

Information Systems and Data Modeling – IT1090



Assignment

Title: (Online Pharmacy Portal)

Batch Number: (Y1.S2.WD.CSNE.01.01)

Group Number: (MLB_CSNE_01.01_03)

Declaration:

We hold a copy of this assignment that we can produce if the original is lost or damaged.

We hereby certify that no part of this assignment has been copied from any other group's work or from any other source. No part of this assignment has been written / produced for our group by another person except where such collaboration has been authorized by the subject lecturer/tutor concerned.

Group Members:

IT23199194	K.P.D.M.Somachandra
IT23184176	Wanniarachchi C.P.
IT23158672	A.M.G.Kaveetha Dulanjali
IT23150652	D.C.B.V.D.S. WIMALASENA
IT23361218	B.S.G.T.Sandeepa


.....
signature

.....
signature

.....
signature

.....
signature

.....
signature

Submitted on: <03/05/2024>

Table of content

Table of Contents

1.0	Introduction.....	3
2.0	Hypothetical scenario	4
3.0	Requirement Analysis	5
3.1	Main requirements for the website.	5
3.2	Data Requirements	8
4.0	ER Diagram.....	11
5.0	Relational Schema.....	12
6.0	SQL Queries.....	13
7.0	Sample Data	23

1.0 Introduction

When we deeply dive into the problems of the modern world, we recognize so many problems related to the medical industry. We are therefore attempting to identify the best fix for such issues. We can see that everyone's life is made easier by the internet. We can create an portal related to online pharmacy services using the power of technology.

At our online pharmacy portal we understand the importance of providing healthcare services with maximum convenience and efficiency for the users. Users can effortlessly explore a wide range of pharmaceutical products, including prescription and over the counter remedies from our platform. Ensuring a seamless and safe user experience is our top priority. We guarantee trust in every transaction by enforcing stringent private policies and using safe payment methods to safeguard our client's sensitive information.

The online pharmacy system was created for the ISDM module using entity relationship diagram and a sample database, respectively. The online pharmacy scenario allows customers to login to their accounts by entering their username and password into the online pharmacy system. A database is necessary because managing a computer based stored data system is simpler than managing written or typed documents.

2.0 Hypothetical scenario

In this scenario, the online pharmacy portal serves customers conveniently. Consider a situation where a patient called Nuwan wants to get some medical pills for his cholesterol situation. He logs into the system using his account and provide his prescription details issued by doctor, Dr. Dinesh Perera including doctors' details. Regarding the prescription issued by the doctor, Nuwan can order relevant medicine.

After that Nuwan places an Order for required medication using the portal, the portal automatically assigns a delivery service with a sales representative, and the order details are sent to Nuwan's account and Nuwan can track the delivery process.

The administrator at the portal overseas the order process and ensures that Nuwan's medication delivered on time and without any disturbance. If there are any issues related to the above process, Nuwan always can contact the support team of the online pharmacy portal for any matter regarding to his order. Overall, the online pharmacy portal streamlines the process for patients like Nuwan, providing a seamless healthcare experience. Also, he has the facility to return his products under some terms and conditions.

3.0 Requirement Analysis

3.1 Main requirements for the website.

3.1.1 Functional requirements

Online pharmacy portal system has functionalities like login, confirmation, money transaction, customer information, doctor details, delivery service details, sales report details and administrator controls. Customers and administrators can access to the system by different platforms like mobile phones, desktop computers and laptops.

User customer requirements

Basically, customer use this system to order medicine and get delivered it to their household. They must have their doctor's permission for this process. Without that user cannot buy medicine from the online pharmacy portal.

- Users can change their passwords and usernames.
- User can log out from the system.
- User can transfer money to the pharmacy account after buying products.
- User can select medicine from a variety of brands.
- User can order medicine.
- Users can add customer inquiries.

Administrator requirements

Administrator has most of the higher-level access for the system.

- Admin can login/logout from the system.
- Admin can have access to the sales reports.
- Admin has access to all money transactions.
- Admin can manage orders.
- Admin can shut down the system if required.

