PERSONAL FINANCE TRACKER

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ABSTRACT

The Personal Finance Tracker is a database-driven project designed to help individuals monitor their income, expenses, and savings. By using MySQL/SQLite for data storage and Power BI for visualization, the system enables users to generate monthly reports and category-wise spending analysis. The project demonstrates how structured data and visualization tools can be combined to improve financial awareness and decision-making.

INTRODUCTION

Managing personal finances is a critical life skill, yet many people struggle to keep track of their income and expenses. This project aims to address that issue by building a simple yet effective Personal Finance Tracker. The system records income and expenses, categorizes transactions, and provides insights through monthly summaries and graphical dashboards. The tracker not only helps in monitoring day-to-day financial activities but also encourages better budgeting and savings practices.

TOOLS USED

1. **MySQL / SQLite** → Database for storing income, expenses, and categories.

2. **SQL Queries** → Used to generate monthly and category-based reports.

3. **CSV Export** → Used as an intermediate step to load reports into Power BI.

4. **Power BI** → Data visualization tool used to create dashboards with bar charts, line charts, and pie charts.

STEPS INVOLVED

1. **Database Design** → Created schema with tables for users, categories, income, and expenses.

2. **Data Insertion** → Recorded transactions with date, category, amount, and notes.

3. **Report Generation** → Wrote SQL queries to calculate monthly income, expenses, and net balance.

4. **CSV Export** → Exported SQL query results into CSV files.

5. **Power BI Dashboard** → Imported CSV files into Power BI to build:

   - Bar chart (Income vs Expenses vs Net)

   - Line chart (Monthly Net Balance Trend)

   - Pie chart (Category-wise Spending)

6. **Final Output** → A working financial dashboard for better insights and decision-making.

CONCLUSION

The Personal Finance Tracker successfully integrates database management and data visualization to create a practical financial monitoring system. By maintaining structured financial records and using visual dashboards, users can easily track their monthly income, expenses, and spending patterns. The project demonstrates how combining SQL with business intelligence tools like Power BI can turn raw data into meaningful insights. Future improvements may include multi-user support, real-time data entry via a web app, and automated reporting.

THANK YOU