across the application.
- Specific Element Styling: Buttons will have rounded corners and a subtle shadow effect. Forms will have a clean and minimalist design.

Schedule:

Week 1:

- Research and gather requirements: Understand the project scope and objectives.

- Create wireframes: Develop mobile and desktop wireframes for major views.
- Set up project structure: Initialize the project repository, set up necessary tools and frameworks.
- User registration and authentication module:
 - i) Implement user registration functionality.
 - ii) Develop user login and authentication features.

Week 2:

- Expense tracking module:
 - i) Create the expense recording form
 - ii) Implement expenses categorization functionality
 - iii) Enable viewing, editing, and deletion of expense records.
- Income management module:
 - i) Develop income recording form
 - ii) Implement income categorization functionality
 - iii) Enable editing and deletion of income records
- Budget setting and tracking module:
 - i) Design the budget setting interface.
 - ii) Implement budget tracking and progress display.
 - iii) Allow users to modify budget allocations.

Week 3:

- Data Visualization:
 - i) Integrate charting library for visualizations.
 - ii) Generate expense, income, and budget visualizations.
 - iii) Implement interactive features for data exploration.
- Insights and recommendations module:
 - i) Analyze user financial data.
 - ii) Develop algorithms to provide personalized insights and recommendations.
 - iii) Implement notifications for potential savings and financial milestones.
- Testing and bug fixing: Conduct thorough testing and address any issues or bugs.
- Refine user interface and user experience.
- Ensure code quality.
- Deployment and final adjustments: Prepare the application for deployment on a server.
- Perform final adjustments and optimizations.
- Create documentation and user guide.

Trello Board:

<https://trello.com/u/mup23001/boards>