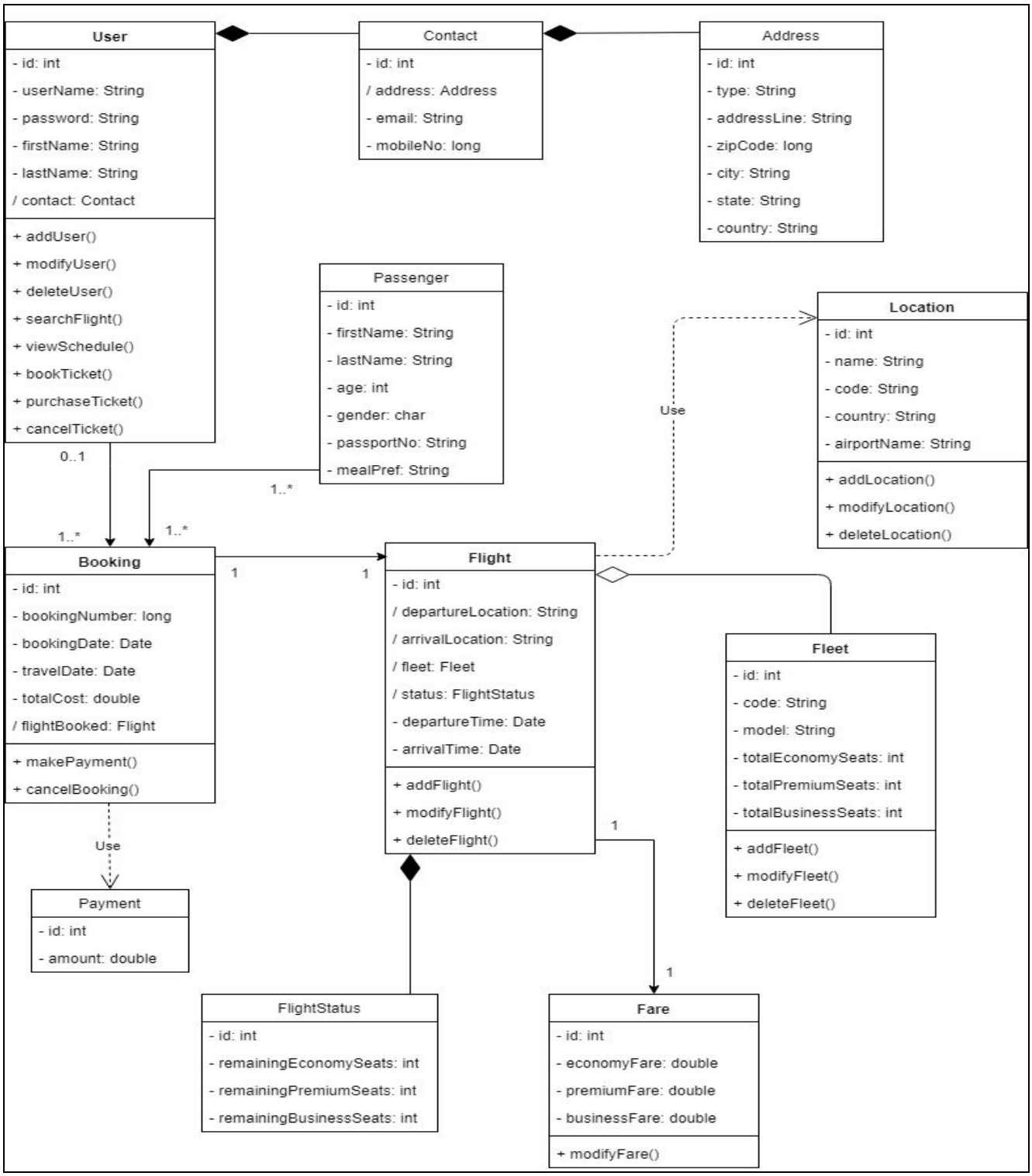
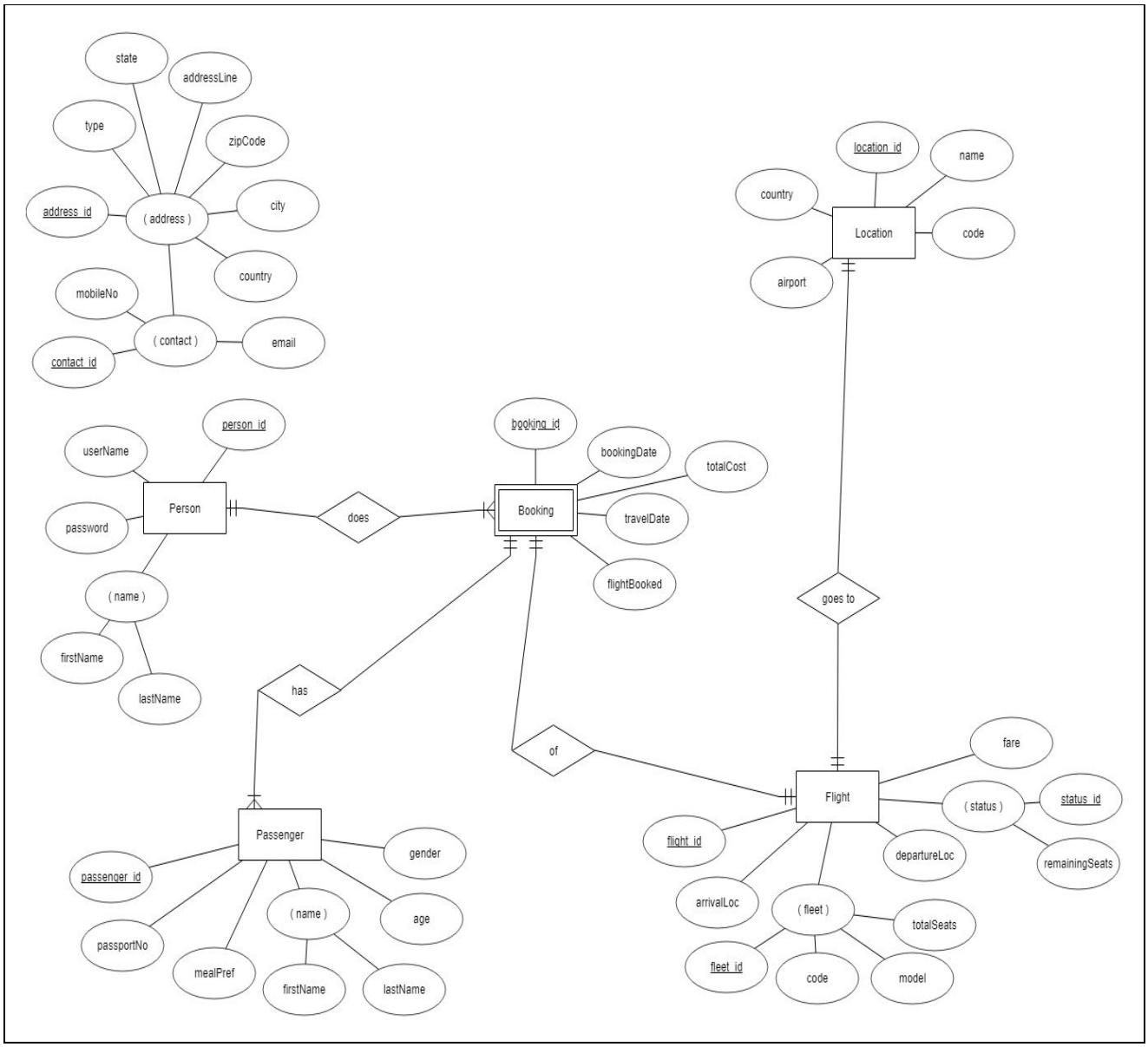
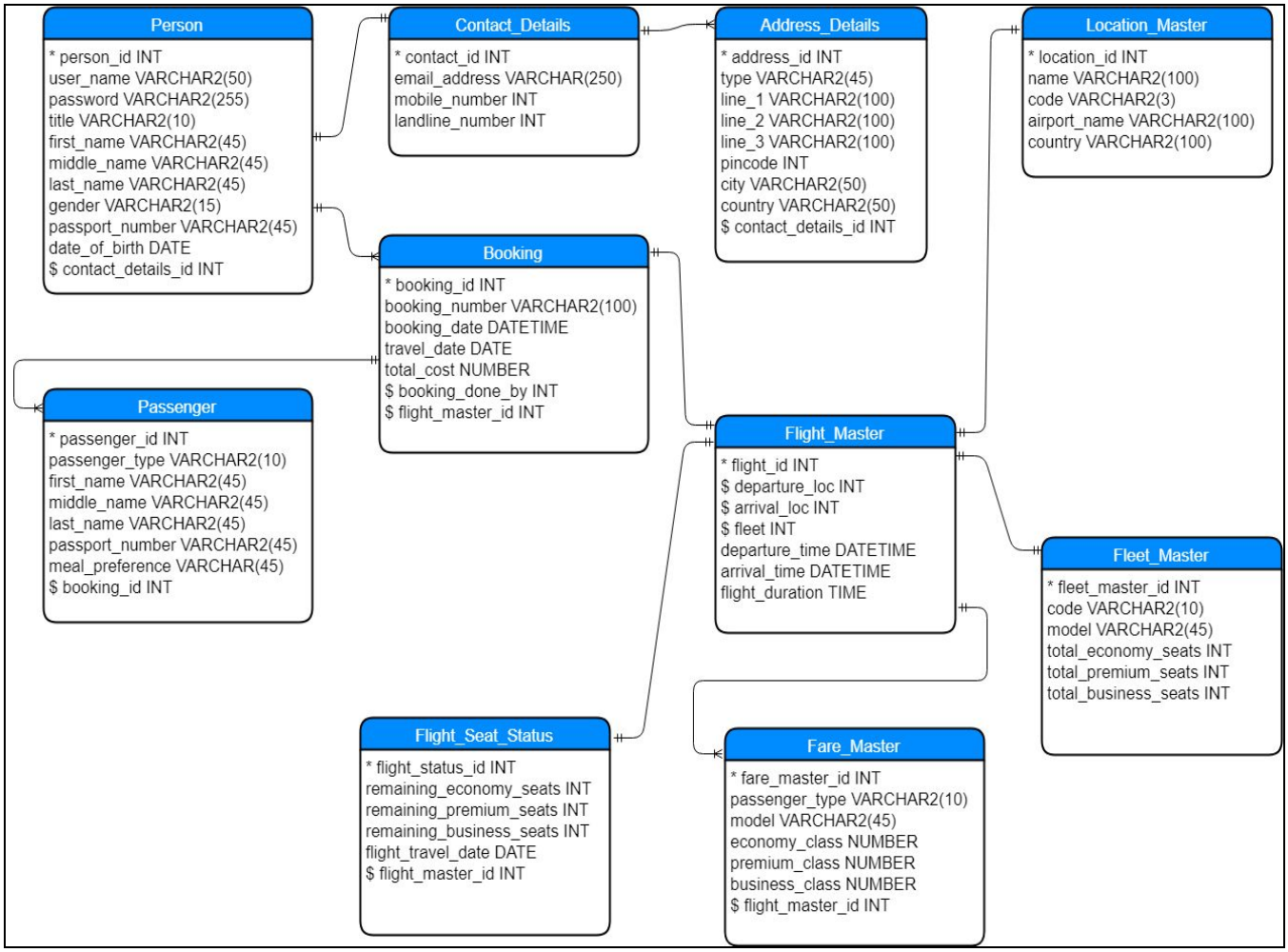
CLASS DIAGRAM



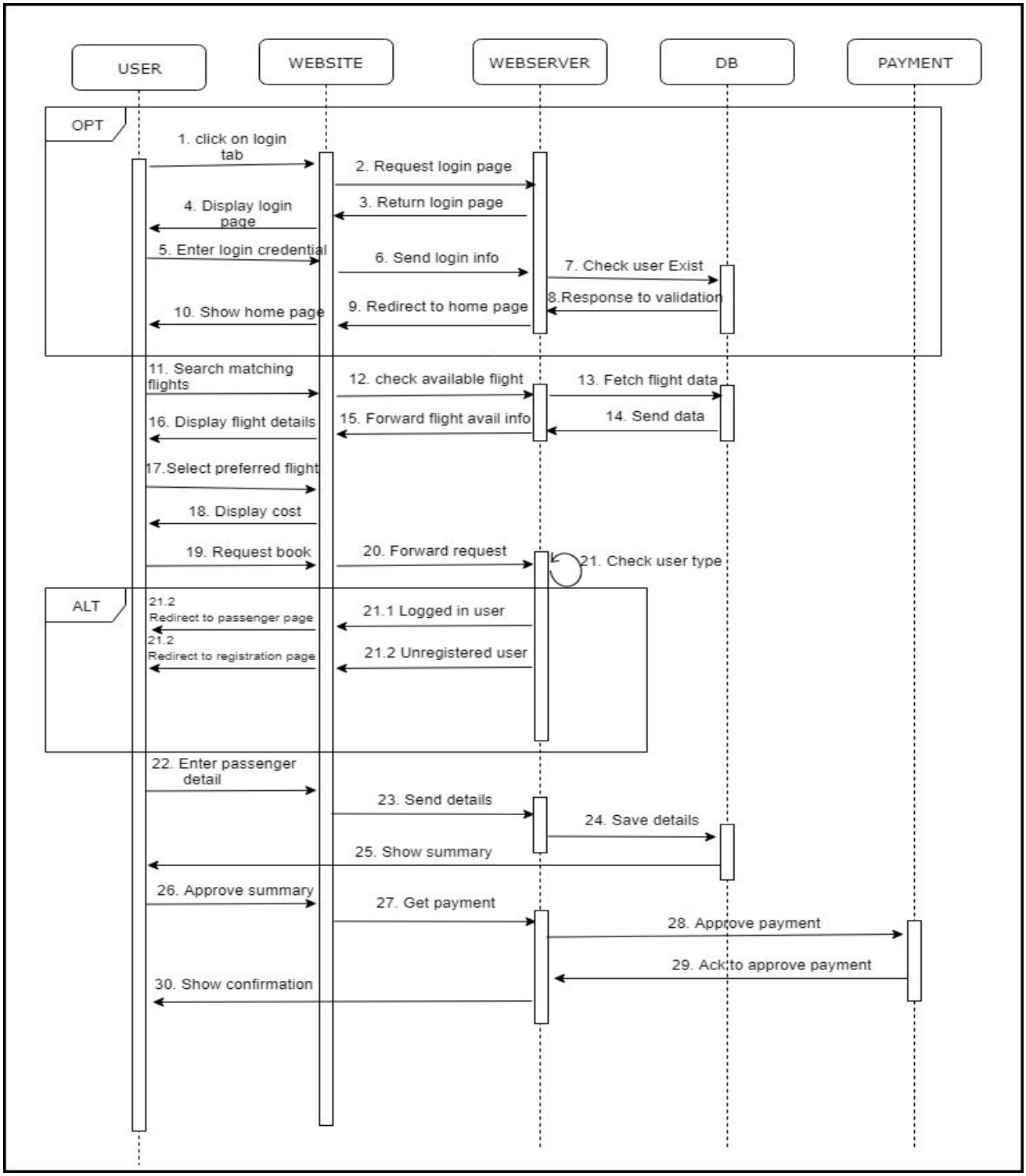
ER DIAGRAM


state
addressLine
type
zipCode
address_id
(address)
city
country
mobileNo
(contact)
email
contact_id
location_id
name
country
Location
code
airport
person_id
userName
Person
password
(name)
firstName
lastName
does
booking_id
bookingDate
totalCost
Booking
travelDate
flightBooked
goes to
has
of
fare
Flight
(status)
status_id
flight_id
departureLoc
remainingSeats
arrivalLoc
(fleet)
totalSeats
fleet_id
code
model
Passenger
gender
passenger_id
(name)
age
passportNo
mealPref
firstName
lastName

RELATIONAL SCHEMA



SEQUENCE DIAGRAM



