---------------------- Project Requirement -----------------------

### Project Requirement Document: Bookkeeping System

#### Introduction

This document outlines the requirements for a bookkeeping system designed to record, manage, and analyze financial transactions for individuals or small businesses. The system will provide features to enter and categorize income and expenses, set tax rates, view financial summaries, and track account balances over various time frames.

#### Functional Requirements

1. \*\*User Registration and Authentication\*\*

- Users can register for an account using an email address and password.

- The system must provide secure login and logout capabilities.

2. \*\*Income Entry Management\*\*

- Users can record various sources of income, specifying the amount, source, and date received.

- Support for setting tax rates applicable to different income sources.

- Capability to edit or delete recorded income entries.

3. \*\*Expense Entry Management\*\*

- Users can record expenses, detailing the amount, category (e.g., utilities, rent, office supplies), and date of transaction.

- Functionality to edit or delete expense entries.

- Support for recurring expenses with the option to set frequencies (e.g., monthly, annually).

4. \*\*Balance Tracking\*\*

- The system must automatically update the account balance with each recorded income or expense.

- Provide an overview of current balance, including all deposits and withdrawals.

- Alert or notification system for low balance based on a threshold set by the user.

5. \*\*Tax Calculation\*\*

- Automatically calculate taxes based on income entries and applicable tax rates.

- Generate summary reports of estimated taxes owed for specified periods.

6. \*\*Financial Reporting and Views\*\*

- \*\*Monthly Spending View:\*\* Display a summary of income and expenses for any selected month.

- \*\*Annual Spending View:\*\* Aggregate and display income and expenses for a selected year.

- \*\*Category-wise Spending Breakdown:\*\* Visual representations (charts or graphs) showing the proportion of expenses in different categories.

- \*\*Historical Balance View:\*\* Graphical representation of account balance changes over time.

7. \*\*Data Export and Import\*\*

- Allow users to export financial reports and data in CSV or PDF format.

- Provide a feature for importing financial data from external sources or files.

8. \*\*Notifications and Reminders\*\*

- System to send reminders for upcoming expenses or payments.

- Notifications for any discrepancies in account balance or unusual spending patterns.

9. \*\*User Settings and Customization\*\*

- Users can customize tax rates, set balance alert thresholds, and manage categories for income and expenses.

- Option to enable or disable notifications and reminders.

#### Non-functional Requirements

1. \*\*Security\*\*

- All user data must be encrypted at rest and in transit.

- Implementation of industry-standard authentication and authorization practices.

2. \*\*Performance\*\*

- The system should be optimized for fast loading times and smooth interactions.

- Capable of handling a large number of concurrent users without degradation in performance.

3. \*\*Scalability\*\*

- The architecture should support scaling to accommodate growing amounts of user data and increasing user base.

4. \*\*Usability\*\*

- User interface must be intuitive and easy to navigate for users with varying levels of technical expertise.

- Responsive design to ensure accessibility on various devices (desktop, tablet, smartphone).

5. \*\*Backup and Recovery\*\*

- Regular automated backups of all data.

- Procedures in place for quick recovery in case of data loss.

#### Conclusion

This project requirement document provides a comprehensive overview of the features and specifications for the bookkeeping system. It is designed to offer users a robust tool for managing their financial records efficiently while providing valuable insights into their financial health. Future enhancements may include integration with banking APIs for automatic transaction import, advanced predictive analytics for financial planning, and customizable dashboards for a personalized overview.

----------------- User stories and journeys ------------------------

Based on the Project Requirement Document you've shared for a bookkeeping system, I will outline user stories and journeys that cover the functional and non-functional requirements. These stories will help guide the development process by focusing on the end user's needs and how they interact with the system. Let's break it down by key features and scenarios.

### User Stories

#### User Registration and Authentication

- \*\*As a\*\* new user, \*\*I want to\*\* register for an account using my email address and password \*\*so that\*\* I can securely access the bookkeeping system.

- \*\*As a\*\* user, \*\*I want to\*\* log in to my account \*\*so that\*\* I can manage my financial records.

- \*\*As a\*\* user, \*\*I want to\*\* log out of the system \*\*so that\*\* my account remains secure when I'm not using it.

#### Income Entry Management

- \*\*As a\*\* user, \*\*I want to\*\* record various sources of income \*\*so that\*\* I can keep track of my financial inflow.

- \*\*As a\*\* user, \*\*I want to\*\* specify tax rates for different income sources \*\*so that\*\* I can manage my tax obligations more efficiently.

- \*\*As a\*\* user, \*\*I want to\*\* edit or delete income entries \*\*so that\*\* my financial records are accurate.

#### Expense Entry Management

- \*\*As a\*\* user, \*\*I want to\*\* record my expenses with details \*\*so that\*\* I can track where my money is going.

- \*\*As a\*\* user, \*\*I want to\*\* set up recurring expenses \*\*so that\*\* I can manage my regular payments more effectively.

- \*\*As a\*\* user, \*\*I want to\*\* edit or delete expense entries \*\*so that\*\* my financial records are up-to-date.

#### Balance Tracking

- \*\*As a\*\* user, \*\*I want to\*\* see an overview of my current balance \*\*so that\*\* I can understand my financial position at a glance.

- \*\*As a\*\* user, \*\*I want to\*\* receive alerts for low balance \*\*so that\*\* I can take action to avoid overdrafts.

#### Tax Calculation

- \*\*As a\*\* user, \*\*I want to\*\* have my taxes automatically calculated \*\*so that\*\* I can easily prepare for tax payments.

#### Financial Reporting and Views

- \*\*As a\*\* user, \*\*I want to\*\* view monthly and annual summaries of my financial activities \*\*so that\*\* I can assess my spending and saving habits.

- \*\*As a\*\* user, \*\*I want to\*\* see visual breakdowns of my expenses by category \*\*so that\*\* I can identify areas for potential savings.

#### Data Export and Import

- \*\*As a\*\* user, \*\*I want to\*\* export my financial data \*\*so that\*\* I can use it for further analysis or keep for my records.

- \*\*As a\*\* user, \*\*I want to\*\* import financial data \*\*so that\*\* I can easily transition from other systems or consolidate my financial information.

#### Notifications and Reminders

- \*\*As a\*\* user, \*\*I want to\*\* receive reminders for upcoming payments \*\*so that\*\* I can avoid late fees.

- \*\*As a\*\* user, \*\*I want to\*\* be notified of discrepancies in my account \*\*so that\*\* I can investigate and resolve issues promptly.

#### User Settings and Customization

- \*\*As a\*\* user, \*\*I want to\*\* customize my settings \*\*so that\*\* the bookkeeping system aligns with my personal preferences and needs.

### User Journey Example: Tracking Monthly Expenses

1. \*\*Registration and Login\*\*: John signs up for an account using his email and sets a password. After verifying his email, he logs into the bookkeeping system.

2. \*\*Initial Setup\*\*: He customizes his tax rates and sets up categories for his income and expenses according to his needs.

3. \*\*Recording Transactions\*\*: Throughout the month, John records each income and expense, categorizing them accordingly.

4. \*\*Reviewing Financial Status\*\*: At the end of the month, John reviews his Monthly Spending View to assess his financial activity.

5. \*\*Adjustments and Planning\*\*: Based on the insights gained, he adjusts his spending habits for the next month and sets reminders for upcoming bills.

6. \*\*Exporting Data\*\*: John exports the monthly report in PDF format to share with his financial advisor for further guidance.

This journey outlines how a typical user would interact with the system from initial setup to regular use, providing insights into the user's experience and the system's functionality.