

## Relational Schema:

**Customer**( CustomerID: string, Email: string, Firstname: string, Lastname: string, Username: string, Password: string, Primary Key(CustomerID))

**Train**(TrainID: INT, Primary Key(TrainID))

**Station**(StationID: INT, StationName: string, City: string, State: string, Primary Key(StationID))

**Transit Line**(TransitLineName: string, OriginStation: INT, DestinationStation: INT, BaseFare: FLOAT, Primary Key(TransitLineName), Foreign Key OriginStation references Station, Foreign Key DestinationStation references Station);

**Stops**(TransitLineName: string, StationID: INT, ArrivalDateTime: DATETIME, DepartureDateTime: DATETIME, Primary Key(TransitLineName, StationID), Foreign Key StationID references Station, Foreign Key TransitLineName references TransitLine);

**Train Schedule**(ScheduleID: INT, TransitLineName: string, TravelTime: TIME, ArrivalDatetime: DATETIME, DepartureDatetime: DATETIME, TrainID: INT, Primary Key(ScheduleID), Foreign Key TrainID references Train, Foreign Key TransitLineName references TransitLine);

- merges applies & includes relationship

**Reservation**(ReservationID: INT, ReservationDate: DATE, ScheduleID: INT, CustomerID: INT, TripType: string, PassengerType: string, ArrivalDatetime: DATETIME, DepartureDatetime: DATETIME, OriginStation: INT, DestinationStation: INT, TotalFare: FLOAT, Primary Key(ReservationID), Foreign Key CustomerID references Customer, Foreign Key ScheduleID references TrainSchedule);

- merges for & makes relationship

**Employee**(EmployeeID: INT, SSN: string, Firstname: string, Lastname: string, Username: string, Password: string, Primary Key(EmpID));

**Manager**(EmpID: INT, Primary Key(EmpID), Foreign Key EmpID references Employee);

**Customer Representative**(EmpID: INT, Primary Key(EmpID), Foreign Key EmpID references Employee);

**Customer Service**(ServiceID: INT, Question: string, Answer: string, QuestionTimeStamp: DATETIME, AnswerTimeStamp: DATETIME, IsAnswered: BOOLEAN, Primary Key(ServiceID), Foreign Key CustomerID references Customer)

**Asks**(CustomerID: INT, ServiceID: INT, Primary Key(CustomerID, ServiceID), Foreign Key CustomerID references Customer, Foreign Key ServiceID references Customer Service);

**Provides**(ServiceID: INT, EmpID: INT, Primary Key(ServiceID, EmpID), Foreign Key EmpID references Customer Representative, Foreign Key ServiceID references Customer Service);

**Manages**(MgrID: INT, RepID: INT, Foreign Key EmpID references Manager, Foreign Key RepID references Customer Representative);