Product Requirements Document (PRD)

Project Title

Personal Finance Tracker API

Overview

The Personal Finance Tracker API is a modern, backend-powered solution designed to help users manage their income, expenses, savings goals, and overall financial health. It allows secure and user-specific financial tracking through RESTful APIs. Users can view, create, update, and delete financial records and visualize their progress using analytics tools.

Goals & Objectives

- Provide CRUD functionality for financial records (income, expenses, savings).
- Enable user-specific data through authentication.
- Offer dashboard analytics (monthly savings, trends).
- Ensure the backend is RESTful, secure, and scalable.
- Allow easy integration with frontend or mobile clients.

Target Users

Category	Description
Age Group	18-45
Profile	Tech-savvy individuals, students, employees
Purpose	Track expenses, analyze budget trends
Devices	Web, Mobile (future scope)

Features & Functionalities

Feature	Description	Priority
User Authentication	Register/Login with JWT	High

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Income API	CRUD operations for incomes	High
Expense API	CRUD operations for expenses	High
Savings Goal API	Set savings goals and track progress	Medium
Monthly Summary API	Calculate net income and spending patterns	High
Filtering & Sorting	Filter by date, category, amount, etc.	Medium
API Documentation	Swagger or Postman collection	High

Technical Requirements

Stack	Tech Used
Backend	Django Rest Framework (DRF)
Database	SQLite (Dev), PostgreSQL (Prod-ready)
Auth	JWT Authentication
API Docs	Swagger / DRF browsable API
Hosting	GitHub (code), Render/Heroku (optional)

API Endpoints

/api/register/	POST	User Registration
/api/token/	POST	Get JWT Token
/api/incomes/	GET/POST	List or Add Income
/api/incomes/<id>/	PUT/DELETE	Update/Delete Income
/api/expenses/	GET/POST	List or Add Expense
/api/expenses/<id>/	PUT/DELETE	Update/Delete Expense
/api/goals/	GET/POST	List or Set Savings Goals
/api/goals/<id>/	PUT/DELETE	Update/Delete Goals
/api/summary/	GET	Get monthly financial summary

Functional Requirements

- Users can only access their own data.

- Input validation and error handling included.
- Summary is calculated using date filters.
- Token-based authentication for every API call.
- API accessible via tools like Postman.

Development Timeline

Task	Timeframe
Project Setup + Models	Day 1
API Development (CRUD)	Day 2-3
Authentication (JWT)	Day 4
Summary & Filtering APIs	Day 5
Final Testing + Docs	Day 6
Submission & Demo	Day 7

Success Criteria

- Full API tested on Postman or Swagger UI
- All models integrated and functional
- JWT working and tested
- GitHub repo publicly accessible
- Code readable and maintainable

Deliverables

- GitHub repository with complete code
- Postman collection or Swagger docs
- Optional hosted version (Render/Heroku)
- PDF of PRD
- Screenshots or screencast (2-min demo)