SCHEMA DESIGN

```
CREATE TABLE PERSON
(
PERSON_ID NUMBER(8) PRIMARY KEY,
USER_NAME VARCHAR(50) NOT NULL,
PASSWORD VARCHAR(255) NOT NULL,
TITLE IN ('Mr.','Mrs.'),
FIRST_NAME VARCHAR(45) NOT NULL,
MIDDLE_NAME VARCHAR(45),
LAST_NAME VARCHAR(45) NOT NULL,
GENDER IN('MALE','FEMALE','TRANSGENDER'),
PASSPORT_NUMBER VARCHAR(45) NOT NULL,
DATE_OF_BIRTH DATE,
CONTACT_DETAILS_ID NUMBER(8) FOREIGN KEY REFERENCES
CONTACT_DETAILS(CONTACT_ID),
);
```

```
CREATE TABLE PASSENGER
(
PASSENGER_ID NUMBER(8) PRIMARY KEY,
PASSENGER_TYPE NUMBER(8) ,
FIRST_NAME VARCHAR(45) NOT NULL,
MIDDLE_NAME VARCHAR(45),
LAST_NAME VARCHAR(45) NOT NULL,
PASSPORT_NUMBER VARCHAR(45) UNIQUE,
MEAL_PREFERENCES IN('VEG','NON-VEG'),
BOOKING_ID NUMBER(8),
