Personal Finance Analyzer - User Manual

Introduction

The **Personal Finance Analyzer** is a web application designed to help users manage their finances by tracking expenses, monitoring subscriptions, and generating financial reports. With an intuitive dashboard and automated insights, users can efficiently make informed financial decisions.

Features

- Dashboard Overview: Displays recent transactions and financial summary.
- Subscription Tracking: Identifies and monitors recurring payments.
- Spending Categories: Provides a breakdown of expenses.
- Budgeting Tool: Allows users to set spending limits and receive alerts.
- Spending Reports: Generates detailed reports on financial activity.

Installation Guide

System Requirements

- A modern web browser (Google Chrome, Firefox, Microsoft Edge, Safari)
- Internet connection
- A valid email address for account creation

Prerequisites

The system integrates with Plaid API to retrieve financial data securely. Ensure that:

- Your bank is supported by Plaid.
- You allow financial account linking for seamless data retrieval.

Installation Steps

1. Visit the hosted application URL (to be provided upon release).
2. Sign up using an email and create a secure password.
3. Link your bank account securely using the Plaid API integration.
4. Once linked, your financial data will be imported and displayed on the dashboard.

Running and Using the Software

1. Logging In
    - Enter your registered email and password.

    - If you forget your password, use the password recovery feature.
2. Navigating the Dashboard
    - The dashboard provides an overview of your financial health.
    - You can switch between views for transactions, budgets, and reports.
3. Tracking Subscriptions
    - Navigate to the Subscription Tracking section.
    - View recurring payments and identify unnecessary subscriptions.
4. Setting Budgets
    - Use the Budgeting Tool to set spending limits for various categories.
    - Enable alerts to receive notifications when nearing budget limits.
5. Generating Reports
    - Select a specific time period.
    - Generate a financial report showing categorized spending trends.

Work in Progress

- Mobile App Compatibility
- AI-Driven Financial Insights

Reporting Issues and Bugs

How to Report a Bug

1. Send an email to support@financeanalyzer.com with the subject Bug Report.
2. Include the following details:
    - Description of the issue
    - Steps to reproduce
    - Expected behavior vs. actual behavior
    - Screenshots (if possible)
3. Our support team will respond with further troubleshooting steps or confirm when the bug has been logged.

Known Bugs

- Some transactions may not be accurately categorized.
- Occasional delays in retrieving financial data from Plaid API.
- Limited support for small financial institutions.

For updates, check the **Known Issues** section in our GitHub repository.

Developer Documentation

Introduction

The Personal Finance Analyzer is a web application that helps users manage their finances by tracking expenses, monitoring subscriptions, and generating financial reports. This documentation is intended for developers who wish to contribute to the project.

Obtaining the Source Code

The source code is hosted on GitHub. To obtain the latest version, run:

```
git clone https://github.com/your-repo/finance-analyzer.git
cd finance-analyzer
```

If the project uses submodules, initialize them with:

```
git submodule update --init --recursive
```

Directory Structure

```
CS362-Class-Project/
│-- personal finance analyzer/      # Source code
│    ├── backend/
│    ├─ ├──Plaid Integration/
│    ├─ ├──├──index.js
│    ├─ ├──├──plaidtest.html
│    ├─ ├──├──transactions.json
│    ├─ ├──package.json
│    ├─ ├──package-lock.json
│    ├─ ├──server.json
│    ├── frontend/
│    ├─ ├──public/
│    ├─ ├──├──css/
│    ├─ ├──├──images/
│    ├─ ├──index.js
│    ├─ ├──login.html
│    ├─ ├──signup.html
│    ├─ ├──navbar.html
│    ├─ ├──dashboard.html
│    ├─ ├──subscriptions.html
```

```
│   ├─ ├──budgeting.html
│   ├─ ├──spending-reports.html
│-- documents/            # Project Proposal and Project Architecture docs
│-- presentation slides/
│-- reports/              # Documentation files
│-- README.md             # Project overview
```

Building the Software

This project uses Node.js and npm. To install dependencies, run:

npm install

To build the project for production:

npm run build

Running the Software

To start the development server:

npm start

The application will be accessible at http://localhost:3000.

Testing the Software

To run all test cases:

npm test

If the project includes end-to-end (E2E) tests, run:

npm run test:e2e

Adding New Tests

- Place unit tests in the tests/ directory.
- Use Jest and React Testing Library for frontend tests.
- Follow naming conventions like componentName.test.js.

Building a Release

Before releasing a new version:

1. Update version number in package.json.
2. Run tests to ensure stability.
3. Build the production version:
   npm run build
4. Deploy to the hosting platform.

For more details, refer to the RELEASE.md file in the repository.