Employee Management System ER Diagram

The **employee management system ER diagram** shows the relationships of the system's entities that build its **database design**. ER diagram describes the logical structure of the system's database or data storage. It is done by identifying the employee management process entities, their properties, and the interactions between them.

The **employee management system database design** is sketched out using **ER (entity-relationship) diagram**. This sketch becomes the actual basis of the system's data storage that will serve as data destination and source.

Employee Management System Features:

- **Employee Management**: This feature plays a big role in the system because this gathers important information about the employees. This information was used to track their job performance and other important matters regarding the system. The system will also check the attendance of the employees.
- **Manage Salaries and Bonuses**: The salary and bonuses management will be done by the admin to track the wages and expenses of the establishment. This process will help them in updating the status of the employees in terms of giving the salaries and other matters regarding their employees.
- **Manage Job Departments and Status**: Its feature will manage and monitor the job status of every employee and then will calculate their salaries for the range of their labor or per month. This will also record all the expenses of the establishment and then save them to the database for future inventory purposes.
- **Manage and Monitor Transaction Records**: This is the process where the admin should keep track of every transaction made by their employees with the product or services offered to their customers. The system will also monitor their attendance and Leave to determine the range of their work and calculate their exact salary.

What is an ER Diagram?

In DBMS, the **ER Diagram of employee management system** is also known as the system's **database design**. It is the graphical depiction of relationships between all the entities involved in the system. Its major components are Entities, Attributes, and Relationships.

To build and troubleshoot relational databases, the **employee management system ER Diagram** is used. It works best with DFD (Data Flow Diagram), which is responsible for data movement. Developing the **database design for employee management system** would be much easier with the help of ER diagram.

