USE MASTER

GO

ALTER DATABASE FanshaweDroneShare set single\_user with rollback immediate;

GO

DROP DATABASE FanshaweDroneShare;

GO

CREATE DATABASE FanshaweDroneShare;

GO

USE FanshaweDroneShare;

GO

CREATE TABLE Stations(

StationID INT IDENTITY(1,1),

NAME NVARCHAR(20) NOT NULL,

MaxDrones INT NOT NULL,

CurrentDronesCount INT NOT NULL,

CONSTRAINT PK\_Stations PRIMARY KEY (StationID)

);

CREATE TABLE Drones(

DroneID INT IDENTITY(1,1),

IDMarkings VARCHAR(30) NOT NULL,

ManufactureName VARCHAR(20) NOT NULL,

Wieght INT NOT NULL,

ModelName NVARCHAR(30) NOT NULL,

SerialNumber Nvarchar(30) NOT NULL,

ManufacturedDate DATE,

StationID INT NOT NULL,

CurrentStationID INT NOT NULL,

HomeStationID INT NOT NULL,

CONSTRAINT PK\_Drones PRIMARY KEY (DroneID),

CONSTRAINT FK\_Drones\_Stations FOREIGN KEY (StationID) REFERENCES Stations(StationID),

CONSTRAINT FK\_Accessories\_CurrentStation FOREIGN KEY (CurrentStationID) REFERENCES Stations(StationID),

CONSTRAINT FK\_Accessories\_HomeStation FOREIGN KEY (HomeStationID) REFERENCES Stations(StationID)

);

CREATE TABLE Accessories (

AccessoryID INT IDENTITY(1,1),

ManufacturerName NVARCHAR(30) NOT NULL,

Wieght INT NOT NULL,

ModelName NVARCHAR(30) NOT NULL,

SerialNumber Nvarchar(30) NOT NULL,

ManufacturedDate DATE,

StationID INT NOT NULL,

CurrentStationID INT NOT NULL,

HomeStationID INT NOT NULL,

CONSTRAINT PK\_Accessories PRIMARY KEY (AccessoryID),

CONSTRAINT FK\_Accessories\_Stations FOREIGN KEY (StationID) REFERENCES Stations(StationID)

CONSTRAINT FK\_Accessories\_CurrentStation FOREIGN KEY (CurrentStationID) REFERENCES Stations(StationID),

CONSTRAINT FK\_Accessories\_HomeStation FOREIGN KEY (HomeStationID) REFERENCES Stations(StationID)

);

CREATE TABLE Pilots(

PilotID INT IDENTITY(1,1),

FirstName VARCHAR(20) NOT NULL,

LastName VARCHAR(20) NOT NULL,

DronePilotCertificateNumber NVARCHAR(30) NOT NULL,

SINNum VARCHAR(30) NOT NULL,

DateOfBirth DATE NOT NULL,

CONSTRAINT PK\_Pilots PRIMARY KEY (PilotID)

);

CREATE TABLE Addresses (

AddressID INT IDENTITY(1,1),

StreetAddress NVARCHAR(40) NOT NULL,

City NVARCHAR(10) NOT NULL,

Province NVARCHAR(20) NOT NULL,

PostalCode NVARCHAR(20) NOT NULL,

CONSTRAINT PK\_Addresses PRIMARY KEY (AddressID)

);

--JUNCTION TABLE

CREATE TABLE PilotAddresses (

PilotAddressID INT IDENTITY(1,1),

PilotID INT NOT NULL,

AddressID INT NOT NULL,

CONSTRAINT PK\_PilotAddresses PRIMARY KEY (PilotAddressID),

CONSTRAINT FK\_PilotAddresses\_Pilots FOREIGN KEY (PilotID) REFERENCES Pilots(PilotID),

CONSTRAINT FK\_PilotAddresses\_Addresses FOREIGN KEY (AddressID) REFERENCES Addresses(AddressID)

);

CREATE TABLE Accounts (

AccountID INT IDENTITY(1,1),

AccountNumber NVARCHAR(50) NOT NULL UNIQUE,

OpeningDate DATE NOT NULL,

CurrentBalance DECIMAL(18, 2) NOT NULL,

CONSTRAINT PK\_Accounts PRIMARY KEY (AccountID)

);

--Junction Table

CREATE TABLE PilotAccounts (

PilotAccountID INT IDENTITY(1,1),

PilotID INT NOT NULL,

AccountID INT NOT NULL,

CONSTRAINT PK\_PilotAccounts PRIMARY KEY (PilotAccountID),

CONSTRAINT FK\_PilotAccounts\_Pilots FOREIGN KEY (PilotID) REFERENCES Pilots(PilotID),

CONSTRAINT FK\_PilotAccounts\_Accounts FOREIGN KEY (AccountID) REFERENCES Accounts(AccountID)

);

-- Create Checkouts table

CREATE TABLE Checkouts (

CheckoutID INT IDENTITY(1,1),

PilotID INT NOT NULL,

DroneID INT Null,

AccessoryID INt Null,

CheckoutDate DATETIME NOT NULL,

ReturnDate DATETIME,

CONSTRAINT PK\_Checkouts PRIMARY KEY (CheckoutID),

CONSTRAINT FK\_Checkouts\_Pilots FOREIGN KEY (PilotID) REFERENCES Pilots(PilotID),

CONSTRAINT FK\_Checkouts\_Drones FOREIGN KEY (DroneID) REFERENCES Drones(DroneID),

CONSTRAINT FK\_Checkouts\_Accessories FOREIGN KEY (AccessoryID) REFERENCES Accessories(AccessoryID)

);