



IT214
DATABASE MANAGEMENT SYSTEM
PROJECT SUBMISSION

Database Title : GSRTC Reservation System

DDL Statements

Team Details

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Booking_Details

```
CREATE TABLE Booking_Details
(
    Booking_ID INT NOT NULL,
    Transaction_Type VARCHAR(20) NOT NULL,
    Booking_Mode VARCHAR NOT NULL,
    Bus_Number INT NOT NULL,
    Schedule_ID INT NOT NULL,
    Route_ID INT NOT NULL,
    Child INT NOT NULL,
    Adult INT NOT NULL,
    PRIMARY KEY (Booking_ID),
    FOREIGN KEY (Schedule_ID,Route_ID,Bus_Number) REFERENCES "HAVING"
(Schedule_ID,Route_ID,Bus_Number) ON DELETE SET DEFAULT ON UPDATE CASCADE
);
```

Passenger

```
CREATE TABLE PASSENGER
(
    Gender CHAR(1) NOT NULL,
    Mobile_Number INT NOT NULL,
    Email_ID VARCHAR(20) NOT NULL,
    Age INT NOT NULL,
    Pname VARCHAR(20) NOT NULL,
    Booking_ID INT NOT NULL,
    Seat_Number INT NOT NULL,
    PRIMARY KEY (Pname,Booking_ID),
    FOREIGN KEY (Booking_ID) REFERENCES BOOKING_DETAILS (Booking_ID) ON DELETE SET
DEFAULT ON UPDATE CASCADE
);
```

Bus_Schedule

```
CREATE TABLE BUS_SCHEDULE
(
    Arriva_Time VARCHAR(20) NOT NULL,
    Schedule_ID INT NOT NULL,
    Departure_Date date NOT NULL,
    Arrival_Date date NOT NULL,
    Departure_Time time without time zone NOT NULL,
    Arrival_Time time without time zone NOT NULL,
    PRIMARY KEY(Schedule_ID)
);
```

Bus

```
CREATE TABLE BUS
(
    Bus_Type VARCHAR(20) NOT NULL,
    Bus_Number INT NOT NULL,
    Capacity INT NOT NULL,
    PRIMARY KEY( Bus_Number)
);
```

"Having"

```
CREATE TABLE "HAVING"
(
    Schedule_ID INT NOT NULL,
    Route_ID INT NOT NULL,
    Bus_Number INT NOT NULL,
    Seats_Available INT NOT NULL,
    FOREIGN KEY (Schedule_ID) REFERENCES BUS_SCHEDULE (Schedule_ID) ON DELETE SET
    DEFAULT ON UPDATE CASCADE,
    FOREIGN KEY (Route_ID,Bus_Number) REFERENCES HAS_FARE_FOR (Route_ID,Bus_Number)
    ON DELETE SET DEFAULT ON UPDATE CASCADE,
    PRIMARY KEY (Schedule_ID, Route_ID, Bus_Number)
);
```

Route

```
CREATE TABLE ROUTE
(
    Route_ID INT NOT NULL,
    Origin VARCHAR(20) NOT NULL,
    Destination VARCHAR(20) NOT NULL,
    Distance INT NOT NULL,
    PRIMARY KEY (Route_ID)
);
```

Has_Fare_For

```
CREATE TABLE HAS_FARE_FOR
(
    Adult_Fare NUMERIC(10,0) NOT NULL,
    Child_Fare NUMERIC(10,0) NOT NULL,
    Route_ID INT NOT NULL,
    Bus_Number INT NOT NULL,
    PRIMARY KEY(Route_ID, Bus_Number),
    FOREIGN KEY (Route_ID) REFERENCES ROUTE(Route_ID) ON DELETE SET DEFAULT ON
    UPDATE CASCADE,
    FOREIGN KEY (Bus_Number) REFERENCES BUS (Bus_Number) ON DELETE SET DEFAULT ON
    UPDATE CASCADE
);
```

rec

```
CREATE TABLE rec
(
    schedule_id INT NOT NULL,
    bus_number INT NOT NULL,
    origin varchar(20) NOT NULL,
    destination varchar(20) NOT NULL,
    total_fare INT NOT NULL,
);
```