Software development team can

- Access the backend.
- Adding updates to the system.

System requirements

- System needs to store all the user information, usernames, passwords, account details.
- System needs to store all transaction details.
- System needs to store order details and sales reports.
- System allows to customer profile managements.
- Check the login details every time customer requires access.
- System should have the space to expand the database if needed.

3.1.2 Non-Functional requirements

Requirements that are not directly related to the information system but highly affect its performance, reliability, security, scalability, usability, maintainability, compatibility, and regulatory compliance are called Non-Functional Requirements. These requirements are crucial to give the expected user requirements and to get the desired output from the information system.

Performance Requirements

- 24/7 availability
- Scalability
- Stability
- Speed Response
- Throughput
- Concurrency
- Stability
- Minimum data processing time

Reliability Requirements

- Fault Tolerance
- Recovery Time Objective (RTO)
- Data Integrity
- Error Handling

- Backup
- Software Updates
- Monitoring and Alerting

Security Requirements

- Access Control
- Authentication
- Authorization
- Data Encryption
- Auditing and Logging
- Security Patch Management
- Physical Security
- Compliance Requirements

Maintainability Requirements

- Code Readability and Documentation
- Testability
- Error handling
- Dependency Management
- Support for Automated Deployment

Other Requirements

- Cost savings for both the pharmacy and the customer
- Training and Knowledge Transfer to System Administrators and staff
- Data Retention and Archiving

Regulatory compliance requirements

- Data Privacy Regulations (GDPR, CCPA, etc.) and Data Security Standards
- Security Standards
- Financial Regulations
- Healthcare and Safety Regulations
- Telecommunication Standards
- Ethical Standards

3.2 Data Requirements

1. Customer

- CustomerID
- Address
- StaffID
- Phone
- Email
- Age
- FirstName
- Last name

2. CustomerCart:

- CartID
- Quantity
- LastModified
- CreatedAt

3. SalesRepresentative:

- StaffID
- FirstName
- LastName
- Email
- Phone

4. Supplier:

- SupplierID
- SupplierName
- Address
- BussinessName
- Email
- Phone

5. CustomerPayments:

- PaymentID
- PaymentMethod
- OrderID
- PaymentDate
- Amount paid

6. UserLogin:

- UserID
- UserName
- AccountStatus
- UserType
- Password

7. CustomerInquiries:

- InquiryID
- Status
- Description
- InquiryDate
- Subject

8. Prescription:

- PrescriptionID
- MedicationDetails
- PresceiptionDate

9. Order_0:

- OrderID
- CartID
- OrderDate
- Status
- Quantity

10.Product:

- ProductID
- ProductName
- Description
- Price
- QuantityAvaliable

11. Administator:

- AdminID
- Name
- Phone
- Email

12.Doctor:

- DoctorID
- Name
- Email
- Phone

13. DeliveryServices:

- ServicePersonID
- DeliveringDate
- ContactNo

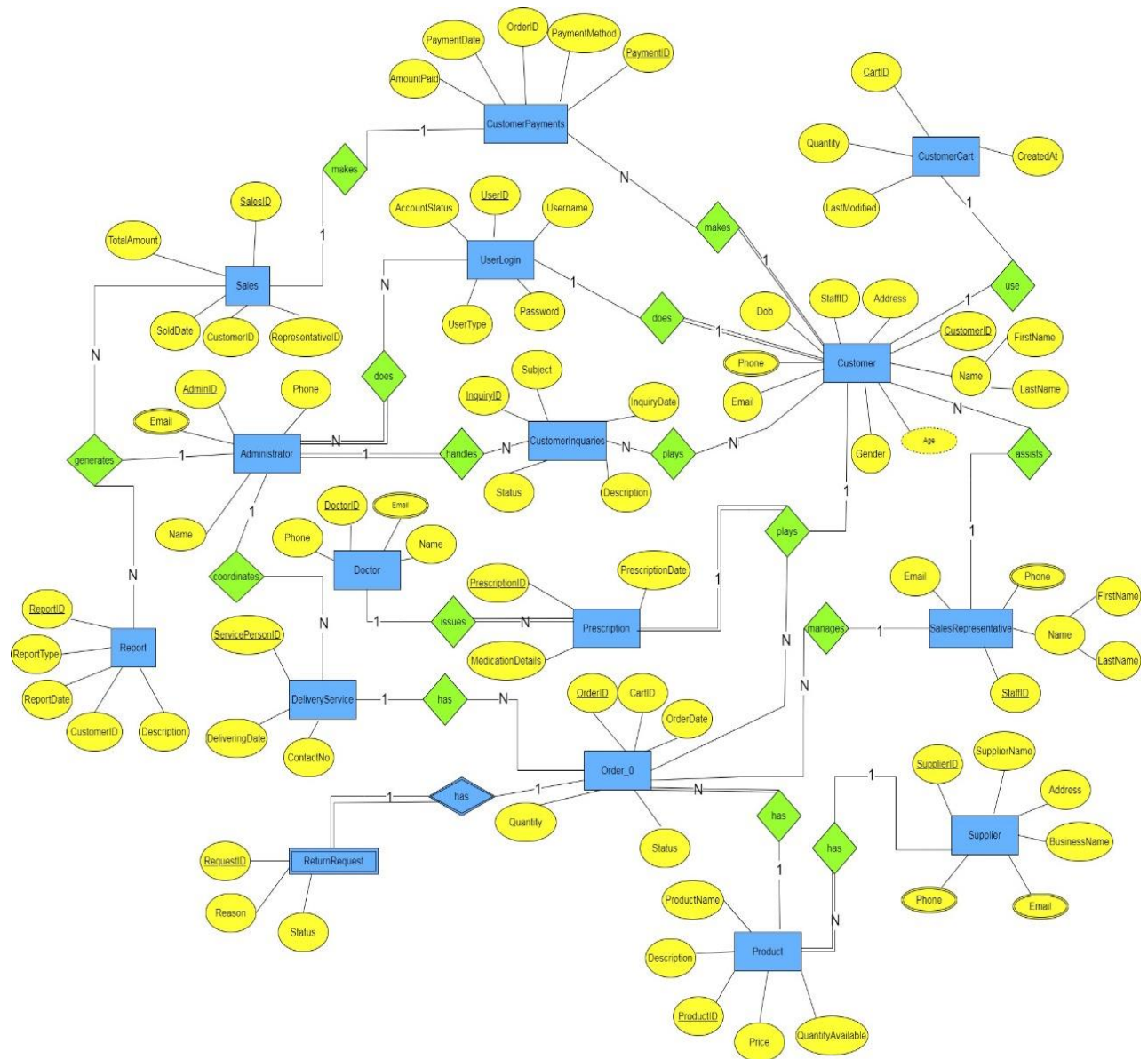
14. Report:

