Progress Report

Project: Personal Finance Management Web Application

Date: 05/01/2024

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1. Introduction

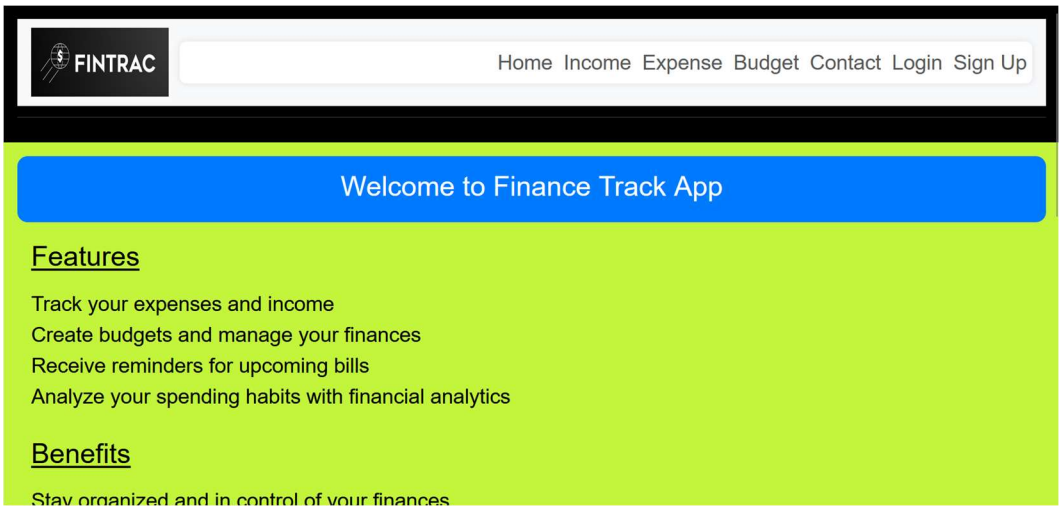
This final report provides an overview of the development of the Web Application for Personal Finance Management. The project aims to create a comprehensive fiscal management tool that assists users in managing their income, expenses, and budget effectively. In this report, we will discuss each web page, including Home, Overview, Income, Expense, Budget, Contact, Reminder, Login, and Sign-Up pages.

2. Home Page

The Home Page serves as the landing page for the web application, providing users with an introduction to the features and functionalities offered. Home Page includes:

1. Design finalized with a clean and intuitive layout.
2. Integration of interactive elements to guide users through the application.
3. Implemented responsive design for optimal viewing across various devices.

Screenshot:



Roles:

Design and Frontend Development: Yash Jasani

Backend Development: Yash Jasani

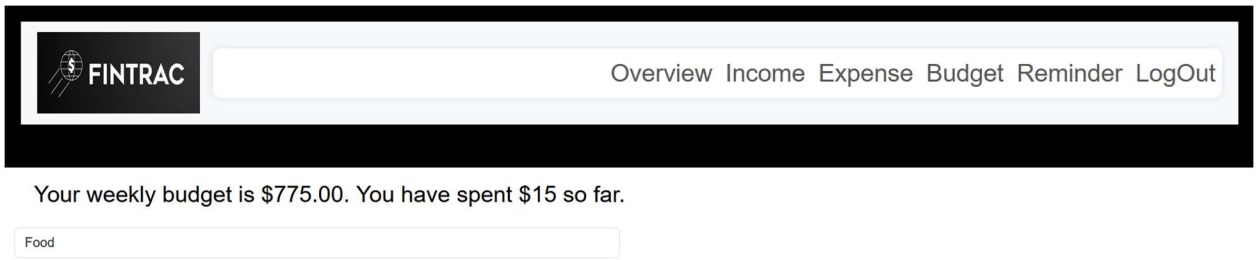
Quality Assurance: Yash Jasani

3. Overview Page

The Overview Page presents users with a summary of their financial status, including total income, expenses, and current budget status. Progress on the Overview Page includes:

1. Development of dynamic data visualization to present financial information graphically.
2. Integration of filters and sorting options for users to customize their overview.
3. Implementation of real-time data updates for accurate reflection of financial changes.

