

## **Schema to be used for Milestone 2**

**Department** (name: varchar (50), building\_location: varchar (50))

**Employee** (employee\_ID: int, first\_name: varchar (50), last\_name: varchar (50), email: varchar (50), password: varchar (50), address: varchar (50), gender char (1), official\_day\_off: varchar (50), years\_of\_experience: int, national\_ID: char (16), employment\_status: varchar (50), type\_of\_contract: varchar (50), emergency\_contact\_name: varchar (50), emergency\_contact\_phone: char (11), annual\_balance: int, accidental\_balance: int, salary decimal(10,2), hire\_date: date, last\_working\_date: date, dept\_name varchar (50) (FK))

Employee.dept\_name references Department.name

**Employee\_Phone** (emp\_ID int (FK), phone\_num: char (11))

Employee\_Phone.emp\_ID references Employee. employee\_ID

**Role** (role\_name: varchar (50), title: varchar (50), description: varchar (50), rank: int, base\_salary: decimal (10,2), percentage\_YOE: decimal (4,2), percentage\_overtime: decimal (4,2), annual\_balance: int, accidental\_balance: int)

**Employee\_Role** (emp\_ID int (FK), role\_name varchar(50) (FK))

Employee\_Role.emp\_ID references Employee. employee\_ID

Employee\_Role.role\_name references Role.role\_name

**Role\_existsIn\_Department** (department\_name (FK), Role\_name (FK))

Role\_existsIn\_Department.department\_name references Department.name  
Role\_existsIn\_Department.Role\_name references Role.role\_name

**Leave** (request\_ID: int, date\_of\_request: date, start\_date: date, end\_date: date, num\_days, final\_approval\_status: varchar (50))

Where num\_days = end\_date - start\_date

**Annual\_Leave** (request\_ID int (FK), emp\_ID int (FK), replacement\_emp int (FK))

Annual\_Leave. emp\_ID references Employee. employee\_ID

Annual\_Leave.request\_ID references Leave.request\_ID

Annual\_Leave. replacement\_emp references employee. employee\_ID

**Accidental\_Leave** (request\_ID int (FK), emp\_ID int (FK))

Accidental\_Leave. emp\_ID references Employee. employee\_ID  
Accidental\_Leave.request\_ID references Leave.request\_ID

**Medical\_Leave** (request\_ID int (FK), insurance\_status: BIT, disability\_details: varchar (50), type: varchar (50), Emp\_ID int (FK))

Medical\_Leave. emp\_ID references Employee. employee\_ID

Medical\_Leave.request\_ID references Leave.request\_ID

**Unpaid\_Leave** (request\_ID int (FK), Emp\_ID int (FK))

Unpaid\_Leave.request\_ID references Leave.request\_ID

Unpaid\_Leave. emp\_ID references Employee. employee\_ID

**Compensation\_Leave** (request\_ID int (FK), reason: varchar (50),

date\_of\_original\_workday: date, emp\_ID int (FK), replacement\_emp int

(FK))

Compensation\_Leave.request\_ID references Leave.request\_ID

Compensation\_Leave. Emp\_id references Employee. employee\_ID

Compensation\_Leave. replacement\_emp references Employee. employee\_ID

**Document** (document\_ID: int, type: varchar (50), description: varchar (50), file\_name: varchar (50), creation\_date: date, expiry\_date: date, status: varchar (50), emp\_ID int (FK), medical\_ID int (FK), unpaid\_ID int (FK))

Document.emp\_ID references Employee. employee\_ID

Document.medical\_ID references medical\_leave.request\_ID

Document.unpaid\_ID references unpaid\_leave. request\_ID

**Payroll** (ID: int, payment\_date: date, final\_salary\_amount: decimal (10,1), from\_date: date, to\_date: date, comments: varchar (150), bonus\_amount: decimal (10,2), deductions\_amount: decimal (10,2), emp\_ID int (FK))

Payroll.emp\_ID references Employee. employee\_ID

**Attendance** (attendance\_ID: int, date: date, check\_in\_time: time, check\_out\_time: time, total\_duration, status: varchar (50), emp\_ID int (FK))

Where total\_duration = check\_out\_time – check\_in\_time

Attendance.emp\_ID references Employee. employee\_ID

**Deduction** (deduction\_ID: int, emp\_ID int (FK), date: date, amount: decimal (10,2), type: varchar (50), status: varchar (50), unpaid\_ID int (FK), attendance\_ID int (FK))

Deduction.emp\_ID references Employee. employee\_ID

Deduction.unpaid\_ID references Unpaid\_leave.request\_ID

Deduction.attendance\_ID references attendance.attendance\_id

**Performance** (performance\_ID: int, rating: int, comments: varchar (50), semester: char (3), emp\_ID (FK))

Performance.emp\_ID references Employee. employee\_ID

**Employee\_Replace\_Employee** (Emp1\_ID int (FK), Emp2\_ID int (FK), from\_date: date, to\_date: date)

Employee\_Replace\_Employee. Emp1\_ID references Employee. Employee\_ID  
Employee\_Replace\_Employee. Emp2\_ID references Employee. Employee\_ID

**Employee\_Approve\_Leave** (Emp1\_ID int (FK), Leave\_ID int (FK), status: varchar (50))

Employee\_Approve\_Employee. Emp1\_ID references Employee. Employee\_ID  
Employee\_Approve\_Employee. Leave\_ID references Leave.request\_ID