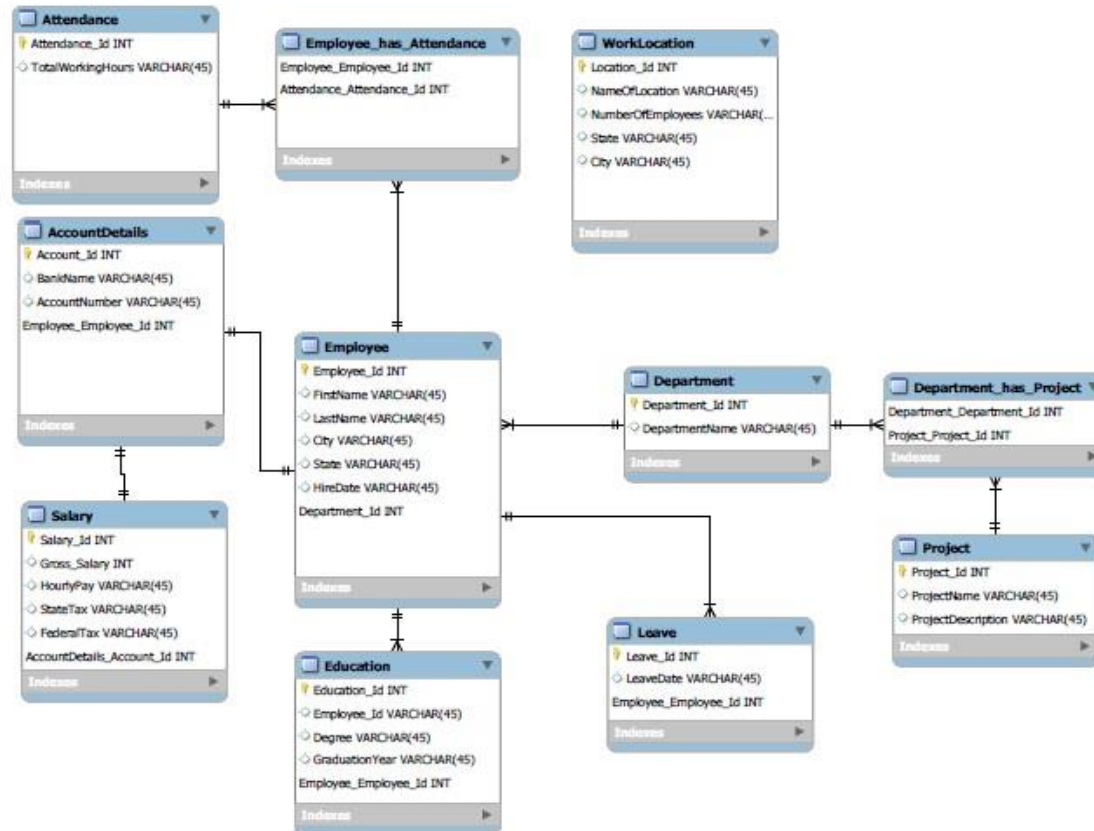


# SYSTEM DESIGN

## 1. EER DIAGRAM



## 2. TABLE STRUCTURE

### Employee

- Employee\_Id (INT, PRIMARY KEY)
- First\_Name (VARCHAR)
- Last\_Name (VARCHAR)
- Hire\_Date (DATE)
- City (VARCHAR)
- State (VARCHAR)

### Department

- Department\_Id (INT, PRIMARY KEY)
- Department\_Name (VARCHAR)

#### Salary

- Salary\_Id (INT, PRIMARY KEY)
- Gross\_Salary (INT)
- Hourly\_Pay (INT)
- State\_Tax (INT)
- Federal\_Tax (INT)
- Account\_Id (INT, FOREIGN KEY)

#### DepartmentProject

- Department\_Id (INT, PRIMARY KEY, FOREIGN KEY)
- Project\_Id (INT, PRIMARY KEY, FOREIGN KEY)

#### Project

- Project\_Id (INT, PRIMARY KEY)
- Project\_Name (VARCHAR)
- Project\_Description (VARCHAR)

#### AccountDetails

- Account\_Id (INT, PRIMARY KEY)
- Bank\_Name (VARCHAR)
- Account\_Number (VARCHAR)
- Employee\_Id (INT, FOREIGN KEY)

#### Education

- Education\_Id (INT, PRIMARY KEY)
- Employee\_Id (INT, FOREIGN KEY)
- Degree (VARCHAR)
- Graduation\_Year (INT)

#### Restdays

- Leave\_Id (INT, PRIMARY KEY)
- Employee\_Id (INT, FOREIGN KEY)
- Leave\_date (DATE)

#### EmployeeAttendance

- Employee\_Id (INT, PRIMARY KEY, FOREIGN KEYS)
- Attendance\_Id (INT, PRIMARY KEY)

## Attendance

- Attendance\_Id (INT, PRIMARY KEY)
- Hours\_Worked (INT),


## WorkLocation

- Location\_Id (INT, PRIMARY KEY)
- Location (VARCHAR)
- Number\_Of\_Employees (INT)
- City (VARCHAR)
- State (VARCHAR)

## 3. SQL SCHEMA


```
CREATE TABLE Employee(  
    Employee_Id int(6) primary key,  
    First_Name VARCHAR(25),  
    Last_Name VARCHAR(25),  
    Hire_Date DATE,  
    City VARCHAR(25),  
    State VARCHAR(25)  
);
```

```
CREATE TABLE Education(  
    Education_Id int primary key,  
    Employee_Id int,  
    Degree VARCHAR(30),  
    Graduation_Year int(4),  
    FOREIGN KEY (Employee_Id) REFERENCES Employee(Employee_Id)  
);
```


- 

```
CREATE TABLE Work_Location(  
    Location_Id INT primary key,  
    Location VARCHAR(25),  
    Number_Of_Employees int,  
    City VARCHAR(25),  
    State VARCHAR(25)  
);
```

```
CREATE TABLE Employee_Attendance(  
    Employee_Id int,  
    Attendance_Id int,  
    PRIMARY KEY (Employee_Id,Attendance_Id),  
    FOREIGN KEY (Employee_Id) REFERENCES Employee(Employee_Id),  
    FOREIGN KEY (Attendance_Id) REFERENCES Attendance(Attendance_Id)  
);
```

- 

```
CREATE TABLE Attendance(  
    Attendance_Id int primary key,  
    Hours_Worked int  
);
```

- 

```
CREATE TABLE Restdays(  
    Leave_Id int primary key,  
    Employee_Id int,  
    Leave_date DATE,  
    FOREIGN KEY (Employee_Id) REFERENCES Employee(Employee_Id)  
);
```