Screenshot:



Roles:

Design and Frontend Development: Yash Jasani

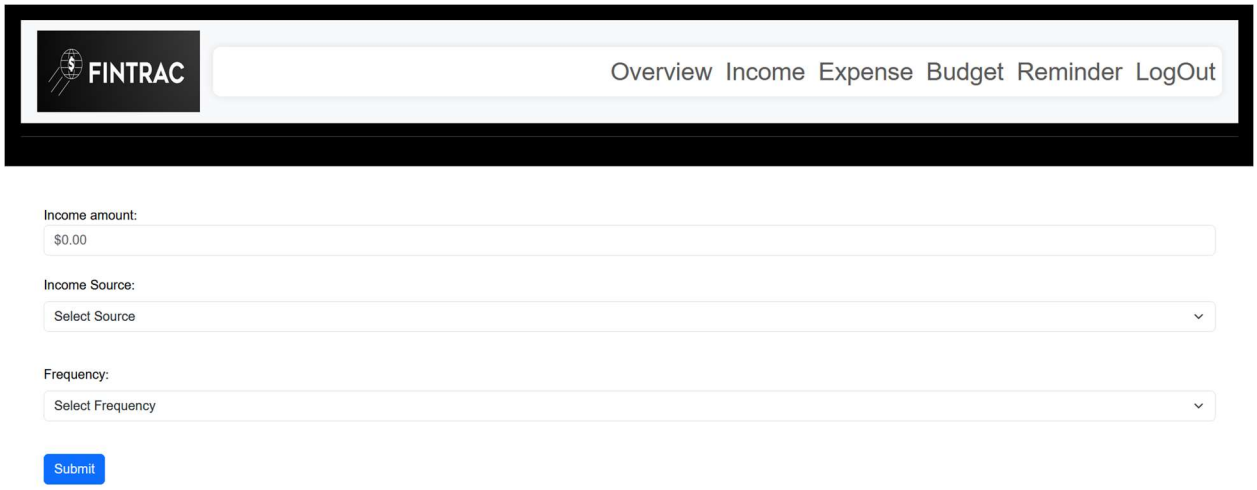
Backend Development: Elizabeth Becker

4. Income Page

The Income Page allows users to input and track their sources of income. Progress on the Income Page includes:

1. Creation of a user-friendly interface for adding, editing, and deleting income entries.
2. Implementation of validation checks to ensure accurate data entry.
3. Integration of features to categorize income sources for better organization.

Screenshot:



Roles:

Design and Frontend Development: Yash Jasani and Elizabeth Becker

Backend Development: Elizabeth Becker

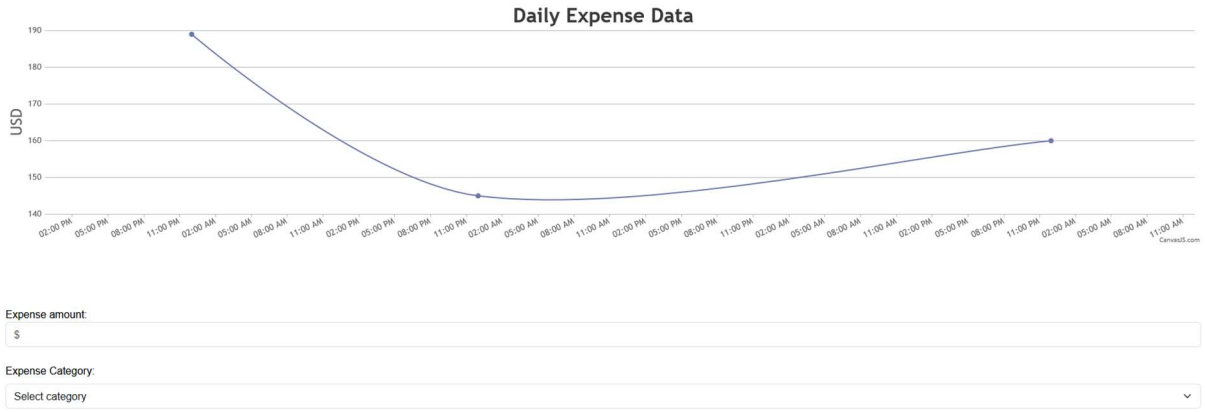
Quality Assurance: Yash Jasani

5. Expense Page

The Expense Page enables users to record and monitor their expenditures. Progress on the Expense Page includes:

1. Development of functionality to add, edit, and delete expense entries effortlessly.
2. Integration of expense categorization for better expense tracking.
3. Implementation of filters and search options for users to navigate through their expenses efficiently.

