

# Project Report

## Personal Finance Tracker

### Abstract

The **Personal Finance Tracker** is a SQL-based system designed to help users track and manage their personal finances. It allows recording of income, expenses, and categorizing spending. The system can generate **monthly expense summaries, category-wise spending reports, and balance tracking**, which can be exported as **CSV files** for easy analysis. This project simplifies financial management and aids in planning and budgeting.

### Introduction

Managing personal finances efficiently is crucial for maintaining a stable financial life. Without proper tracking, it is difficult to know how much is spent, saved, or remaining in the budget. The **Personal Finance Tracker** project uses a relational database to:

- Store user information and financial transactions.
- Categorize expenses for better insight.
- Summarize monthly spending and income.
- Generate balance reports to monitor remaining funds.
- Export reports in CSV format for further analysis or record-keeping.

This project helps individuals track their finances, plan budgets, and make informed decisions.

### Tools & Technologies Used

- **Database:** MySQL Workbench
- **Language:** SQL
- **Export Tools:** MySQL Workbench CSV Export

### Steps Involved

#### Database Creation

First, a new database is created to store all tables and financial data. This database acts as the central storage for the project.

## Schema Design

Different tables are designed to organize data efficiently:

- **Users** – Stores user information such as name and email.
- **Categories** – Stores expense categories like Food, Rent, Travel, etc.
- **Income** – Stores records of users' income sources.
- **Expenses** – Stores users' expenses, linked to categories.

## Insert Dummy Data

Sample records are inserted into tables to test the system, including users, income entries, expense entries, and categories. This step ensures the database is ready for queries and report generation.

## Monthly Expense Summary

Expenses are summarized month-wise for each user. This shows how much a user spent in each month and helps in tracking monthly financial activity.

## Category-Wise Spending Analysis

Expenses are broken down by category. This step helps users understand where most of their money is going and identify areas to adjust spending.

## Balance Tracking

The total income and total expenses are calculated to determine the remaining balance for each user. A view can be created to make it easy to monitor balances at any time.

## Exporting Reports

The results of monthly summaries, category-wise spending, and balance tracking are exported as **CSV files**. CSV format makes the reports shareable and easy to analyze in Excel or other tools.

## Conclusion

The **Personal Finance Tracker** project provides an effective solution to manage personal finances. By using SQL, users can:

- Record income and expenses accurately.
- Categorize and analyze spending patterns.
- Generate monthly and category-wise reports.
- Track balances and financial health.

This project can be extended further with **budget alerts, recurring transactions, graphical dashboards, and predictive analysis**.