GO

-- FK from Device

IF OBJECT\_ID('StoredData')

IS NOT NULL DROP TABLE StoredData;

-- FK from ProviderAccount, DeviceData

IF OBJECT\_ID('Device')

IS NOT NULL DROP TABLE Device;

IF OBJECT\_ID('DeviceData')

IS NOT NULL DROP TABLE DeviceData;

GO

-- FK from Account

IF OBJECT\_ID('ProviderAccount')

IS NOT NULL DROP TABLE ProviderAccount;

-- FK from Account

IF OBJECT\_ID('Details')

IS NOT NULL DROP TABLE Details;

IF OBJECT\_ID('Account')

IS NOT NULL DROP TABLE Account;

GO -- CREATE TABLES

CREATE TABLE Account (

accountID INT IDENTITY(1000, 1) PRIMARY KEY,

email VARCHAR(255) NOT NULL,

password VARCHAR(255) NOT NULL,

firstname VARCHAR(255) NOT NULL,

lastname VARCHAR(255) NOT NULL,

birthdate DATE NOT NULL,

type VARCHAR(255) NOT NULL,

CHECK (type IN ('Admin', 'Business', 'Consumer'))

)

CREATE TABLE Details (

accountID INT PRIMARY KEY,

familysize INT,

children INT,

adults INT,

rooms INT,

address VARCHAR(255),

FOREIGN KEY(accountID) REFERENCES Account(accountID)

)

CREATE TABLE ProviderAccount (

accountID INT PRIMARY KEY,

username VARCHAR(255) NOT NULL,

password VARCHAR(255) NOT NULL,

provider VARCHAR(255) NOT NULL, -- want to restrict somehow

FOREIGN KEY(accountID) REFERENCES Account(accountID)

)

CREATE TABLE DeviceData (

dataID INT PRIMARY KEY,

state VARCHAR(255) NOT NULL,

kwhour FLOAT(2) NOT NULL -- number with 2 decimals

)

CREATE TABLE Device (

deviceID INT PRIMARY KEY,

category VARCHAR(255),

accountID INT NOT NULL,

dataID INT NOT NULL,

FOREIGN KEY(accountID) REFERENCES Account(accountID),

FOREIGN KEY(dataID) REFERENCES DeviceData(dataID)

)

CREATE TABLE StoredData (

deviceID INT PRIMARY KEY,

state VARCHAR(255) NOT NULL,

datetime DATETIME DEFAULT(getdate()), -- stores both date and time

FOREIGN KEY(deviceID) REFERENCES Device(deviceID)

)

-- ADMIN

-- only needs to have a log in

GO -- Create account data

INSERT INTO Account VALUES('abc@123.com', 'admin', 'john', 'smith', '2015-11-14', 'Admin');

-- CONSUMER

-- will have login, provider log in, and device data

GO -- Create account data

INSERT INTO Account VALUES('john@hotmail.com', 'consumer', 'john', 'smith', '2015-11-14', 'Consumer');

INSERT INTO Details VALUES(1001, 4, 2, 2, 6, '1234 2nd Street');

INSERT INTO ProviderAccount VALUES(1001, 'john@hotmail.com', 'consumer', 'Nest');

GO -- create device data

INSERT INTO DeviceData VALUES(1, '78 Degrees F', 25.50);

INSERT INTO Device VALUES(1, 'Thermostat', 1001, 1);

INSERT INTO StoredData VALUES(1, '78 Degrees F', DEFAULT);

-- CONSUMER

-- will have login, provider log in, and device data

GO -- Create account data

INSERT INTO Account VALUES('bob@hotmail.com', 'consumer', 'bob', 'miller', '2015-11-14', 'Consumer');

INSERT INTO Details VALUES(1002, 4, 2, 2, 6, '1234 56th Street');

INSERT INTO ProviderAccount VALUES(1002, 'bob@hotmail.com', 'consumer', 'Samsung');

GO -- create device data

INSERT INTO DeviceData VALUES(2, 'On', 25.50);

INSERT INTO Device VALUES(2, 'Smart Bulb', 1002, 2);

INSERT INTO StoredData VALUES(2, 'On', DEFAULT);

-- CONSUMER

-- will have login, provider log in, and device data

GO -- Create account data

INSERT INTO Account VALUES('reggie@hotmail.com', 'consumer', 'reggie', 'bush', '2015-11-14', 'Consumer');

INSERT INTO Details VALUES(1003, 4, 2, 2, 6, '1234 New orleans Street');

INSERT INTO ProviderAccount VALUES(1003, 'reggie@hotmail.com', 'consumer', 'Nest');

GO -- create device data

INSERT INTO DeviceData VALUES(3, '54 Degrees F', 25.50);

INSERT INTO Device VALUES(3, 'Thermostat', 1003, 3);

INSERT INTO StoredData VALUES(3, '54 Degrees F', DEFAULT);

-- BUSINESS

-- will have login, and gather anonymous device data, no provider account

GO -- Create account data

INSERT INTO Account VALUES('david@hotmail.com', 'business', 'david', 'attenborough', '2015-11-14', 'Business');

INSERT INTO Details VALUES(1004, 4, 2, 2, 6, '1234 3nd Street');

GO -- View data

SELECT \* FROM Account;

SELECT \* FROM Details;

SELECT \* FROM ProviderAccount;

SELECT \* FROM DeviceData;

SELECT \* FROM Device;

SELECT \* FROM StoredData;