Screenshot:



Roles:

Design and Frontend Development: Yash Jasani and Elizabeth Becker

Backend Development: Elizabeth Becker

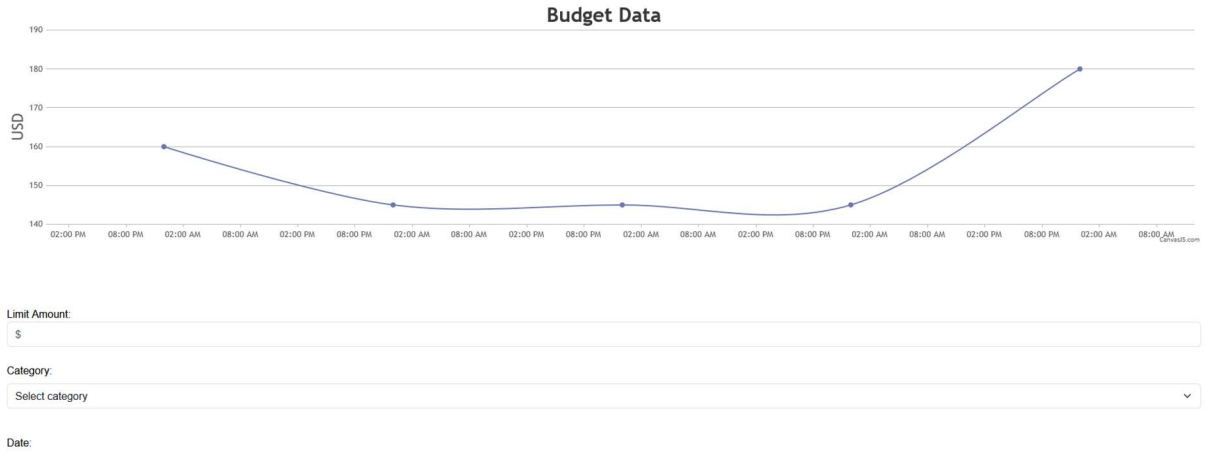
Quality Assurance: Yash Jasani and Elizabeth Becker

6. Budget Page

The Budget Page empowers users to set and manage their financial goals. Progress on the Budget Page includes:

1. Creation of a budget planning tool with customizable categories and limits.
2. Integration of notifications and alerts to keep users informed about budget status.
3. Implementation of progress tracking features to monitor adherence to budget goals.

Screenshot:



Roles:

Design and Frontend Development: Yash Jasani and David Mears

Backend Development: David Mears

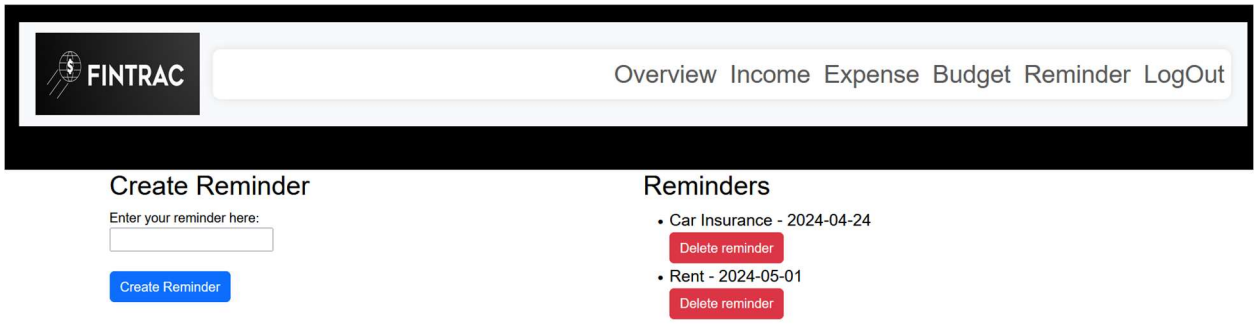
Quality Assurance: Yash Jasani

7. Reminder Page

The Reminder Page helps users stay on track with important financial deadlines and events. Progress on the Reminder Page includes:

1. Development of a reminder scheduling system with customizable alerts.
2. Integration of notifications for upcoming payments, budget reviews, etc.
3. Implementation of user preferences settings to manage reminder frequency and delivery methods.

