UNIVERSIDAD AUTÓNOMA "GABRIEL RENÉ MORENO"

FACULTAD DE INGENIERÍA EN CIENCIAS DE LA COMPUTACIÓN Y TELECOMUNICACIONES

INGENIERÍA EN SISTEMAS



Script

MATERIA: SISTEMAS PARA EL SOPORTE A LA TOMA

DE DECISIONES

SIGLA : INF423

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```
CREATE DATABASE AirlineDB;
GO
USE AirlineDB;
GO
-- Crear tabla FrequentFlyerCard
CREATE TABLE FrequentFlyerCard (
 FFCNumber INT PRIMARY KEY,
 Miles INT,
 MealCode VARCHAR(10)
);
-- Crear tabla Customer
CREATE TABLE Customer (
 CustomerID INT PRIMARY KEY IDENTITY(1,1),
 DateOfBirth DATE,
 Name VARCHAR(100),
 FFCNumber INT,
 FOREIGN KEY (FFCNumber) REFERENCES FrequentFlyerCard(FFCNumber)
);
-- Crear tabla Airport
CREATE TABLE Airport (
 AirportID INT PRIMARY KEY IDENTITY(1,1),
 Name VARCHAR(100)
);
-- Crear tabla Airplane
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CREATE TABLE Airplane (
  AirplaneID INT PRIMARY KEY IDENTITY(1,1),
  RegistrationNumber VARCHAR(50),
  BeginOfOperation DATE,
  Status VARCHAR(50)
);
-- Crear tabla PlaneModel
CREATE TABLE PlaneModel (
  PlaneModelID INT PRIMARY KEY IDENTITY(1,1),
  Description VARCHAR(100),
  Graphic VARCHAR(255),
  AirplaneID INT,
  FOREIGN KEY (AirplaneID) REFERENCES Airplane(AirplaneID)
);
-- Crear tabla Seat
CREATE TABLE Seat (
  SeatID INT PRIMARY KEY IDENTITY(1,1),
  Size VARCHAR(50),
  Number VARCHAR(10),
  Location VARCHAR(100),
  PlaneModelID INT,
  FOREIGN KEY (PlaneModelID) REFERENCES PlaneModel(PlaneModelID)
);
-- Crear tabla FlightNumber
CREATE TABLE FlightNumber (
  FlightNumberID INT PRIMARY KEY IDENTITY(1,1),
  DepartureTime TIME,
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Description VARCHAR(255),
  Type VARCHAR(50),
  Airline VARCHAR(100),
  StartAirportID INT,
  GoalAirportID INT,
  FOREIGN KEY (StartAirportID) REFERENCES Airport(AirportID),
  FOREIGN KEY (GoalAirportID) REFERENCES Airport(AirportID)
);
-- Crear tabla Flight
CREATE TABLE Flight (
  FlightID INT PRIMARY KEY IDENTITY(1,1),
  BoardingTime TIME,
  FlightDate DATE,
  Gate VARCHAR(50),
  CheckInCounter VARCHAR(50),
  FlightNumberID INT,
  FOREIGN KEY (FlightNumberID) REFERENCES FlightNumber(FlightNumberID)
);
-- Crear tabla Ticket
CREATE TABLE Ticket (
  TicketID INT PRIMARY KEY IDENTITY(1,1),
  TicketingCode VARCHAR(50),
  Number VARCHAR(20),
  CustomerID INT,
  FlightID INT,
  FOREIGN KEY (CustomerID) REFERENCES Customer(CustomerID),
  FOREIGN KEY (FlightID) REFERENCES Flight(FlightID)
);
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-- Crear tabla Coupon
CREATE TABLE Coupon (
  CouponID INT PRIMARY KEY IDENTITY(1,1),
  DateOfRedemption DATE,
  Class VARCHAR(50),
  Standby BIT,
  MealCode VARCHAR(10),
  TicketID INT,
  FOREIGN KEY (TicketID) REFERENCES Ticket(TicketID)
);
-- Crear tabla AvailableSeat
CREATE TABLE AvailableSeat (
  AvailableSeatID INT PRIMARY KEY IDENTITY(1,1),
  FlightID INT,
  SeatID INT,
  CouponID INT,
  FOREIGN KEY (FlightID) REFERENCES Flight(FlightID),
  FOREIGN KEY (SeatID) REFERENCES Seat(SeatID),
  FOREIGN KEY (CouponID) REFERENCES Coupon(CouponID)
);
-- Crear tabla PiecesOfLuggage
CREATE TABLE PiecesOfLuggage (
  LuggageID INT PRIMARY KEY IDENTITY(1,1),
  Number INT,
  Weight DECIMAL(10,2),
  CouponID INT,
  FOREIGN KEY (CouponID) REFERENCES Coupon(CouponID)
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```
-- Insertar datos en FrequentFlyerCard
INSERT INTO FrequentFlyerCard (FFCNumber, Miles, MealCode) VALUES
(1001, 50000, 'VEG'),
(1002, 25000, 'NON-VEG'),
(1003, 15000, 'VEG'),
(1004, 70000, 'NON-VEG'),
(1005, 8000, 'VEG'),
(1006, 40000, 'NON-VEG'),
(1007, 20000, 'VEG'),
(1008, 30000, 'NON-VEG'),
(1009, 60000, 'VEG'),
(1010, 90000, 'NON-VEG');
-- Insertar datos en Customer
INSERT INTO Customer (DateOfBirth, Name, FFCNumber) VALUES
('1980-05-15', 'John Doe', 1001),
('1992-07-22', 'Jane Smith', 1002),
('1985-03-30', 'James Brown', NULL),
('1978-11-12', 'Lisa White', 1003),
('1990-09-19', 'Michael Green', 1004),
('1988-02-25', 'Emily Black', NULL),
('1983-12-01', 'Robert Gray', 1005),
('1995-10-10', 'Linda Blue', 1006),
('1981-06-18', 'David Yellow', NULL),
('1975-08-23', 'Susan Red', 1007);
-- Insertar datos en Airport
INSERT INTO Airport (Name) VALUES
('JFK International'),
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);

