

EMPLOYEE MANAGEMENT DATABASE

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DESCRIPTION

Introduction

The Employee Leave Management Database is designed to **store and track employee details, leave applications, and leave balances** within an organization. It helps HR and management efficiently manage leave requests, monitor employee attendance, and generate monthly/annual leave summaries.

Also analyses an online dataset for better understanding

Objectives

- Maintain **employee records** (personal, departmental, and joining details).
- Record **leave applications** (type, date, and duration).
- Calculate **total leaves taken** and **remaining balances**.
- Provide **monthly and departmental summaries** for HR decision-making.
- Ensure **data consistency and accuracy** using relational constraints.

Key Features

- Tracks leave usage **by employee, month, or department.**
- Monitors **leave balances automatically.**
- Generates **summary reports** for HR.
- Helps identify **leave patterns and trends.**

DESCRIPTION ABOUT THE DATASET ANALYSIS

This dataset contains detailed employee information for **689 staff members** across multiple departments and countries. It includes **personal details (name, gender, start date, country, center)**, **job-related data (department, tenure, job rate, salaries)**, and **workplace metrics (sick leaves, unpaid leaves, overtime hours)**.

It is well-suited for analyzing **workforce demographics, salary structures, departmental distributions, employee tenure, and leave/overtime patterns**.

Key Features

Workforce Demographics

- **Gender split:**
 Male: ~65%
 Female: ~35%
- Workforce is male-dominated, but there's still significant female representation.
- **Countries represented:**
 Egypt (55%) has the largest share of employees.
 Followed by **UAE (23%), Saudi Arabia (13%), Syria (8%), Lebanon (2%).**

Departments

- **Top departments** (by employee count):
 - **Manufacturing** – 140 employees
 - **Quality Control** – 89
 - **Account Management** – 84
 - **Quality Assurance** – 67
 - **Facilities/Engineering** – 58
- ☞ Manufacturing is the largest workforce segment.

Leaves & Overtime

- **Sick leaves (avg):** 1.6 per employee/year.
- **Unpaid leaves (avg):** 0.8 per employee/year.
- **Overtime:** Average **~14 hours per employee/year**, but extreme cases reach **198 hours** → indicates workload imbalance in some roles.

⚡ Key Highlights

- **Manufacturing & Quality** functions are core, employing ~30%+ of the workforce.
- **Egypt dominates** as the main talent hub, especially in the "Main" and "West" centers.
- **Salaries are structured** into clear bands (703–3450/month).
- **Workforce is young in tenure**, suggesting company growth or attrition.
- **Overtime disparity** (avg low, but max very high) → some employees may be overburdened.