**Blacklist**

PRIMARY KEY (PSSN , Date\_Blacklisted)

FOREIGN KEY (PSSN) REFERENCES Passenger

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| PSSN | int | Not Allow Null | ON UPDATE CASCADE |
| Date\_Blacklisted | date | Not Allow Null |  |
| Reason | varchar(20) | Not Allow Null |  |

**Complaints**

PRIMARY KEY (C\_Code),

FOREIGN KEY (P\_SSN) REFERENCES Passenger

ON DELETE SET NULL

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| C\_Code | varchar(20) | Not Allow Null |  |
| Descrip | varchar(200) | Not Allow Null |  |
| P\_SSN | int | Allow Null |  |

**CovidVaccination**

PRIMARY KEY (SerialNo)

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| SerialNo | int | Not Allow Null |  |
| Vacc\_Type | varchar(20) | Not Allow Null |  |
| Organisation | varchar(30) | Not Allow Null |  |

**Department**

PRIMARY KEY (DepartmentNumber)

FOREIGN KEY (Mgr\_SSN) REFERENCES Employee

ON DELETE SET NULL

ON UPDATE CASCADE

Unique (DepartmentName)

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| DepartmentNumber | int | Not Allow Null |  |
| DepartmentName | varchar(50) | Not Allow Null |  |
| Mgr\_SSN | int | Allow Null |  |

**Drive**

PRIMARY KEY (ESSN, TrainNum)

FOREIGN KEY (ESSN) REFERENCES Employee

ON DELETE CASCADE

ON UPDATE CASCADE

FOREIGN KEY (TrainNum) REFERENCES Train

ON DELETE CASCADE

ON UPDATE CASCADE

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| ESSN | int | Not Allow Null |  |
| TrainNum | int | Not Allow Null |  |

**E\_PhoneNumber**

PRIMARY KEY (ESSN,PNumber),

FOREIGN KEY (ESSN) REFERENCES Employee

ON DELETE CASCADE

ON UPDATE CASCADE,

unique (PNumber)

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| ESSN | int | Not Allow Null |  |
| PNumber | varchar(11) | Not Allow Null |  |

**Employee**

unique (CV\_SerialNo)

unique (Emp\_Email)

PRIMARY KEY (SSN)

FOREIGN KEY (Super\_SSN) REFERENCES Employee

FOREIGN KEY (Emp\_Email) REFERENCES User\_Login

ON DELETE CASCADE

ON UPDATE CASCADE

FOREIGN KEY (CV\_SerialNo) REFERENCES CovidVaccination

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| SSN | int | Not Allow Null |  |
| Fname | varchar(20) | Not Allow Null |  |
| Minit | char(1) | Not Allow Null |  |
| Lname | varchar(20) | Not Allow Null |  |
| Gender | char(1) | Not Allow Null | CHECK(Gender='M' OR Gender='F' ) |
| DOB | date | Not Allow Null |  |
| Salary | int | Not Allow Null | CHECK(Salary>=0 ) |
| Rate | int | Allow Null | CHECK(Rate>=0 AND Rate<=10 |
| House\_Num | int | Not Allow Null |  |
| Street | varchar(30) | Not Allow Null |  |
| City | varchar(20) | Not Allow Null |  |
| Super\_SSN | int | Allow Null |  |
| Dno | int | Not Allow Null |  |
| CV\_SerialNo | int | Allow Null |  |
| Vacc\_Date | date | Allow Null |  |
| Emp\_Email | varchar(50) | Not Allow Null |  |

**Handle**

PRIMARY KEY (ESSN,Code)

FOREIGN KEY (ESSN) REFERENCES Employee

ON DELETE CASCADE

ON UPDATE CASCADE

FOREIGN KEY (Code) REFERENCES Complaints

ON DELETE CASCADE

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| Code | varchar(20) | Not Allow Null |  |
| ESSN | int | Not Allow Null |  |

**Pass\_PhoneNumber**

PRIMARY KEY (PSSN,P\_PhoneNumber)

FOREIGN KEY (PSSN) REFERENCES Passenger

ON DELETE CASCADE

ON UPDATE CASCADE

Unique (P\_PhoneNumber)

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| PSSN | int | Not Allow Null |  |
| P\_PhoneNumber | varchar(20) | Not Allow Null |  |

**Passenger**

PRIMARY KEY (Pass\_SSN),

FOREIGN KEY (Pass \_Email) REFERENCES User\_Login

ON DELETE CASCADE

ON UPDATE CASCADE

FOREIGN KEY (CV\_SerialNo) REFERENCES CovidVaccination

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| Pass\_SSN | int | Not Allow Null | Size = 11 numbers |
| Pass\_Fname | varchar(20) | Not Allow Null |  |
| Pass\_Minit | char(1) | Not Allow Null |  |
| Pass\_Lname | varchar(20) | Not Allow Null |  |
| Pass\_Gender | char(1) | Not Allow Null | CHECK(Gender='M' OR Gender='F' ) |
| Pass\_Email | varchar(50) | Allow Null |  |
| Pass\_CV\_SerialNo | Int | Not Allow Null |  |
| Pass\_Vacc\_Date | date | Not Allow Null |  |

**Station**

PRIMARY KEY (ID)

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| ID | int | Not Allow Null |  |
| St\_Location | varchar(30) | Not Allow Null |  |
| St\_Name | varchar(30) | Not Allow Null |  |
| No\_Of\_Terminals | int | Not Allow Null |  |

**Ticket**

PRIMARY KEY (TicketNo)

FOREIGN KEY (ESSN) REFERENCES Employee

ON DELETE SET NULL

ON UPDATE NO ACTION

FOREIGN KEY (PSSN) REFERENCES PASSENGER

ON DELETE CASCADE

FOREIGN KEY (TripCode) REFERENCES Trip

ON DELETE CASCADE

ON UPDATE CASCADE

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| TicketNo | int | Not Allow Null |  |
| Class | char(1) | Not Allow Null | CHECK(Class='V' OR Class='G' ) |
| Price | int | Not Allow Null |  |
| Ticket\_Date | date | Not Allow Null |  |
| ESSN | int | Allow Null |  |
| PSSN | int | Allow Null |  |
| TripCode | varchar(20) | Allow Null |  |

**Train**

PRIMARY KEY (PlateNumber)

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| PlateNumber | int | Not Allow Null |  |
| Maintenance | bit | Not Allow Null |  |
| Colour | varchar(10) | Allow Null |  |
| Capacity | int | Allow Null |  |

**Trip**

PRIMARY KEY (Trip\_Code)

FOREIGN KEY (Train\_PlateNumber) REFERENCES Train

ON UPDATE CASCADE,

ON DELETE SET NULL

FOREIGN KEY (Come\_Station) REFERENCES Station

FOREIGN KEY (Go\_Station) REFERENCES Station

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| Trip\_Code | varchar(20) | Not Allow Null |  |
| Arrival\_Time | time(7) | Not Allow Null |  |
| Departure\_Time | time(7) | Not Allow Null |  |
| Train\_PlateNumber | int | Allow Null |  |
| Come\_Station | int | Allow Null |  |
| Go\_Station | int | Allow Null |  |

**User\_Login**

PRIMARY KEY (Email)

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Allow Nulls | Constrains |
| Email | varchar(50) | Not Allow Null |  |
| Pass | varchar(50) | Not Allow Null |  |
| Authority | varchar(20) | Not Allow Null |  |
| UserName | varchar(30) | Not Allow Null |  |