Leave Scheduler System

1. Introduction

The Leave Scheduler System is a digital application that automates employee leave management, replacing manual paperwork with a structured system built using Java, JDBC, and MySQL. Employees can apply for leave and track their history, while administrators can review, approve, or reject requests. The system enhances accuracy, reduces delays, and speeds up leave tracking.

It also provides employees and HR with real-time access to leave information, improving transparency and simplifying the entire leave management process.

2. Objectives

- Manage employee leave records digitally.
- Make leave application and approval automatic.
- Let employees track leave and history easily.
- Help admins approve or reject leaves quickly.
- Reduce errors and keep accurate, real-time records.

3. Functional Requirements

User Requirements

1. Users must log in with a valid username and password.
2. Employees can apply for different types of leave (CT, SL, PL).
3. Employees can view their leave history and remaining balance.
4. Admins can see all leave requests from employees.
5. Admins can approve or reject leave requests.
6. The system should show confirmation messages for each action.

System Requirements

- Programming Language: Java
- Database: MySQL
- Connectivity: JDBC Driver
- Tools : Eclipse IDE, MySQL Workbench
- Architecture: Console-based (CLI) system

Functional Modules

1. Login & Registration
2. Leave Application
3. Leave History
4. Leave Balance
5. Admin Management
6. Report Module

4. Features of the Project

1. Centralized Leave Management

- Keeps all employee leave data in one place
- Accessible by employees and admins

2. Automated Leave Processing

- Updates leave balances automatically
- Tracks leave status (Pending, Approved, Rejected)

3. Role-Based Access

- Employees can apply for leave and check history/balance
- Admins can approve or reject leave requests

4. Real-Time Leave Tracking

- Shows updates instantly
- Reduces delays and confusion

5. Accurate Leave Calculations

- Automatically calculates used leaves
- Tracks remaining Casual, Sick, and Paid leaves

6. Modular Architecture

- Organized in layers (Model, DAO, Service, Utility, CLI)
- Easy to maintain and expand

5. Technology Used

Component	Details
Programming Language	Java
Database	MYSQL
Connectivity	JDBC
Architecture	CLI-based
Tools Used	Eclipse, MYSQL workbench

6. ER Diagram

Prisoner
- prisoner_id
- name
- age
- gender
- address

User
- user_id
- username
- password

Case Register
- case_id
- prisoner_id
- crime_detalls
- sentence
- court_date

Prisoner
- prisoner_id
- name
- age
- gender
- address

Release Generator
- release_id
- prisoner_id
- release_date
- reason

Duty Register
- duty_id
- officer_name
- prisoner_id
- duty_date
- purpose

In-Register
- in_id
- prisoner_id
- in_date

Interview Register
- interview_id
- prisoner_id
- relative_name

Out-Register
- out_id
- prisoner_id
- out_date