FOREIGN KEY (BOOKING_ID) REFERENCES BOOKING (BOOKING_ID)
);
```

```
CREATE TABLE BOOKING
(
BOOKING_ID NUMBER(8) PRIMARY KEY,
BOOKING_NUMBER VARCHAR(100) NOT NULL,
BOOKING_DATE DATETIME,
TRAVEL_DATE DATE,
TOTAL_COST NUMBER,
BOOKING_DONE_BY NUMBER(8) FOREIGN KEY REFERENCES PERSON(PERSON_ID),
FLIGHT_MASTER_ID NUMBER(8) FOREIGN KEY REFERENCES
FLIGHT_MASTER(FLIGHT_MASTER_ID)
);

CREATE TABLE CONTACT_DETAILS
(
CONTACT_ID NUMBER(8) PRIMARY KEY,
EMAIL_ADDRESS VARCHAR(250) NOT NULL UNIQUE,
MOBILE_NUMBER NUMBER(10) NOT NULL,
LANDLINE_NUMBER NUMBER(10)
);


CREATE TABLE ADDRESS_DETAILS
(
ADDRESS_ID NUMBER(8) PRIMARY KEY,
TYPE IN ('RESIDENTIAL','OFFICE','PERMANENT'),
LINE_1 VARCHAR2(100) NOT NULL,
LINE_2 VARCHAR2(100),
