TRAVELLING RESERVATION SYSTEM

Database Project

**“Traveling Reservation System.”**

**Project Description:**

**The project aims to develop a traveling reservation system that allows users to book various travel services, such as flights, hotels, and car rentals, in a convenient and user-friendly manner. The system will provide a seamless experience for users, enabling them to easily search, compare, and reserve travel options based on their preferences and requirements.**

**Assumptions:**

**1-The system assumes that the necessary APIs and data sources for retrieving information about flights, hotels, and car rentals are available and accessible.**

**2-It assumes that the users have access to the internet and a device to interact with the system.**

**3-The system assumes that users will provide accurate information while making reservations.**

**Flow and Procedure:**

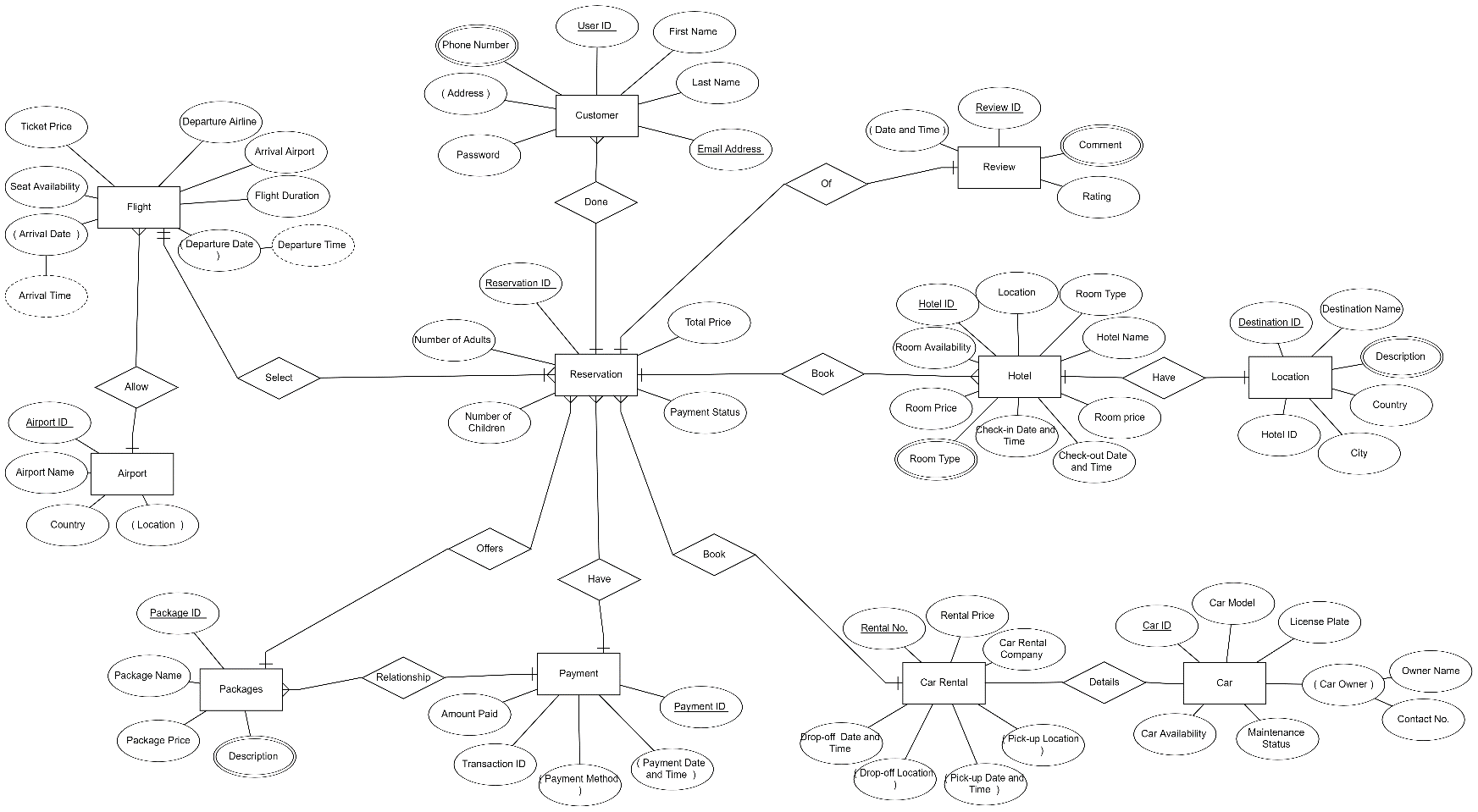
* **User Registration**
* **Search for Travel Options**
* **Display Search Results**
* **Select and Reserve**
* **Confirmation and Payment**
* **Booking Confirmation**
* **Manage Reservations**
* **Complete Car Rental Support**
* **Customer Support**

