FinTrack Project Setup Guidelines

1. **Description:**
   FinTrack is a web-based account ledger system designed to help users manage accounts and transactions efficiently. The frontend is built using React, and the backend uses FastAPI.

2. **Features:**
   - User-friendly interface for account and transaction management
   - Secure user authentication
   - Real-time transaction updates
   - Detailed financial reports
   - API integration for account data management

3. **Tech Stack:**
   - Frontend: React, Axios
   - Backend: FastAPI
   - Database: MySQL
   - State Management: Context API
   - Authentication: JWT
   - API Testing: Postman
   - API Documentation: Swagger

4. **Pre-Requisite:**
   MySQL should be setup locally with database and related tables in order to execute the below steps for performing CRUD Operations. Scripts of SQL is placed in ledger_backend folder.

5. **FastAPI Backend Setup for Windows Environment:**
   - **Navigate to the project directory:** Open your terminal (or command prompt) and navigate to the folder where the FastAPI app is located:
     cd ledger_backend (in this case)
   - **Recreate and activate the virtual environment:** Run the following commands to create and activate a new virtual environment for the backend (first you need to delete the existing one if existed):
     python -m venv venv
   - **Activate the virtual environment:** Use below command to activate the virtual environment:
     venv\Scripts\activate

- **Install the dependencies:** Use below command to activate the virtual environment:

  pip install -r requirements.txt
- **Start the FastAPI server:** Once the dependencies are installed, you can start the FastAPI app using below command:

  python3 app.py

  The API will be accessible at http://127.0.0.1:8002 and the interactive API documentation will be available at http://127.0.0.1:8002/docs#/

  Note: I have made some changes in the .env file like removed app password which is being used for email sent due to some security considerations. If you want to run this application please reach out to me so that I can share the credentials with you. Same applies for the database credentials as well.

6. React Frontend Setup for Windows Environment:

- **Navigate to the project directory:** Open your terminal (or command prompt) and navigate to the folder where React app is located:

  cd ledger_frontend (in this case)
- **Reinstall the dependencies:** Run the following command to reinstall the packages listed in your package.json file:

  npm install

  This will recreate the node_modules folder and install all necessary dependencies.
- **Start the server:** Once the dependencies are installed, you can start the React app:

  npm start

  The app will be accessible at http://localhost:3000

7. Microsoft Power BI Desktop Setup

As this is the part of future improvements but I am sharing the initial version of my Power BI report (.pbix file) which you can see by downloading first Microsoft power BI in your system and then open the shared file.

Download Link - https://www.microsoft.com/en-us/download/details.aspx?id=58494