

Personal Finance Tracker - SQL Project Report

Introduction

The Personal Finance Tracker project is designed to help users manage their income and expenses efficiently using SQL. It provides insights into monthly income, expense patterns, category-wise spending, and balance tracking. The project is simple, beginner-friendly, and demonstrates core SQL concepts like table creation, queries, views, and relationships.

Abstract

This project implements a finance tracking system using SQL database concepts. It uses four main tables: Users, Categories, Income, and Expenses. The system allows storing financial transactions and generating reports such as monthly income, monthly expenses, category-wise breakdowns, and overall balance. The project highlights SQL operations like joins, aggregate functions, and view creation.

Tools Used

Tool/Technology	Purpose
MySQL / PostgreSQL	Database system for implementation
SQL Queries	Data manipulation and report generation
Views	Simplified reporting
ReportLab (Python)	Project report generation (PDF)

Steps Involved

1. Designed database schema with four tables: Users, Categories, Income, Expenses.
2. Inserted sample data for users, income, and expenses.
3. Wrote SQL queries for monthly summaries, category-wise analysis, and balance tracking.
4. Created views (Monthly_Report, Balance_Tracker) for simplified reporting.
5. Tested queries with sample data to validate functionality.

Conclusion

The Personal Finance Tracker demonstrates how SQL can be used to manage and analyze financial data in a structured way. By implementing this project, interns gain hands-on experience in database design, data insertion, query writing, and reporting. The project is lightweight, easy to understand, and useful for interview preparation as it covers essential SQL concepts.