

REV WORKFORCE : HR SYSTEM

1. Project Overview

Rev WorkForce is a comprehensive console-based Human Resource Management (HRM) system built using Core Java and MySQL. The application automates HR operations such as employee management, leave workflows, and performance reviews through Role-Based Access Control (RBAC).

2. System Architecture

The system follows a professional N-Tier (Layered) Architecture to ensure scalability and separation of concerns.

UI Layer: Interactive console menus for Admin, Manager, and Employee.

Service Layer: Business logic, validations, and workflow orchestration.

DAO Layer: Secure JDBC-based database interactions.

Database Layer: Persistent storage using MySQL.

3. Database Design & Entities

A highly normalized MySQL database with 8+ tables ensures data integrity and security.

Core Tables: employees, departments, designations, leave_requests, leave_balances, notifications, and performance_reviews.

4. Key Features & Workflows

Employee Management: Full CRUD operations and manager assignments.

Leave Management: Automated leave application, approval, and balance tracking system.

Performance Cycle: Structured feedback, goal setting, and rating reviews.

Security: Secure authentication and notification triggers for system actions.

5. Technology Stack

Language: Java (Core Java)

Database: MySQL

Connectivity: JDBC

Build Tool: Maven

6. Environment / Technologies

Java, MySQL, JUnit, Log4J, GitHub Actions, JDBC, IntelliJ IDEA

7. Project Repository

GitHub URL: <https://github.com/anmol2517/Rev-WorkForce-HRM-System>

8. Conclusion

Rev WorkForce demonstrates a robust backend HR solution with enterprise-level workflow implementation, strong object-oriented design, and secure database management.