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('Los Angeles International'),
('Heathrow'),
('Charles de Gaulle'),
('Tokyo Haneda'),
('Dubai International'),
('Sydney Kingsford Smith'),
('Frankfurt'),
('Singapore Changi'),
('Beijing Capital');
-- Insertar datos en Airplane
INSERT INTO Airplane (RegistrationNumber, BeginOfOperation, Status) VALUES
('N12345', '2015-01-01', 'Active'),
('N67890', '2016-05-20', 'Active'),
('G-ABCD', '2013-08-14', 'Inactive'),
('F-EFGH', '2017-03-28', 'Active'),
('JA1234', '2014-11-05', 'Active'),
('A6-BCDE', '2019-02-18', 'Active'),
('VH-ZYX', '2012-07-30', 'Inactive'),
('D-HJKL', '2018-12-11', 'Active'),
('9V-WXYZ', '2020-06-15', 'Active'),
('B-98765', '2011-04-25', 'Inactive');
-- Insertar datos en PlaneModel
INSERT INTO PlaneModel (Description, Graphic, AirplaneID) VALUES
('Boeing 737', 'boeing 737.jpg', 1),
('Airbus A320', 'airbus A320.jpg', 2),
('Boeing 747', 'boeing 747.jpg', 3),
('Airbus A380', 'airbus A380.jpg', 4),
('Boeing 777', 'boeing 777.jpg', 5),
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('Airbus A350', 'airbus A350.jpg', 6),
('Boeing 787', 'boeing 787.jpg', 7),
('Embraer 190', 'embraer 190.jpg', 8),
('Bombardier Q400', 'q400.jpg', 9),
('Cessna 172', 'cessna 172.jpg', 10);
-- Insertar datos en Seat
INSERT INTO Seat (Size, Number, Location, PlaneModelID) VALUES
('Economy', '12A', 'Window', 1),
('Business', '2B', 'Aisle', 2),
('Economy', '15C', 'Middle', 3),
('First Class', '1A', 'Window', 4),
('Economy', '18B', 'Aisle', 5),
('Business', '3C', 'Middle', 6),
('Economy', '20D', 'Window', 7),
('Economy', '22E', 'Middle', 8),
('Business', '4F', 'Aisle', 9),
('Economy', '24G', 'Window', 10);
-- Insertar datos en FlightNumber
INSERT INTO FlightNumber (DepartureTime, Description, Type, Airline, StartAirportID,
GoalAirportID) VALUES
('08:00:00', 'NYC to LA', 'Domestic', 'American Airlines', 1, 2),
('10:30:00', 'London to Paris', 'International', 'British Airways', 3, 4),
('12:15:00', 'Tokyo to Dubai', 'International', 'Emirates', 5, 6),
('14:50:00', 'Sydney to Frankfurt', 'International', 'Qantas', 7, 8),
('16:00:00', 'Singapore to Beijing', 'International', 'Singapore Airlines', 9, 10),
('18:25:00', 'Paris to NYC', 'International', 'Air France', 4, 1),
('20:10:00', 'LA to Tokyo', 'International', 'United Airlines', 2, 5),
('21:45:00', 'Dubai to London', 'International', 'Emirates', 6, 3),
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('23:30:00', 'Frankfurt to Sydney', 'International', 'Lufthansa', 8, 7),
('06:00:00', 'Beijing to Singapore', 'International', 'Air China', 10, 9);
-- Insertar datos en Flight
INSERT INTO Flight (BoardingTime, FlightDate, Gate, CheckInCounter, FlightNumberID)
VALUES
('07:30:00', '2024-08-21', 'A1', 'C1', 1),
('10:00:00', '2024-08-22', 'B2', 'D2', 2),
('11:45:00', '2024-08-23', 'C3', 'E3', 3),
('14:20:00', '2024-08-24', 'D4', 'F4', 4),
('15:30:00', '2024-08-25', 'E5', 'G5', 5),
('17:55:00', '2024-08-26', 'F6', 'H6', 6),
('19:40:00', '2024-08-27', 'G7', 'I7', 7),
('21:15:00', '2024-08-28', 'H8', 'J8', 8),
('23:00:00', '2024-08-29', 'I9', 'K9', 9),
('05:30:00', '2024-08-30', 'J10', 'L10', 10);
-- Insertar datos en Ticket
INSERT INTO Ticket (TicketingCode, Number, CustomerID, FlightID) VALUES
('AA123', 'T001', 1, 1),
('BA456', 'T002', 2, 2),
('EM789', 'T003', 3, 3),
('QA012', 'T004', 4, 4),
('SA345', 'T005', 5, 5),
('AF678', 'T006', 6, 6),
('UA901', 'T007', 7, 7),
('EM234', 'T008', 8, 8),
('LH567', 'T009', 9, 9),
('AC890', 'T010', 10, 10);
```