- ReportID
- CustomerID
- ReportType
- ReportDate
- Description

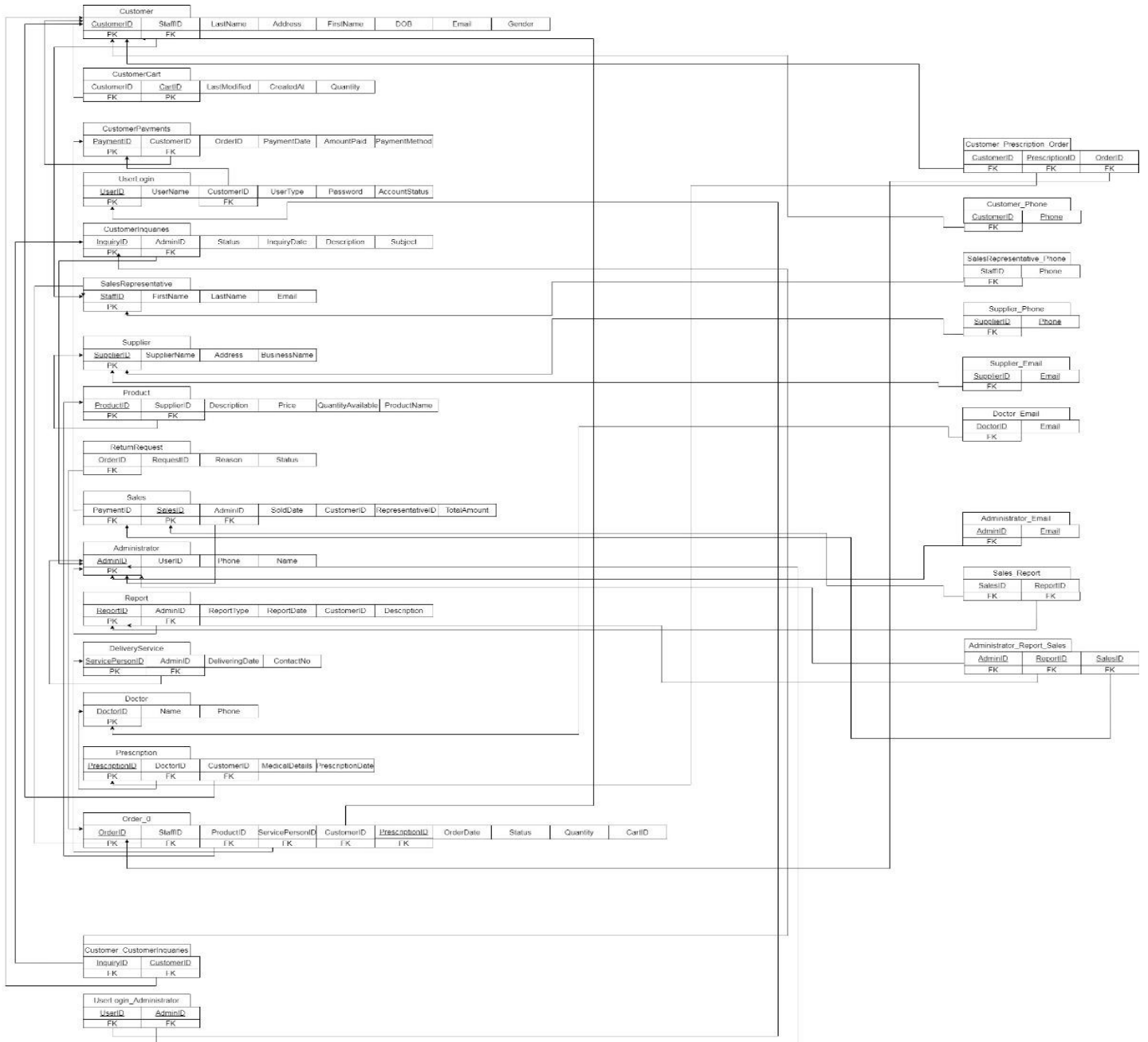
15. ReturnRequest:

- RequestID
- Reason
- Status

11 | Page



5.0 Relational Schema



6.0 SQL Queries

```
/* Table Administrator */
create table Administrator(
    AdminID varchar(10) not null,
    UserID varchar(10) not null,
    Phone decimal(10,0) not null,
    Name varchar(100) not null,

    constraint AdminID_PK PRIMARY KEY(AdminID)
);

/* Table Administrator_Email */
CREATE TABLE Administrator_Email(
    AdminID varchar(10) NOT NULL,
    Email varchar(40) CHECK(Email LIKE '%@%._%') not null,

    CONSTRAINT Administrator_Email_AdminID_FK1 FOREIGN KEY (AdminID) REFERENCES
Administrator(AdminID),
);

/* Table Supplier */
create table Supplier (
    SupplierID varchar(10) not null,
    supplierName varchar(100) not null,
    address varchar(100) not null,
    BusinessName varchar(100) not null,

    constraint Supplier_PK PRIMARY KEY(SupplierID)
);

/* Table Supplier_Phone */
CREATE TABLE Supplier_Phone(
    SupplierID varchar(10) NOT NULL,
    Phone decimal(10,0) not null,

    CONSTRAINT Supplier_Phone_SupplierID_FK1 FOREIGN KEY (SupplierID) REFERENCES
Supplier(SupplierID),
);

/* Table Supplier_Email */
CREATE TABLE Supplier_Email(
    SupplierID varchar(10) NOT NULL,
    Email varchar(40) CHECK(Email LIKE '%@%._%') not null,

    CONSTRAINT Supplier_Email_SupplierID_FK1 FOREIGN KEY (SupplierID) REFERENCES
Supplier(SupplierID),
);

/* Table Doctor */
create table Doctor (
    DoctorID varchar(10) not null,
    Name varchar(100) not null,
```

```

        Phone decimal(10,0) not null,

        constraint Doctor_PK PRIMARY KEY(DoctorID)
);

/* Table Doctor_Email */
CREATE TABLE Doctor_Email(
    DoctorID varchar(10) NOT NULL,
    Email varchar(40) CHECK(Email LIKE '%@%._%') not null,

    CONSTRAINT Doctor_Email_DoctorID_FK1 FOREIGN KEY (DoctorID) REFERENCES
Doctor(DoctorID),
);

/* Table SalesRepresentative */
CREATE Table SalesRepresentative(
    StaffID varchar(10) not null,
    FirstName varchar(100) NOT NULL,
    LastName varchar(100) NOT NULL,
    Email varchar(40) CHECK(Email LIKE '%@%._%') not null,

    constraint SalesRepresentative_StaffID_PK PRIMARY KEY(StaffID),
);

/* Table SalesRepresentative_Phone */
CREATE TABLE SalesRepresentative_Phone(
    StaffID varchar(10) NOT NULL,
    Phone decimal(10,0) not null,

    CONSTRAINT SalesRepresentative_Phone_StaffID_FK1 FOREIGN KEY (StaffID) REFERENCES
SalesRepresentative(StaffID),
);

/* Table Customer */
Create table customer(
    CustomerID varchar(10) not null,
    StaffID varchar(10) not null,
    FirstName varchar(100) not null,
    LastName varchar(100) not null,
    Address varchar(100) not null,
    DOB date not null,
    Email varchar(40) CHECK(Email LIKE '%@%._%') not null,

    constraint Customer_PK PRIMARY KEY(CustomerID),
    constraint Customer_StaffID_FK FOREIGN KEY(StaffID) REFERENCES
SalesRepresentative(StaffID)
);

/* Table CustomerCart */
create table CustomerCart(
    CartID varchar(10) not null,
    CreatedAt date not null,
    LastModified date not null,
    Quantity int not null,
    constraint CustomerCart_PK PRIMARY KEY(CARTID)
);

/* Table CustomerPayments */

```

```

create table CustomerPayments(
    PaymentID varchar(10) not null,
    CustomerID varchar(10) not null,
    OrderID varchar(10) not null,
    PaymentDate date not null,
    AmountPaid varchar(10) not null,
    PaymentMethod varchar(100) not null,

    constraint CustomerPayments_PK PRIMARY KEY(PaymentID),
    constraint CustomerPayments_cusiomerID_FK FOREIGN KEY(CustomerID) REFERENCES
Customer(CustomerID)
);

```

```

/* Table Report */
create table Report (
    ReportID varchar(10) not null,
    AdminID varchar(10) not null,
    ReportType varchar(100) not null,
    ReportDate date not null,
    Description varchar(100) not null,
    CustomerID varchar(10) not null,

    constraint Report_PK PRIMARY KEY(ReportID),
    constraint Report_AdminID_FK FOREIGN KEY(AdminID) REFERENCES
Administrator(AdminID)
);

```

```

/* Table Product */
create table Product(
    ProductID varchar(10) not null,
    SupplierID varchar(10) not null,
    Description varchar(100) not null,
    Price char(10) not null,
    QuantityAvailable char(10) not null,
    ProductName varchar(100) not null,

    constraint Product_PK PRIMARY KEY(ProductID),
    constraint Product_supplierID_FK FOREIGN KEY(SupplierID) REFERENCES
Supplier(SupplierID)
);