**By following the above procedure the customer select or book the hotel, air ticket and a hotel for travelling from one point to another.**

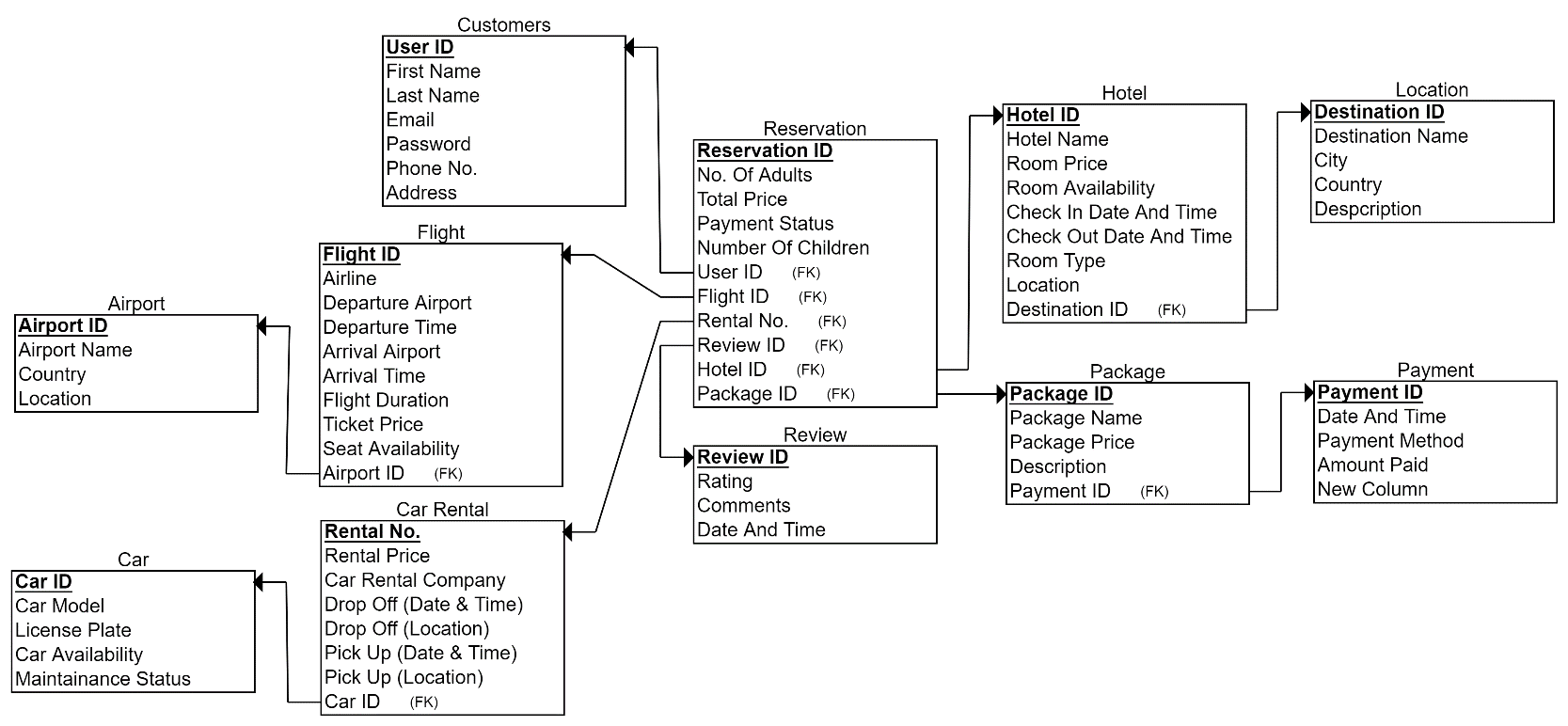
**Entities:**

* Customer
* Reservations
* Hotel
* Hotel Location
* Flight
* Airport
* Car Rental
* Car
* Payment
* Packages
* Reviews

ERD DIAGRAM:



RELATIONAL SCHEMA:



TABLES:

CREATE DATABASE TravelSystem;

use TravelSystem;

-- Customers Table

CREATE TABLE Customers (

User\_ID INT PRIMARY KEY AUTO\_INCREMENT,

First\_Name VARCHAR(50) NOT NULL,

Last\_Name VARCHAR(50) NOT NULL,

Email VARCHAR(100) NOT NULL UNIQUE,

Password VARCHAR(100) NOT NULL,

Phone\_No VARCHAR(15),

Address TEXT

);

