

Leave Management System for Employee Leave Tracking

The **Leave Management System** is designed to manage employee leave requests. This system allows users to perform CRUD operations — **Create, Read, Update, and Delete** — on employee leave records. The system manages leave requests with employee IDs, employee names, leave start dates, leave end dates, and leave statuses, and interacts with a **MySQL** database using **JDBC** for data persistence.

Table Structure

Table name: leave_requests

Methods to Implement in Java

java

```
public static Connection getConnection()
public static void displayAllLeaves(Connection con)
public static void insertLeave(Connection con, Scanner sc)
public static void updateLeave(Connection con, Scanner sc)
public static void deleteLeave(Connection con, Scanner sc)
public static void processMenu(Connection con, Scanner sc)
```

1. Insert Leave Request

Input:

1
employee_id

employee_name

start_date

end_date

status

Logic:

- If Status is exactly "Rejected", the leave should **not** be added.
- Otherwise, insert the leave into the table.
- Regardless of insertion success, display all leave requests sorted by **status (ascending)** and **start date (descending)**.

Output:

- If status is "Rejected":
Leave request not allowed with status Rejected.
- If inserted successfully:
Leave request added successfully.
- Then list all leave requests.



2. Update Leave Request

Input:

2

employee_id

new_start_date

new_end_date

new_status

Logic:

- Update the start date, end date, and status for the employee with the provided employee_id.
- Display all leave requests sorted by **status (ascending)** and **start date (descending)**.

Output:

- Leave request updated successfully.
- List of leave requests in **reverse alphabetical order of employee_name**.

3. Delete Leave Request

Input:

3

employee_id

status

Logic:

- Delete the leave request where both **employee_id** and **status** match.
- Display all leave requests sorted by **status** (ascending) and **start date** (descending).

Output:

- Leave request deleted successfully.
- Display all leave requests sorted by **status** (ascending) and **start date** (descending).

4. View All Leave Requests

Input:

4

Logic:

- Display all leave requests sorted by **status (ascending)** and **start date (descending)**.

Output Format (All Operations)

php-template

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```
ID: <employee_id>, Name: <employee_name>, Start Date: <start_date>, End Date: <end_date>, Status:
```

Sorting Rule:

All leave request lists should be sorted by **employee_name** in **reverse alphabetical order**.

5. Invalid Option

Input: Any option like 5, 6, 7, etc.

Output:

Invalid option.