```

```

/* Table CustomerInquiries */
create table CustomerInquiries(
    InquiryID varchar(10) not null,
    AdminID varchar(10) not null,
    Status varchar(100) not null,
    InquiryDate date not null,
    Description varchar(100) not null,
    Subject varchar(100) not null,

    constraint CustomerInquiries_PK PRIMARY KEY(InquiryID),
    constraint CustomerInquiries_FK FOREIGN KEY(AdminID) REFERENCES
Administrator(AdminID)
);

```

```

/* Table DeliveryService */

```

```

create table DeliveryService(
    ServicePersonID varchar(10) not null,
    AdminID varchar(10) not null,
    DeliveringDate date not null,
    ContactNo int not null,

    constraint DeliveryService_PK PRIMARY KEY(ServicePersonID),
    constraint DeliveryService_adminID_FK FOREIGN KEY(AdminID) REFERENCES
Administrator(AdminID)
);

/* Table UserLogin */
Create table UserLogin(
    UserID varchar(10) not null,
    UserName varchar(100) not null,
    CustomerID varchar(10) not null,
    UserType varchar(100) not null,
    Password varchar(100) not null,
    Accountstatus varchar(100) not null,

    constraint UserLogin_PK PRIMARY KEY(UserID),
    constraint UserLogin_StaffID_FK FOREIGN KEY(CustomerID) REFERENCES
Customer(CustomerID)
);

/* Table Customer_CustomerInquiries */
create table Customer_CustomerInquiries (
    InquiryID varchar(10) not null,
    CustomerID varchar(10) not null,

    constraint Customer_CustomerInquiries_InquiryID_FK FOREIGN KEY(InquiryID)
REFERENCES CustomerInquiries(InquiryID),
    constraint Customer_CustomerInquiries_CustomerID_FK FOREIGN KEY(CustomerID)
REFERENCES Customer(CustomerID)
);

/* Table UserLogin_Administrator */
create table UserLogin_Administrator (
    UserID varchar(10) not null,
    AdminID varchar(10) not null,

    constraint UserLogin_Administrator_UserID_FK FOREIGN KEY(UserID) REFERENCES
UserLogin(UserID),
    constraint Customer_UserLogin_Administrator_AdminID_FK FOREIGN KEY(AdminID)
REFERENCES Administrator(AdminID)
);

/* Table Sales */
create table Sales(
    SalesID varchar(10) not null,
    PaymentID varchar(10) not null,
    AdminID varchar(10) not null,
    SoldDate date not null,
    CustomerID varchar(10) not null,
    RepresentativeID varchar(10) not null,
    TotalAmount char(6) not null,

```



```

        constraint Sales_PK PRIMARY KEY(SalesID),
        constraint Sales_paymentID_FK1 FOREIGN KEY(PaymentID) REFERENCES
CustomerPayments(PaymentID),
        constraint Sales_adminID_FK2 FOREIGN KEY(AdminID) REFERENCES
Administrator(AdminID)
);

/* Table Customer_Phone */
CREATE TABLE Customer_Phone(
    CustomerID varchar(10) NOT NULL,
    Phone decimal(10,0) not null,

    CONSTRAINT Customer_Phone_CustomerID_FK1 FOREIGN KEY (CustomerID) REFERENCES
Customer(CustomerID),
);

/* Table Sales_Report */
CREATE TABLE Sales_Report(
    SalesID varchar(10) NOT NULL,
    ReportID varchar(10) NOT NULL,

    CONSTRAINT Sales_Report_SalesID_FK1 FOREIGN KEY (SalesID) REFERENCES Sales(SalesID),
    CONSTRAINT Sales_Report_ReportID_FK1 FOREIGN KEY (ReportID) REFERENCES
Report(ReportID),
);

/* Table Administrator_Report_Sales */
CREATE TABLE Administrator_Report_Sales(
    AdminID varchar(10) NOT NULL,
    ReportID varchar(10) NOT NULL,
    SalesID varchar(10) NOT NULL,

    CONSTRAINT Administrator_Report_Sales_AdminID_FK1 FOREIGN KEY (AdminID) REFERENCES
Administrator(AdminID),
    CONSTRAINT Administrator_Report_Sales_ReportID_FK1 FOREIGN KEY (ReportID) REFERENCES
Report(ReportID),
    CONSTRAINT Administrator_Report_Sales_SalesID_FK1 FOREIGN KEY (SalesID) REFERENCES
Sales(SalesID),
);

/* Table Prescription */
create table Prescription(
    PrescriptionID varchar(10) not null,
    DoctorID varchar(10) not null,
    CustomerID varchar(10) not null,
    MedicalDetails varchar(200) not null,
    PrescriptionDate date not null,

    constraint PrescriptionID_PK PRIMARY KEY(PRESCRIPTIONID),
    constraint Prescription_DoctorID_FK1 FOREIGN KEY(DOCTORID) REFERENCES
Doctor(DOCTORID),
    constraint Prescription_CustomerID_FK2 FOREIGN KEY(CustomerID) REFERENCES
Customer(CustomerID)
);

/* Table Orders_0 */

