## **Blacklist**

PRIMARY KEY (PSSN , Date\_Blacklisted)

FOREIGN KEY (PSSN) REFERENCES Passenger

<b>Column Name</b>	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	<b>Allow Nulls</b>	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

<b>Column Name</b>	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)

<b>Column Name</b>	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, TripCode)

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)	Not 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	