-- Airport Table

CREATE TABLE Airport (

Airport\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Airport\_Name VARCHAR(100) NOT NULL,

Country VARCHAR(50) NOT NULL,

Location VARCHAR(100) NOT NULL

);

-- Car Table

CREATE TABLE Car (

Car\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Car\_Model VARCHAR(50) NOT NULL,

License\_Plate VARCHAR(20) NOT NULL UNIQUE,

Car\_Availability BOOLEAN NOT NULL,

Maintenance\_Status BOOLEAN NOT NULL

);

-- Car Rental Table

CREATE TABLE Car\_Rental (

Rental\_No INT PRIMARY KEY AUTO\_INCREMENT,

Rental\_Price DECIMAL(10, 2) NOT NULL,

Car\_Rental\_Company VARCHAR(50) NOT NULL,

Drop\_Off\_Date\_Time DATETIME NOT NULL,

Drop\_Off\_Location VARCHAR(100) NOT NULL,

Pick\_Up\_Date\_Time DATETIME NOT NULL,

Pick\_Up\_Location VARCHAR(100) NOT NULL,

Car\_ID INT NOT NULL,

FOREIGN KEY (Car\_ID) REFERENCES Car(Car\_ID)

);

-- Flight Table

CREATE TABLE Flight (

Flight\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Airline VARCHAR(50) NOT NULL,

Departure\_Airport VARCHAR(50) NOT NULL,

Departure\_Time TIME NOT NULL,

Arrival\_Airport VARCHAR(50) NOT NULL,

Arrival\_Time TIME NOT NULL,

Flight\_Duration INT NOT NULL,

Ticket\_Price DECIMAL(10, 2) NOT NULL,

Seat\_Availability INT NOT NULL,

Airport\_ID INT NOT NULL,

FOREIGN KEY (Airport\_ID) REFERENCES Airport(Airport\_ID)

);

-- Review Table

CREATE TABLE Review (

Review\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Rating INT NOT NULL,

Comments TEXT,

Date\_And\_Time DATETIME NOT NULL

);

-- Package Table

CREATE TABLE Package (

Package\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Package\_Name VARCHAR(100) NOT NULL,

Package\_Price DECIMAL(10, 2) NOT NULL,

Description TEXT

);

-- Payment Table

CREATE TABLE Payment (

Payment\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Date\_And\_Time DATETIME NOT NULL,

Payment\_Method VARCHAR(50) NOT NULL,

Amount\_Paid DECIMAL(10, 2) NOT NULL

);

-- Location Table

CREATE TABLE Location (

Destination\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Destination\_Name VARCHAR(100) NOT NULL,

City VARCHAR(50) NOT NULL,

Country VARCHAR(50) NOT NULL,

Description TEXT

);

-- Reservation Table

CREATE TABLE Reservation (

Reservation\_ID INT PRIMARY KEY AUTO\_INCREMENT,

No\_Of\_Adults INT NOT NULL,

Total\_Price DECIMAL(10, 2) NOT NULL,

Payment\_Status BOOLEAN NOT NULL,

Number\_Of\_Children INT NOT NULL,

User\_ID INT NOT NULL,

Flight\_ID INT,

Rental\_No INT,

Review\_ID INT,

Hotel\_ID INT,

Package\_ID INT,

FOREIGN KEY (User\_ID) REFERENCES Customers(User\_ID),

FOREIGN KEY (Flight\_ID) REFERENCES Flight(Flight\_ID),

FOREIGN KEY (Rental\_No) REFERENCES Car\_Rental(Rental\_No),

FOREIGN KEY (Hotel\_ID) REFERENCES Hotel(Hotel\_ID),

FOREIGN KEY (Package\_ID) REFERENCES Package(Package\_ID)

);

-- Hotel Table

CREATE TABLE Hotel (

Hotel\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Hotel\_Name VARCHAR(100) NOT NULL,

Room\_Price DECIMAL(10, 2) NOT NULL,

Room\_Availability INT NOT NULL,

Check\_In\_Date\_And\_Time DATETIME NOT NULL,

Check\_Out\_Date\_And\_Time DATETIME NOT NULL,

Room\_Type VARCHAR(50) NOT NULL,

Location VARCHAR(100) NOT NULL,

Destination\_ID INT,

FOREIGN KEY (Destination\_ID) REFERENCES Location(Destination\_ID)

);