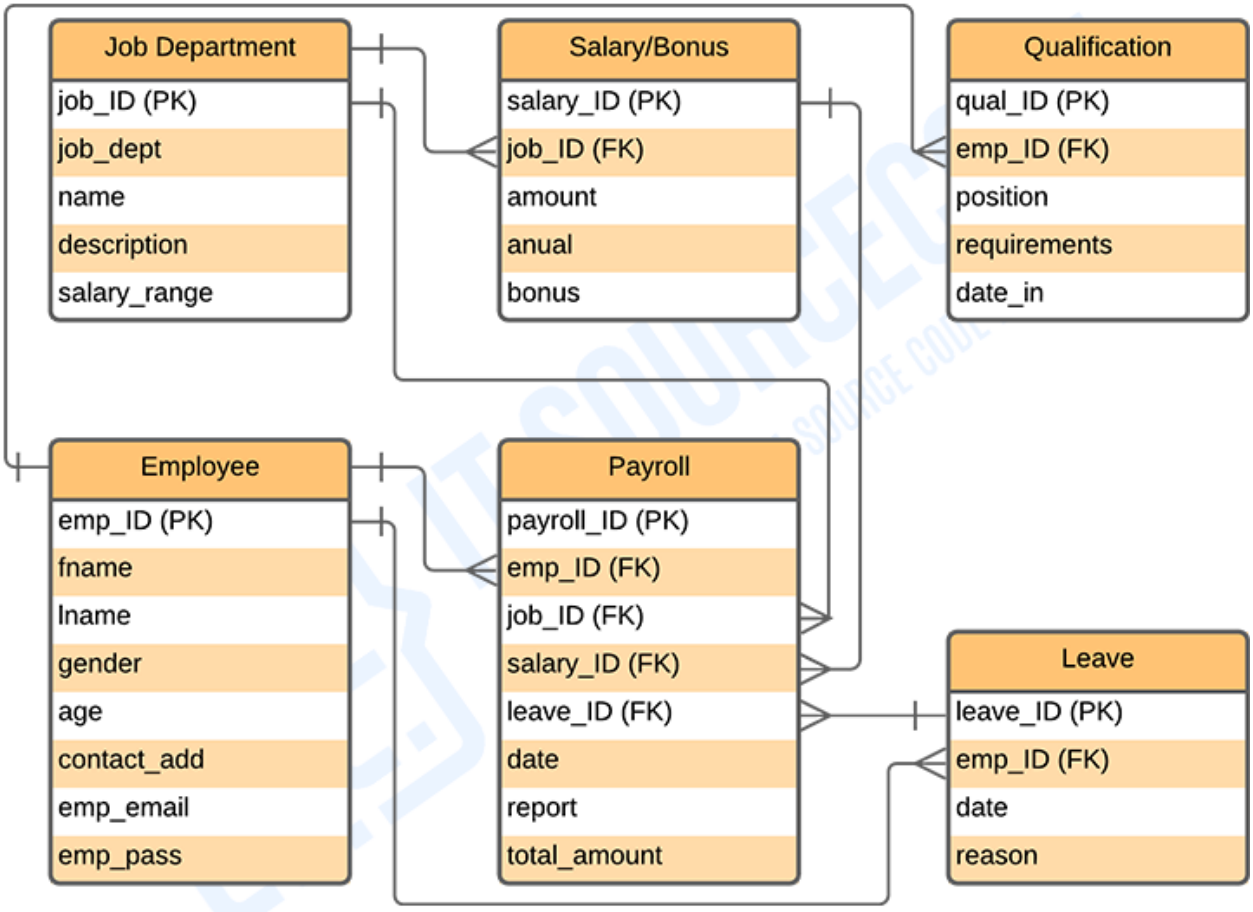
Importance of ER Diagram

The **importance of ER Diagram for Employee Management System** is that it helps in modeling its data storage or database. It is the basis of the project's database foundation for construction. This **entity-relationship diagram (ERD)** also aids in defining the data types to be stored such as their attributes and characteristics.

In addition to that, the ER Diagram also describes how an entity interacts with other entities. The employee management System project is presented with ER Diagrams to model its database design.

ER Diagram for Employee Management System

ER Diagram of Employee Management System shows the system entity relationships in each entity and their supposed functions in each relationship.



ER Diagram For Employee Management System (Database Design)

This diagram presents the Entities' Relational Model for Employee Management System. It is used to enlighten you on how the back end of the database of the project works. The tables

are made to meet the required specification of the system and provide much more specific details of each entity within the system.

Based on the image above, the **entity-relationship (ER) diagram for employee management system tables** presents the database design of the project. The tables are made to meet the required specification of the system and provide much more specific details of each entity within the system.

Employee Management System Database Design

The **employee management system ER Diagram** was made based on managing employees' information requirements. Its database design can store and secure employees' information. Admin can have access to the employees' status and information to see their performances and salaries. They can handle the data needed in managing employees and their job departments.

The features included in the system ER diagram were the security and monitoring of the employees' jobs and the range of service records, job information, and status. These features were also listed and recorded in reports that served as the history of transactions done in the system.

Employee Management System ER Diagram Tables

These tables below provide the complete database design details such as **Field Name**, **student management system project**, **data types**, and **character lengths** for Employee System.

Table Name: Employee

Field	Description	Type	Length
emp_ID (PK)	Employee ID	Int	11
fname	Employee First Name	Varchar	255
lname	Employee Last Name	Varchar	255
gender	Employee Gender	Int	11
age	Employee Age	Int	11
contact_add	Contact Address	Int	11
emp_email	Employee Email	Varchar	255
emp_pass	Employee Password	Varchar	255

Table Name: Users

Field	Description	Type	Length
admin_ID (PK)	Admin ID	Int	11
fname	Instructor First Name	Varchar	255
lname	Instructor Last Name	Varchar	255
gender	Instructor Gender	Int	11
age	Instructor Age	Int	11
contact_add	Contact Address	Int	11

admin_email	Admin Email	Varchar	255
admin_pass	Admin Password	Varchar	255

Table Name: Job Department

Field	Description	Type	Length
job_ID (PK)	Job ID	Int	11
job_dept	Job Department	Varchar	30
name	Job Name	Varchar	30
description	Job Description	Varchar	30
salary_range	Salary Range	Varchar	30

Table Name: Salary or Bonus

Field	Description	Type	Length
salary_ID (PK)	Salary ID	Int	11
job_ID (FK)	Job ID	Int	11
amount	Amount	Int	11
annual	Annual Expense	Date	
bonus	Bonus	Date	

Table Name: Qualification

Field	Description	Type	Length
qual_ID (PK)	Qualification ID	Int	11
emp_ID (FK)	Employee ID	Int	11
position	Position of Application	Varchar	30
r**equirements**	Requirements	Varchar	30
date_in	Date In	Date	

Table Name: Payroll

Field	Description	Type	Length
payroll_ID (PK)	Payroll ID	Int	11
emp_ID (FK)	Employee ID	Int	11
job_ID (FK)	Job ID	Int	11
salary_ID (FK)	Salary ID	Int	11
leave_ID (FK)	Leave ID	Int	11
date	Date of Payroll Report	Date	
report	Report	Text	
total amount	Total Amount	Int	11

The tables given will be the basis for developers on how would they do the **employee management system database design**. It has the complete description of the database and they will put this into the program or data storage the same as the names given to each of the tables. They will create a database with the attributes given as well as the value of each attribute.