SQL CODE

**Creating Database**

DROP DATABASE IF EXISTS Skyfall

GO

CREATE DATABASE Skyfall

GO

**Creating Tables**

USE Skyfall

GO

CREATE TABLE Seat

(

Seat\_Code varchar(10) PRIMARY KEY,

Seat\_Placement int

);

CREATE TABLE Baggage

(

Baggage\_Code varchar(10) PRIMARY KEY,

Weight decimal

);

CREATE TABLE Destinations

(

Destination\_ID varchar(3) PRIMARY KEY,

Destination\_Name varchar(30)

);

CREATE TABLE Flight

(

Flight\_Code varchar(30) PRIMARY KEY,

Destination\_ID varchar(3) FOREIGN KEY REFERENCES Destinations(Destination\_ID),

Departure\_Time datetime,

Arrival\_Time datetime,

Total\_Baggage\_Weight decimal,

Seats\_Available int

);

CREATE TABLE Passengers

(

Passenger\_Code varchar(15) PRIMARY KEY,

Baggage\_Code varchar(10) FOREIGN KEY REFERENCES Baggage(Baggage\_Code),

Seat\_Code varchar(10) FOREIGN KEY REFERENCES Seat(Seat\_Code),

First\_Name varchar(30),

Last\_Name varchar(30),

Contact\_Email varchar(30)

);

CREATE TABLE Passengers\_on\_flight

(

Passenger\_Code varchar(15) NOT NULL,

Flight\_Code varchar(30) NOT NULL,

CONSTRAINT PK\_Passengers\_On\_Flight PRIMARY KEY (Passenger\_Code, Flight\_Code),

FOREIGN KEY (Passenger\_Code) REFERENCES Passengers(Passenger\_Code),

FOREIGN KEY (Flight\_Code) REFERENCES Flight(Flight\_Code)

);

**Populating Destinations with data**

USE Skyfall

GO

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('JHB','OR Thambo')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('CPT','Cape Town')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('RAA','Rand Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('GCA','Grand Central Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('WNA','Wonderboom National Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('GAA','Greytown Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('VAA','Vereeniging Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('PAA','Potchefstroom Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('KAA','Krugersdorp Aerodrome')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('BAA','Brakpan Airfield')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('WAA','Witbank Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('NMA','Newcastle Municipal Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('BBA','Bethlehem Airport')

INSERT INTO Destinations (Destination\_ID, Destination\_Name)

VALUES ('RRA','Rustenburg Airfield')

**SQL Queries used in program**

**Add Flight**

$"INSERT INTO Flight VALUES('{lblFlightOut.Text}', '{cbxDestination.Text}', '{dateDeparture.Value}', '{dateArrival.Value}', '{Double.Parse(txtTotalBaggage.Text)}', '{Double.Parse(txtSeatsAvail.Text)}')";

**Add Passenger, baggage and seat**

$"INSERT INTO Baggage VALUES( '{baggageCode}','{Double.Parse(txtBaggageWeight.Text)}')";

$"INSERT INTO Seat VALUES ('{seatCode}', '{seatNum}')";

$"INSERT INTO Passengers VALUES('{passengerCode}','{baggageCode}','{seatCode}','{txtName.Text}', '{txtSurname.Text}', '{txtEmail.Text}')";

**Search Queries used**

"SELECT \* FROM Flight WHERE Flight\_Code = '{txtFlightNum.Text}'"

$"SELECT \* FROM Flight WHERE Destination\_ID = '{cbxDestination.SelectedItem.ToString()}' ";

$"SELECT \* FROM Flight WHERE Total\_Baggage\_Weight = '{numBaggage.Text}' ";

$"SELECT \* FROM Flight WHERE Seats\_Available = '{numericUpDown1.Text}' ";

$"SELECT \* FROM Flight WHERE Departure\_Time&Date LIKE '{dtpDepart.Format}' ";