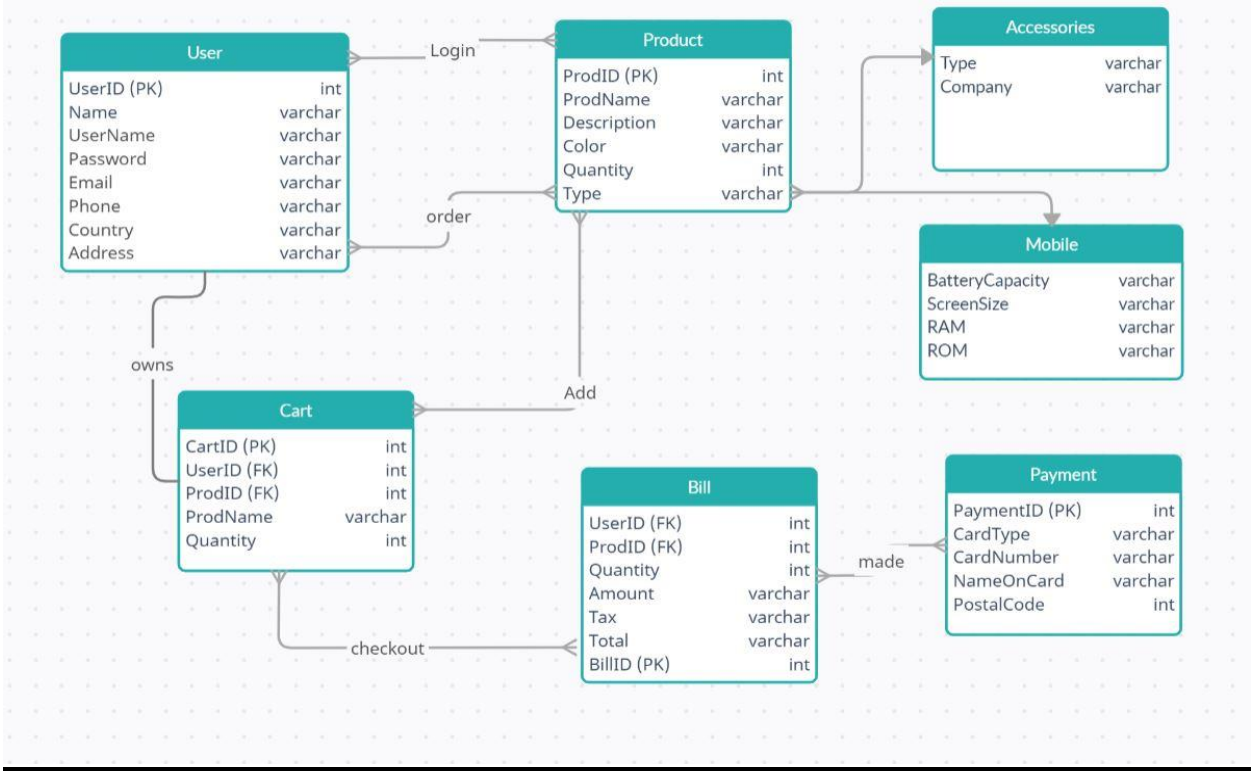
ER_DIAGRAM_OF_CELLPHONE_STORE



SQL DDL Database Creation:

```
CREATE DATABASE CellPhone_DB;
```

SQL DDL Table Creation:

```
CREATE TABLE User (
        UserID int PRIMARY KEY,
        Name varchar (255),
        UserName varchar (255) NOT NULL,
        Password varchar (255) NOT NULL,
        Email varchar (255),
        Phone varchar (255),
        Country varchar (255),
        Address varchar (255)
);
```

SQL DML Data Insertion into Tables:

```
INSERT INTO User (Name, UserName, Password, Email, Phone, Country, Address) VALUES (23, 'David', 'David007', 'KJHsd4fKSD3', 'iamDavid1@gmail.com', '002343475424', 'United States', 'H# 23 St# 1 New York New York');

INSERT INTO User (Name, UserName, Password, Email, Phone, Country, Address) VALUES (67, 'James', 'James230', 'YUU/sd4fKSSDF','james13@gmail.com','00945458721','Canada','H# 02 St# 5 Calgary Canada');

INSERT INTO User (Name, UserName, Password, Email, Phone, Country, Address) VALUES (87, 'Stone', 'Stone322', 'SCXN3,.SDDF','mrstone2@gmail.com' ,'003456787429','Germany','H# 01 St# 6 Bonn Germany');
```

SQL DDL Table Creation:

```
CREATE TABLE Product (
        ProdID int PRIMARY KEY,
        ProdName varchar (255) NOT NULL,
        Description varchar (255),
        Color varchar (255),
        Quantity int,
        Type varchar (255) NOT NULL
);
```

SQL DML Data Insertion into Tables:

INSERT INTO Product (ProdID, ProdName, Description, Color, Quantity, Type) VALUES (1, 'IphoneX', 'Phone by Apple', 'Black', 20, 'Mobile');

INSERT INTO Product (ProdID, ProdName, Description, Color, Quantity, Type) VALUES (1, 'Iphone11 Pro', 'Phone by Apple', 'Golden', 45, 'Mobile');

INSERT INTO Product (ProdID, ProdName, Description, Color, Quantity, Type) VALUES (1, 'Iphone8 plus', 'Phone by Apple', 'Metallic', 70, 'Mobile');

SQL DDL Table Creation:

```
CREATE TABLE Mobile (
        BatteryCapacity varchar (255),
        ScreenSize varchar (255),
        RAM varchar (255),
        ROM varchar (255)
);
```

SQL DML Data Insertion into Tables:

INSERT INTO Mobile (BatteryCapacity, ScreenSize, RAM, Rom) VALUES ('4000mah', '5.9Inch', '8GB','256GB');

INSERT INTO Mobile (BatteryCapacity, ScreenSize, RAM, Rom) VALUES ('3500mah', '6Inch', '6GB','128GB');

INSERT INTO Mobile (BatteryCapacity, ScreenSize, RAM, Rom) VALUES ('4300mah', '6.7Inch', '4GB','64GB');

SQL DDL Table Creation:

```
CREATE TABLE Accessories (
        Type varchar (255),
        Company varchar (255)
);
```

SQL DML Data Insertion into Tables:

INSERT INTO Accessories (type, Company) VALUES ('Handsfree', 'Runin');

INSERT INTO Accessories (type, Company) VALUES ('Charger', 'LogiTech');

INSERT INTO Accessories (type, Company) VALUES ('Data Cable', 'Runin');

SQL DDL Table Creation:

```
CREATE TABLE Cart (
        CartID int PRIMARY KEY,
        UserID int FOREIGN KEY REFERENCES User (UserID),
        ProdID int FOREIGN KEY REFERENCES Product (ProdID),
        ProdName varchar (255),
        Quantity int
);
```

SQL DML Data Insertion into Tables:

```
INSERT INTO Cart (CartID, PersonID, ProdID, ProdName, Quantity) VALUES (345, 123, 243, 'Apple Iphone X', 1); INSERT INTO Cart (CartID, PersonID, ProdID, ProdName, Quantity) VALUES (567, 234, 342, 'Apple Iphone 12', 3); INSERT INTO Cart (CartID, PersonID, ProdID, ProdName, Quantity) VALUES (873, 345, 567, 'Apple Iphone 13 Pro Max', 5);
```

SQL DDL Table Creation:

```
CREATE TABLE Bill (
        UserID int FOREIGN KEY REFERENCES User (UserID),
        ProdID int FOREIGN KEY REFERENCES Product (ProdID),
        Quantity int,
        Amount varchar (255) NOT NULL,
        Tax varchar (255) NOT NULL,
        Total varchar (255) NOT NULL,
        BillID int (255) PRIMARY KEY
);
```

SQL DML Data Insertion into Tables:

```
INSERT INTO Bill (UserID, ProdID, Quantity, Amount, Tax, Total, BillID) VALUES (2323, 5654, 7,'$340','10%','$374','ADS232');

INSERT INTO Bill (UserID, ProdID, Quantity, Amount, Tax, Total, BillID) VALUES (5453, 3234, 10,'$280','17%','$324','AGF256');

INSERT INTO Bill (UserID, ProdID, Quantity, Amount, Tax, Total, BillID) VALUES (2786, 2147, 14,'$680','12%','$746','ERD298');
```

SQL DDL Table Creation:

```
CREATE TABLE Payment (
        PaymentID int PRIMARY KEY,
        CardType varchar (255),
        CardNumber varchar (255),
        NameOnCard varchar (255),
        PostalCode int
);
```

SQL DML Data Insertion into Tables:

```
INSERT INTO Payment (PaymentID, CardType, CardNumber, NameOnCard, PostalCode) VALUES (45, 'MasterCard', '3423-3423-6756-2346', 'Jamieson', 33256);

INSERT INTO Payment (PaymentID, CardType, CardNumber, NameOnCard, PostalCode) VALUES (34, 'VISA', '1422-3453-4545-8987', 'Starmo', 17654);

INSERT INTO Payment (PaymentID, CardType, CardNumber, NameOnCard, PostalCode) VALUES (65, 'Stripe', '5676-5674-7876-1267', 'Featic', 55656);
```

Creating Index on Tables:

```
CREATE INDEX user_by_key ON User (UserID);

CREATE INDEX cart_by_user ON Cart (UserID);

CREATE INDEX bill_by_ID ON Bill (BillID);

CREATE INDEX payments_by_PostalCode ON Payment (PostalCode);
```