# Data Model

## 1 ER Diagram

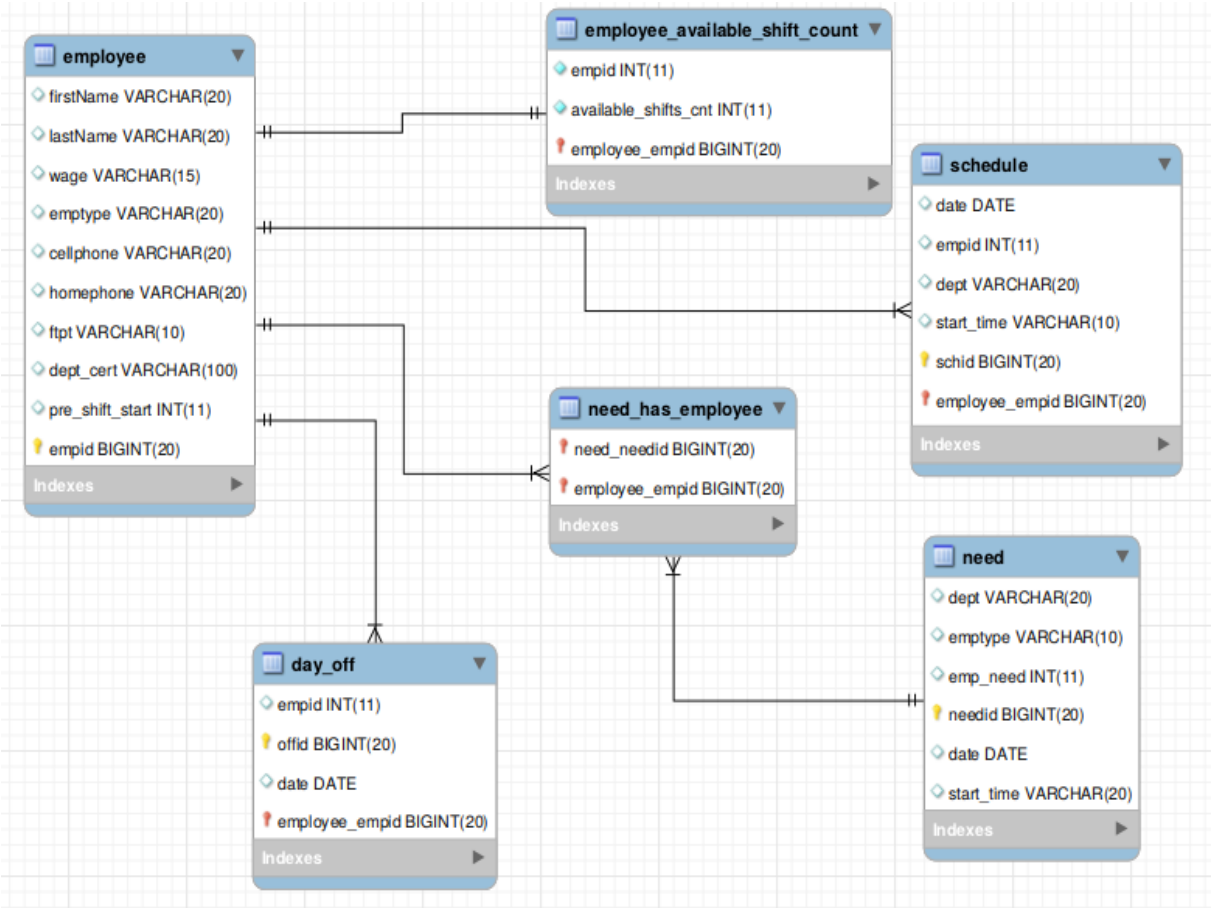


Figure 1: ER Diagram

## 2 Tables Description

**DESCRIBE employee;**

Table 1: **EMPLOYEE**

| | Field | Type | Null | Key | Default | Extra |
|---|---|---|---|---|---|---|
| 0 | firstName | varchar(20) | YES | | None | |
| 1 | lastName | varchar(20) | YES | | None | |
| 2 | wage | varchar(15) | YES | | None | |
| 3 | emptype | varchar(20) | YES | | None | |
| 4 | cellphone | varchar(20) | YES | | None | |
| 5 | homephone | varchar(20) | YES | | None | |
| 6 | ftpt | varchar(10) | YES | | None | |
| 7 | dept_cert | varchar(100) | YES | | None | |
| 8 | pre_shift_start | int(11) | YES | | None | |
| 9 | empid | bigint(20) unsigned | NO | PRI | None | auto_increment |

**DESCRIBE need;**

Table 2: **NEED**

| | Field | Type | Null | Key | Default | Extra |
|---|---|---|---|---|---|---|
| 0 | dept | varchar(20) | YES | | None | |
| 1 | emptype | varchar(10) | YES | | None | |
| 2 | emp_need | int(11) | YES | | None | |
| 3 | needid | bigint(20) unsigned | NO | PRI | None | auto_increment |
| 4 | date | date | YES | | None | |
| 5 | start_time | varchar(20) | YES | | None | |

**DESCRIBE schedule;**

Table 3: **SCHEDULE**

| | Field | Type | Null | Key | Default | Extra |
|---|---|---|---|---|---|---|
| 0 | date | date | YES | | None | |
| 1 | empid | int(11) | YES | | None | |
| 2 | dept | varchar(20) | YES | | None | |
| 3 | start_time | varchar(10) | YES | | None | |
| 4 | schid | bigint(20) unsigned | NO | PRI | None | auto_increment |

**DESCRIBE day_off;**

Table 4: **DAY OFF**

| | Field | Type | Null | Key | Default | Extra |
|---|---|---|---|---|---|---|
| 0 | empid | int(11) | YES | | None | |
| 1 | offid | bigint(20) unsigned | NO | PRI | None | auto_increment |
| 2 | date | date | YES | | None | |

**DESCRIBE employee_available_shift_count;**

Table 5: **EMPLOYEE AVAILABLE SHIFT**

| | Field | Type | Null | Key | Default | Extra |
|---|---|---|---|---|---|---|
| 0 | empid | int(11) | NO | | None | |
| 1 | available_shifts_count | int(11) | NO | | None | |