**Employee Management System**

1. **Overview**
   1. **What:**

* Employee Management System is an application that manages employee data within an organization, including details about employees, departments (e.g., Operations, IT, Accounting, Finance, Admin, HR), attendance, and payroll.
* It provides features such as viewing employee details, viewing and handling attendance details, viewing and handling leave details (e.g., apply leaves, assign leave application to the respective manager, approve leaves), on-boarding (adding new employees), off-boarding (removing resigned employees), updating personal details (e.g., contact number, address, blood group), and updating job-specific details (e.g., employee ID, role, salary, department, tenure, skillset, KPIs handled, performance scores).
* The application uses MySQL as the DBMS.
* This is a web-based application that runs on a browser and is accessible within the Local Area Network (LAN) of the organization.
  1. **Why:**
* This application is useful for any organization (e.g., IT & ITES companies, banks, insurance companies, restaurants, warehouses) with employees driving the business.
* It can be used to sort and filter employees based on performance scores and provide yearly salary hikes and promotions based on the budget.
  1. **How:**
* Backend: MySQL, SQL and Python
* Frontend: Streamlit

1. **Database Structure**

**EMS**

**Employee**

Emp\_ID (Primary\_Key)

Emp\_Name

Password

Dept\_ID

Role\_ID

Contact\_No

Email

Address

Date\_of\_Birth

Gender

Emergency\_Contact

Joining\_Date

Manager\_ID

**Department**

Dept\_ID (Primary\_Key)

Dept\_Name

Manager\_ID

**Roles**

Role\_ID (Primary\_Key)

Role\_Name

Role\_Desc

**Attendance**

Att\_Date

Emp\_ID

Attendance\_Status

**Leaves**

Leave\_Date

Emp\_ID

Approver\_ID

Approver\_Role

Approval\_Status

**Payroll**

Emp\_ID

Month\_Year

Salary

Deductions

**Performance**

Financial\_Year

Emp\_ID

Number\_Of\_Projects

Score

**Projects**

Project\_ID (Primary\_Key)

Project\_Name

Start\_Date

End\_Date

Dept\_ID

Manager\_ID

**Employee\_Project**

Emp\_ID

Project\_ID

Role\_in\_Project

Hours\_Spent

1. **Features and Roles**

**Employee (common to all):**

Mark Attendance

View Attendance Status

Mark Leave

View Individual Leaves

View Performance Details

View Projects

**Human Resource Management:**

View Employee

Add Employee

Delete Employee

Update Employee Details

Generate Monthly Payroll

Generate & Update Performance Data

**Department Head:**

Update Role

Change Department

Update Manager

Add Roles

**Manager:**

Leave Approval

Update Employee Project

**Project Manager:**

Add Projects

Update Projects

1. **Screenshot of MySQL workbench, all the SQL commands and tables.**
   1. Employee table:

**A screenshot of a computer

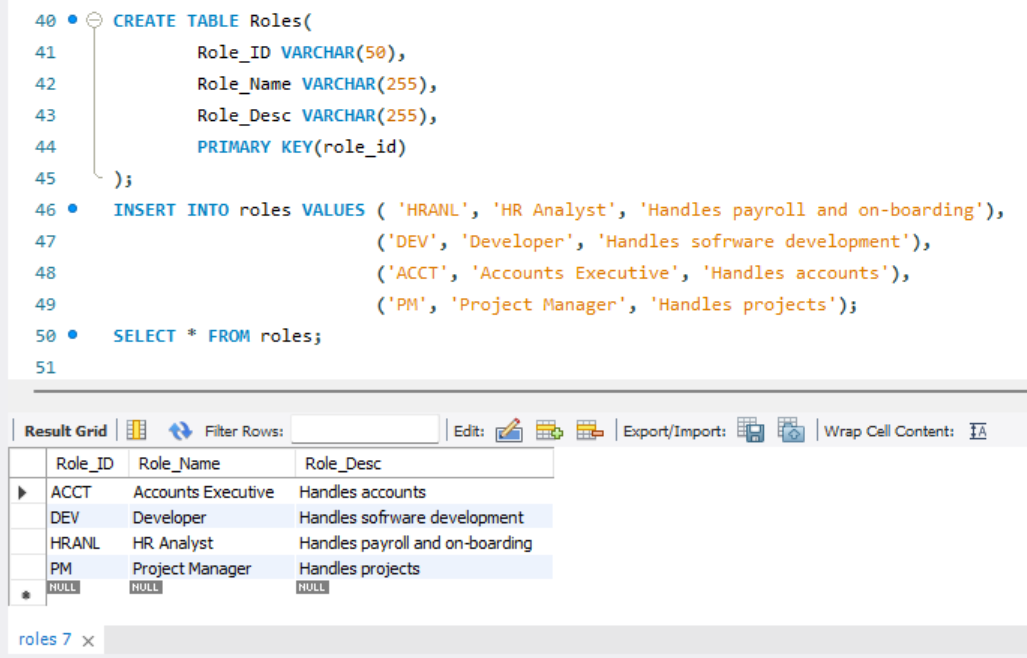
Description automatically generated**

* 1. Department table:

**A screenshot of a computer

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* 1. Roles table:

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* 1. Attendance table:

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* 1. Leaves table:

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* 1. Payroll table:

**A screenshot of a computer

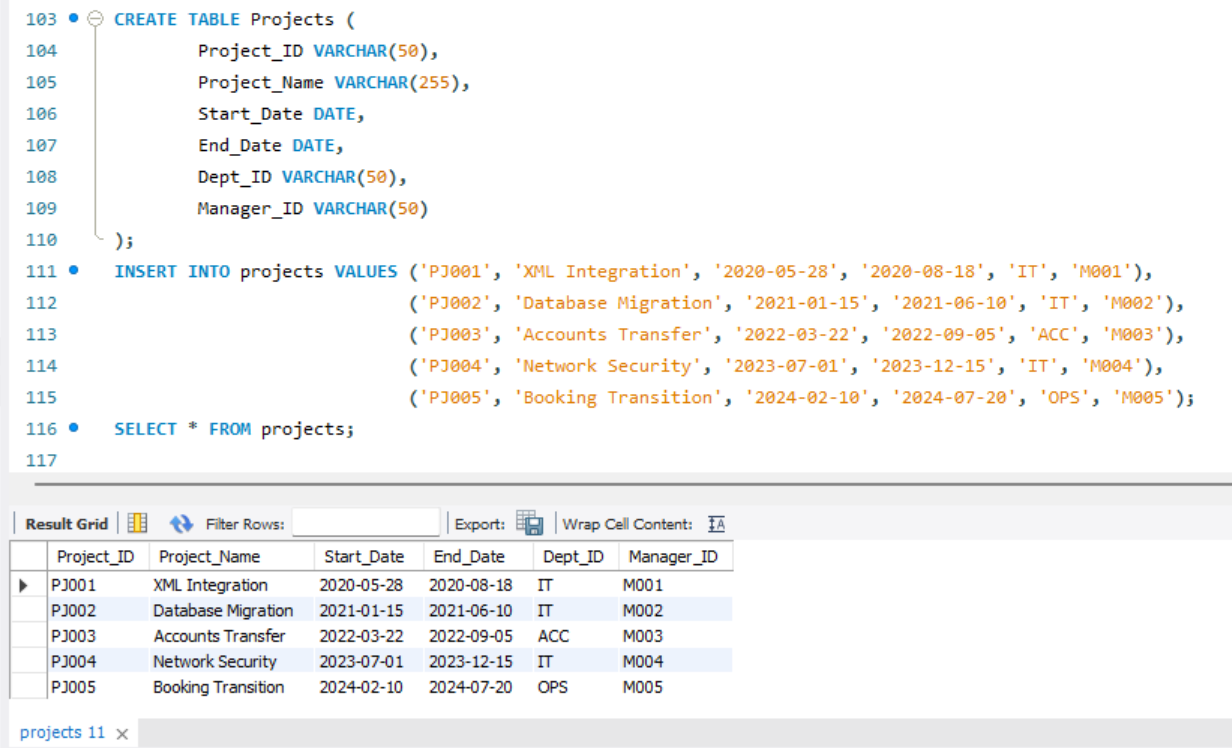
Description automatically generated**

* 1. Performance table:

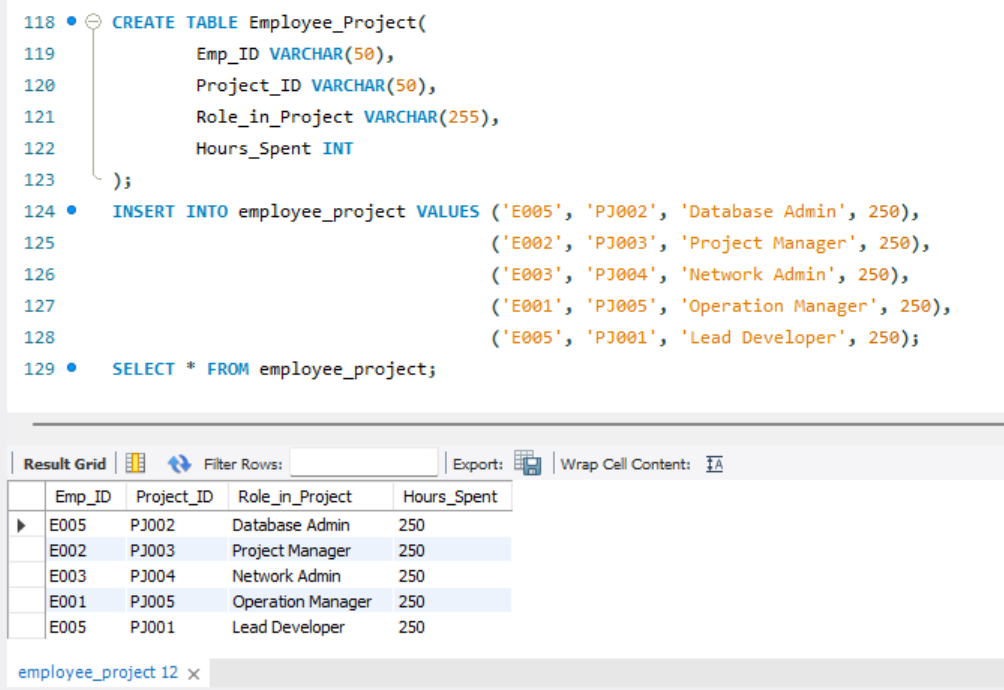
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* 1. Projects table:

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* 1. Employee\_Project table:

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1. **Main streamlit python code**
2. **Screenshot of streamlit application including all the features**