

HR Management system

Tables Schema



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To design the database schema for your HR management application, we need to define tables, their attributes, and their relationships. Here’s a comprehensive outline for each module:

**1. Employee Management**

**Tables:**

* Employees
* Departments
* JobTitles
* EmployeeContactDetails
* EmployeeAddresses

**Attributes:**

* **Employees**: EmployeeID, FirstName, LastName, DepartmentID, JobTitleID, HireDate, DateOfBirth, Gender, Email, Nationality, MaritalStatus,Employment status, Salary, Photo
* **Departments**: DepartmentID, DepartmentName
* **JobTitles**: JobTitleID, JobTitleName
* **EmployeeContactDetails**: ContactDetailID, EmployeeID, EmergencyContactName, EmergencyContactPhone
* **EmployeeAddresses**: AddressID, EmployeeID, Street, City, State, PostalCode, Country

**Relationships:**

* Employees has a many-to-one relationship with Departments (via DepartmentID)
* Employees has a many-to-one relationship with JobTitles (via JobTitleID)
* Employees has a one-to-many relationship with EmployeeContactDetails (via ContactDetailID)
* Employees has a one-to-many relationship with EmployeeAddresses (via AddressID)

**2. Payroll Management**

**Tables:**

* Payrolls
* Salaries
* Deductions
* Bonuses
* TrackHistory

**Attributes:**

* **Payrolls**: PayrollID, EmployeeID, SalaryID, DeductionID, BonusID, PayDate, TotalPay
* **Salaries**: SalaryID, EmployeeID, BaseSalary, PayFrequency
* **Deductions**: DeductionID, EmployeeID, DeductionAmount, DeductionReason,Deduction Date
* **Bonuses**: BonusID, EmployeeID, BonusAmount, BonusReason,Bonus Date
* **TrackHistory**: HistoryID, EmployeeID, ChangeType, ChangeAmount, ChangeReason, EffectiveDate

**Relationships:**

* **Payrolls** has a many-to-one relationship with **Employees** (via EmployeeID)
* **Payrolls** has a many-to-one relationship with **Salaries** (via SalaryID)
* **Payrolls** has a many-to-one relationship with **Deductions** (via DeductionID)
* **Payrolls** has a many-to-one relationship with **Bonuses** (via BonusID)
* **TrackHistory** has a many-to-one relationship with **Employees** (via EmployeeID)

**3. Recruitment Management**

**Tables:**

* JobOpenings
* Applications
* Interviews
* Interviewers

**Attributes:**

* **JobOpenings**: JobOpeningID, JobTitleID, DepartmentID, OpenDate, CloseDate, JobDescription
* **Applications**: ApplicationID, JobOpeningID, CandidateName, CandidateEmail, Resume, ApplicationDate, Status
* **Interviews**: InterviewID, ApplicationID, InterviewerID, InterviewDate, InterviewFeedback, InterviewOutcome
* **Interviewers**: InterviewerID, EmployeeID

**Relationships:**

* Applications has a many-to-one relationship with JobOpenings (via JobOpeningID)
* Interviews has a many-to-one relationship with Applications (via ApplicationID)
* Interviews has a many-to-one relationship with Interviewers (via InterviewerID)
* Interviewers has a many-to-one relationship with Employees (via EmployeeID)

**4. Attendance Management**

**Tables:**

* AttendanceRecords
* LeaveRequests

**Attributes:**

* **AttendanceRecords**: AttendanceID, EmployeeID, Date, CheckInTime, CheckOutTime, Status
* **LeaveRequests**: LeaveRequestID, EmployeeID, LeaveType, StartDate, EndDate, Reason, Status

**Relationships:**

* AttendanceRecords has a many-to-one relationship with Employees (via EmployeeID)
* LeaveRequests has a many-to-one relationship with Employees (via EmployeeID)

**5. Reporting Management**

**Tables:**

* Reports
* ReportCategories

**Attributes:**

* **Reports**: ReportID, ReportCategoryID, ReportName, GeneratedDate, GeneratedBy, Data
* **ReportCategories**: ReportCategoryID, CategoryName

**Relationships:**

* Reports has a many-to-one relationship with ReportCategories (via ReportCategoryID)

**6. Performance Management**

**Tables:**

* PerformanceReviews
* ReviewCriteria
* ReviewScores

**Attributes:**

* **PerformanceReviews**: ReviewID, EmployeeID, ReviewerID, ReviewDate, OverallScore, Comments
* **ReviewCriteria**: CriteriaID, CriteriaName, Description
* **ReviewScores**: ScoreID, ReviewID, CriteriaID, Score

**Relationships:**

* PerformanceReviews has a many-to-one relationship with Employees (via EmployeeID)
* PerformanceReviews has a many-to-one relationship with Employees (via ReviewerID)
* ReviewScores has a many-to-one relationship with PerformanceReviews (via ReviewID)
* ReviewScores has a many-to-one relationship with ReviewCriteria (via CriteriaID)

**7. Benefits Administration**

**Tables:**

* Benefits
* EmployeeBenefits

**Attributes:**

* **Benefits**: BenefitID, BenefitName, Description, EligibilityCriteria
* **EmployeeBenefits**: EmployeeBenefitID, EmployeeID, BenefitID, EnrollmentDate, Status

**Relationships:**

* EmployeeBenefits has a many-to-one relationship with Employees (via EmployeeID)
* EmployeeBenefits has a many-to-one relationship with Benefits (via BenefitID)

**Summary of Tables and Relationships**

**Total Tables:** 22

* Employees
* Departments
* JobTitles
* EmployeeContactDetails
* EmployeeAddresses
* Payrolls
* Salaries
* Deductions
* Bonuses
* JobOpenings
* Applications
* Interviews
* Interviewers
* AttendanceRecords
* LeaveRequests
* Reports
* ReportCategories
* PerformanceReviews
* ReviewCriteria
* ReviewScores
* Benefits
* EmployeeBenefits

This schema ensures each module has its own set of tables with appropriate relationships, facilitating efficient data management and retrieval.­­­