LINE_3 VARCHAR2(100),
PINCODE NUMBER(7) NOT NULL,
CITY VARCHAR2(50) NOT NULL,
COUNTRY VARCHAR2(50) NOT NULL,
CONTACT_DETAILS NUMBER(8) FOREIGN KEY REFERENCES
CONTACT_DETAILS(CONTACT_ID)
);
```

```
CREATE TABLE FLIGHT_MASTER
(
FLIGHT_ID NUMBER(8) PRIMARY KEY,
DEPARTURE_LOC NUMBER(8) NOT NULL,
ARRIVAL_LOC NUMBER(8) NOT NULL,
FLEET NUMBER(8) NOT NULL,
DEPARTURE_TIME TIME NOT NULL,
ARRIVAL_TIME TIME NOT NULL,
FLIGHT_DURATION TIME NOT NULL
);

CREATE TABLE LOCATION_MASTER
(
LOCATION_MASTER_ID NUMBER(8) PRIMARY KEY,
NAME VARCHAR(100) NOT NULL,
CODE VARCHAR(3) NOT NULL,
AIRPORT_NAME VARCHAR(100) NOT NULL,
COUNTRY VARCHAR2(100) NOT NULL
);


CREATE TABLE FLIGHT_SEAT_STATUS
(
FLIGHT_SEAT_STATUS NUMBER(8) PRIMARY KEY,