```
-- Insertar datos en Coupon
INSERT INTO Coupon (DateOfRedemption, Class, Standby, MealCode, TicketID) VALUES
('2024-08-21', 'Economy', 0, 'VEG', 1),
('2024-08-22', 'Business', 1, 'NON-VEG', 2),
('2024-08-23', 'Economy', 0, 'VEG', 3),
('2024-08-24', 'First Class', 0, 'NON-VEG', 4),
('2024-08-25', 'Economy', 1, 'VEG', 5),
('2024-08-26', 'Business', 0, 'NON-VEG', 6),
('2024-08-27', 'Economy', 0, 'VEG', 7),
('2024-08-28', 'Economy', 0, 'NON-VEG', 8),
('2024-08-29', 'Business', 1, 'VEG', 9),
('2024-08-30', 'Economy', 0, 'NON-VEG', 10);
-- Insertar datos en AvailableSeat
INSERT INTO AvailableSeat (FlightID, SeatID, CouponID) VALUES
(1, 1, 1),
(2, 2, 2),
(3, 3, 3),
(4, 4, 4),
(5, 5, 5),
(6, 6, 6),
(7, 7, 7),
(8, 8, 8),
(9, 9, 9),
(10, 10, 10);
-- Insertar datos en PiecesOfLuggage
INSERT INTO PiecesOfLuggage (Number, Weight, CouponID) VALUES
(2, 20.5, 1),
(1, 15.0, 2),
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- (3, 25.7, 3),
- (2, 22.3, 4),
- (1, 18.2, 5),
- (2, 19.5, 6),
- (1, 17.8, 7),
- (2, 20.0, 8),
- (3, 28.4, 9),
- (2, 23.1, 10);