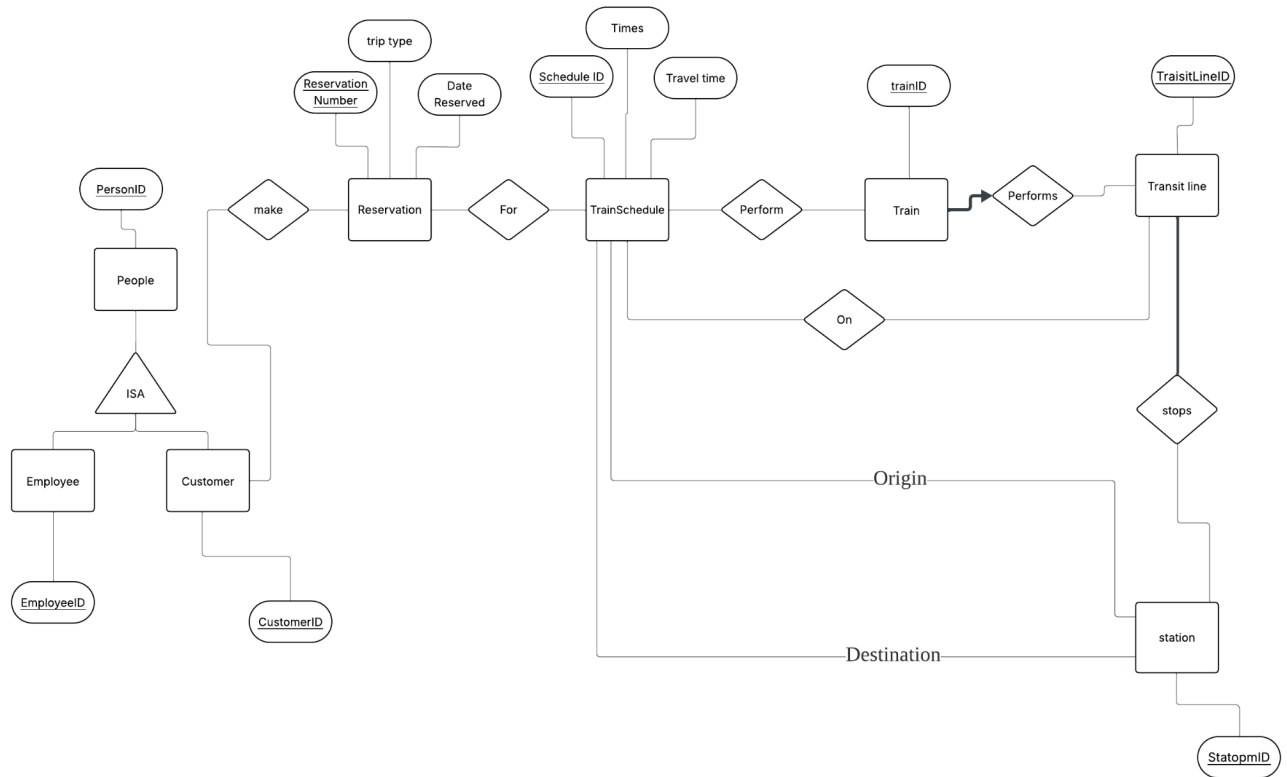GROUP 36

BYOUNGUK KIM,, RICHARD BAAH, MICHAEL LOPRESTI, GILBERT TENG

CREATE TABLE People (
  PersonID INT PRIMARY KEY AUTO_INCREMENT,
  FirstName VARCHAR(50) NOT NULL,
  LastName VARCHAR(50) NOT NULL,
  Username VARCHAR(50) UNIQUE NOT NULL,
  Password VARCHAR(255) NOT NULL
);

```sql
CREATE TABLE Customer (
  CustomerID INT PRIMARY KEY,
  Email VARCHAR(100) NOT NULL,
  FareDiscount DECIMAL(3,2),
  FOREIGN KEY (CustomerID) REFERENCES People(PersonID)
);

CREATE TABLE Employee (
  EmployeeID INT PRIMARY KEY,
  SSN VARCHAR(20) UNIQUE NOT NULL,
  Role VARCHAR(20) NOT NULL,
  FOREIGN KEY (EmployeeID) REFERENCES People(PersonID)
);

CREATE TABLE Station (
  StationID INT PRIMARY KEY AUTO_INCREMENT,
  Name VARCHAR(100) NOT NULL,
  City VARCHAR(100) NOT NULL,
  State VARCHAR(50) NOT NULL
);

CREATE TABLE TransitLine (
  TransitLineID INT PRIMARY KEY AUTO_INCREMENT,
  Name VARCHAR(100) NOT NULL
);

CREATE TABLE Train (
  TrainID INT PRIMARY KEY AUTO_INCREMENT,
  Name VARCHAR(100) NOT NULL
);

CREATE TABLE TrainSchedule (
  ScheduleID INT PRIMARY KEY AUTO_INCREMENT,
  TrainID INT NOT NULL,
  TransitLineID INT NOT NULL,
  OriginStationID INT NOT NULL,
  DestinationStationID INT NOT NULL,
  StartTime DATETIME NOT NULL,
  EndTime DATETIME NOT NULL,
  TravelTime INT,
  Fare DECIMAL(6,2),
  FOREIGN KEY (TrainID) REFERENCES Train(TrainID),
  FOREIGN KEY (TransitLineID) REFERENCES TransitLine(TransitLineID),
  FOREIGN KEY (OriginStationID) REFERENCES Station(StationID),
```

```
   FOREIGN KEY (DestinationStationID) REFERENCES Station(StationID)
);

CREATE TABLE ScheduleStop (
  ScheduleID INT,
  StationID INT,
  StopNumber INT,
  ArrivalTime DATETIME,
  DepartureTime DATETIME,
  PRIMARY KEY (ScheduleID, StopNumber),
  FOREIGN KEY (ScheduleID) REFERENCES TrainSchedule(ScheduleID),
  FOREIGN KEY (StationID) REFERENCES Station(StationID)
);

CREATE TABLE Reservation (
  ReservationID INT PRIMARY KEY AUTO_INCREMENT,
  ScheduleID INT NOT NULL,
  CustomerID INT NOT NULL,
  DateReserved DATETIME NOT NULL,
  TripType VARCHAR(20),
  FareDiscount DECIMAL(3,2),
  TotalFare DECIMAL(6,2) NOT NULL,
  FOREIGN KEY (ScheduleID) REFERENCES TrainSchedule(ScheduleID),
  FOREIGN KEY (CustomerID) REFERENCES Customer(CustomerID)
);
```