REMAINING_ECONOMY_SEATS NUMBER(2) DEFAULT 0,
REMAINING_PREMIUM_SEATS NUMBER(2) DEFAULT 0,
REMAINING_BUSINESS_SEATS NUMBER(2) DEFAULT 0,
FLIGHT_TRAVEL_DATE DATE,
FLIGHT_MASTER_ID NUMBER(8) FOREIGN KEY REFERENCES
FLIGHT_MASTER(FLIGHT_ID)
);

CREATE FARE_MASTER
(
FARE_MASTER_ID NUMBER(8) PRIMARY KEY,
ECONOMY_CLASS NUMBER(2) DEFAULT 0,
PREMIUM_CLASS NUMBER(2) DEFAULT 0,
BUSINESS_CLASS NUMBER(2) DEFAULT 0,
FLIGHT_MASTER_ID NUMBER(8) FOREIGN KEY REFERENCES
FLIGHT_MASTER(FLIGHT_ID)
);
```

```
CREATE FLEET_MASTER
(
FLEET_MASTER_ID NUMBER(8) PRIMARY KEY,
CODE VARCHAR(10) NOT NULL,
MODEL VARCHAR(45) NOT NULL,
TOTAL_ECONOMY_SEATS NUMBER(2) DEFAULT 0,
TOTAL_PREMIUM_SEATS NUMBER(2) DEFAULT 0,
TOTAL_BUSINESS_SEATS NUMBER(2) DEFAULT
);
```