Screenshot:



Roles:

Design and Frontend Development: Yash Jasani

Backend Development: Yash Jasani or David Mears

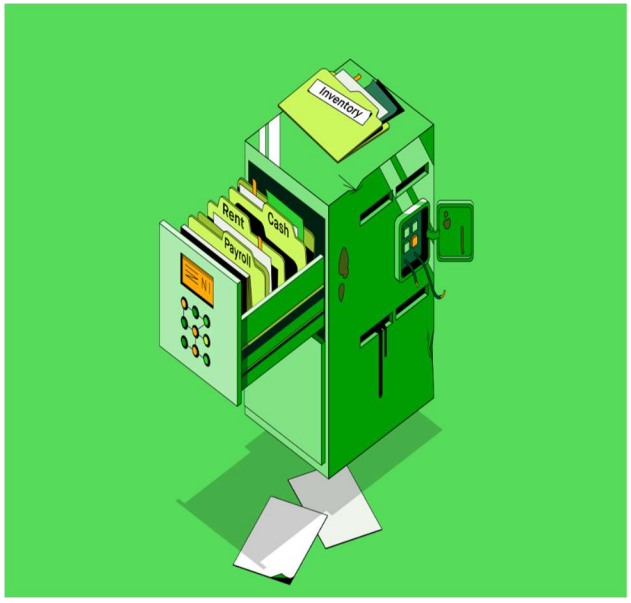
Quality Assurance: Yash Jasani

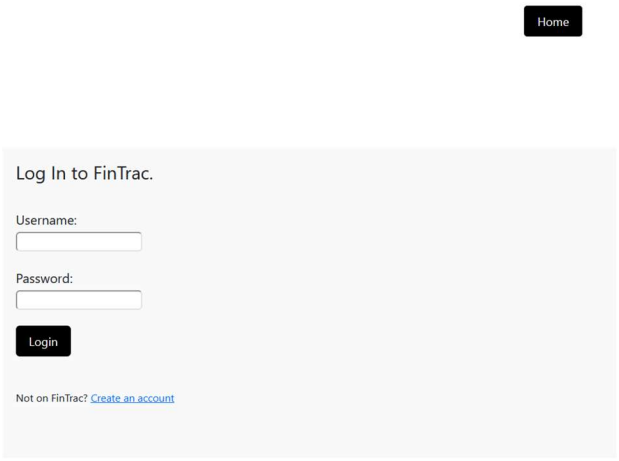
8. Login Page

The Login Page provides secure access to user accounts. Progress on the Login Page includes:

1. Implementation of user authentication and authorization protocols.
2. Integration of password encryption for enhanced security.
3. Deployment of error handling mechanisms to manage login failures effectively.

Screenshot:





Roles:

