EXPENSE TRACKER PROJECT REPORT

Introduction:-

The Expense Tracker project is a desktop application developed using Java and JavaFX, designed to help users record, categorize, and analyze their daily expenses.

The system maintains a structured database for efficient storage and retrieval of data, providing an intuitive interface for managing expenses and generating summaries.

Abstract:-

This project aims to simplify personal finance management by offering a user-friendly solution for tracking expenses.

It allows users to add, view, and categorize expenses, while also generating monthly summaries and exporting data to CSV for further analysis.

The tool provides insights into spending patterns, assisting users in better budgeting.

Tools Used:-

- Programming Language: Java (JDK).

Framework: JavaFX for user interface.

Build Tool: Maven (pom.xml configuration).

Database: SQL (schema-based).

IDE: Eclipse / IntelliJ IDEA - Version Control: GitHub

Steps Involved in Building the Project:-

- 1. Database Setup: Defined schema using SQL for expense and category tables.
- 2. Model Creation: Implemented Java classes for Expense

and Category to represent entities.

- 3. DAO Layer: Developed DAO classes for interacting with the database.
- 4. Service Layer: Built services for CSV export and generating monthly summaries.
- <u>5. UI Design:</u> Created user-friendly interfaces with JavaFX, including forms and analytics view.
- **6. Integration:** Connected the UI to backend services ensuring smooth data flow.
- 7. Testing & Debugging: Verified database connections, UI functionalities, and report generation.

Conclusion:-

The Expense Tracker project successfully demonstrates the integration of Java, JavaFX, and SQL to create a functional desktop application.

It provides a practical solution for managing personal finances with features like expense categorization, data persistence, and analytics.

This project also enhanced my understanding of full-stack application development, bridging database operations with an interactive user interface.