Design and Frontend Development: Yash Jasani

Backend Development: Yash Jasani

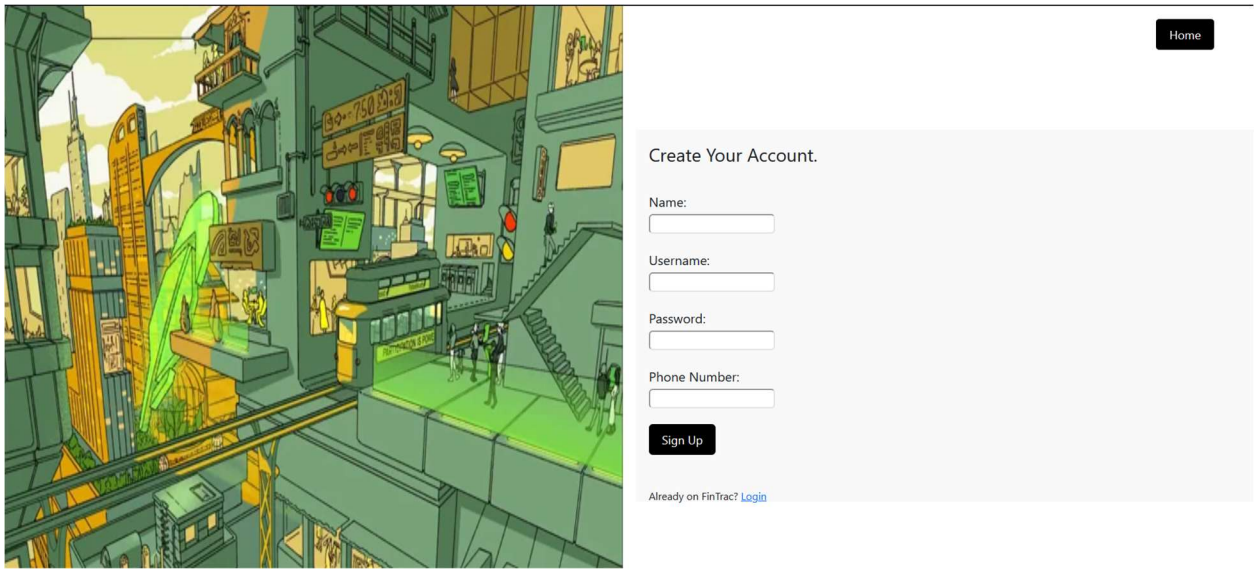
Quality Assurance: Yash Jasani

9. Sign Up Page

The Sign-Up Page enables new users to create accounts for accessing the web application. Progress on the Sign-Up Page includes:

1. Development of a registration form with fields for username, email, and password.
2. Integration of validation checks to ensure the uniqueness and validity of user credentials.
3. Deployment of email verification functionality for account activation.

Screenshot:



Roles:

Design and Frontend Development: Yash Jasani

Backend Development: Yash Jasani

Quality Assurance: Yash Jasani

10. Database Design Progress

We have made significant progress in designing the database structure to efficiently store and manage user data. Here is an overview of the tables and their structures:

Users Table:

1. userID (Primary Key)
2. username(email)
3. password
4. name
5. phoneNumber

Income Table:

1. incomeID (Primary Key)
2. userID (Foreign Key)
3. amount
4. source

5. date
6. frequency

Expenses Table:

1. expenseID (Primary Key)
2. userID (Foreign Key)
3. amount
4. category
5. date
6. description

Budgets Table:

1. budgetID (Primary Key)
2. userID (Foreign Key)
3. limitAmount
4. category
5. date

Reminders Table:

1. reminderID (Primary Key)
2. userID (Foreign Key)
3. reminderDate
4. description

These tables are interconnected using foreign keys to maintain data integrity. We have also populated the tables with sample data for testing and demonstration purposes.

Conclusion

In conclusion, noteworthy progress has been made on each web page of the financial management web application. The development team continues to work diligently to ensure the timely completion and delivery of a high-quality product. Moving forward, focus will be on refining existing features, implementing user feedback, and conducting thorough testing to ensure a seamless user experience.

How we used JavaScript:

- JavaScript plays a crucial role in managing and presenting budget-related information dynamically on the user interface.
- It facilitates data manipulation and visualization through functions like getData, which format retrieved data for display on graphs.
- Additionally, JavaScript powers dynamic content loading with functions like load_new_content, adjusting the interface based on user interactions such as category selection. Moreover, client-side form validation ensures data integrity before submission, enhancing user experience.
- Beyond these existing functionalities, additional functions like login, logout, signup, retrieveBudgetData, and insertBudgetData are proposed to handle user authentication and data management tasks, essential for a budget tracking application.
- Integrating these functions enhances the application's functionality, allowing users to securely manage their budget data.

Public URL of Personal Finance Management Web Application:

https://www.dynamicpointer.com/Project2/Home.php

Public URL of project's source code on GitHub:

https://github.com/Phantom-Acid/Project2.git

During the implementation of this milestone, we faced several challenges:

1. User Interface Consistency: Ensuring consistency across web pages was tough due to varying functionalities.
2. Data Validation and Security: Implementing robust validation and security measures demanded careful planning.
3. Performance Optimization: Optimizing performance, especially with large datasets, was challenging.
4. Team Collaboration: Effective communication and collaboration were vital, especially in a remote setting.

I (Yash Jasani) found Data Validation and Security frustrating.

David found using ajax for the graph to be exceedingly difficult, for some reason it would simply disappear whenever I had the smallest issue, even with unrelated portions of code.

Despite these challenges, we have made progress through collaborative problem-solving and continuous learning.