```

```

create table Order_0(
    OrderID varchar(10) not null,
    StaffID varchar(10) not null,
    ProductID varchar(10) not null,
    ServicePersonID varchar(10) not null,
    CustomerID varchar(10) not null,
    PrescriptionID char(10) not null,
    Status varchar(100) not null,

    constraint Order_PK PRIMARY KEY(OrderID),
    constraint Order_0_staffID_FK1 FOREIGN KEY(StaffID) REFERENCES
SalesRepresentative(StaffID),
    constraint Order_0_productID_FK2 FOREIGN KEY(ProductID) REFERENCES
Product(ProductID),
    constraint Order_0_servicePersonID_FK3 FOREIGN KEY(ServicePersonID) REFERENCES
DeliveryService(ServicePersonID),
    constraint Order_0_customerID_FK4 FOREIGN KEY(CustomerID) REFERENCES
Customer(CustomerID)
);

/* Table Customer_Prescription_Order */
CREATE TABLE Customer_Prescription_Order(
    CustomerID varchar(10) NOT NULL,
    PrescriptionID varchar(10) NOT NULL,
    OrderID varchar(10) NOT NULL,

    CONSTRAINT Customer_Prescription_Order_CustomerID_FK1 FOREIGN KEY (CustomerID)
REFERENCES Customer(CustomerID),
    CONSTRAINT Customer_Prescription_Order_PrescriptionID_FK2 FOREIGN KEY
(PrescriptionID) REFERENCES Prescription(PrescriptionID),
    CONSTRAINT Customer_Prescription_Order_OrderID_FK2 FOREIGN KEY (OrderID) REFERENCES
Order_0(OrderID)
);

-- Sample data for Administrator table
INSERT INTO Administrator (AdminID, UserID, Phone, Name)
VALUES
('A001', 'U001', 0774567890, 'Anura Perera'),
('A002', 'U002', 0775678901, 'Kamal Fernando'),
('A003', 'U003', 0776789012, 'Nirosha Silva'),
('A004', 'U004', 0777890123, 'Thilini Gunasekara'),
('A005', 'U005', 0778901234, 'Chamara Jayawardena');

-- Sample data for Administrator_Email table
INSERT INTO Administrator_Email (AdminID, Email)
VALUES
('A001', 'anura.perera@gmail.com'),
('A002', 'kamal.fernando@yahoo.com'),
('A003', 'nirosha.silva@outlook.com'),
('A004', 'thilini.gunasekara@hotmail.com'),
('A005', 'chamara.jayawardena@gmail.com');

```

```

-- Sample data for Supplier table
INSERT INTO Supplier (SupplierID, supplierName, address, BusinessName)
VALUES
('SP001', 'Lanka Pharma', 'No. 15, Colombo 7', 'Lanka Pharmaceuticals Ltd'),
('SP002', 'Ceylon Medics', 'No. 23, Kandy Road', 'Ceylon Medics Pvt Ltd'),
('SP003', 'Galle Pharma', 'No. 5, Galle Fort', 'Galle Pharma Ltd'),
('SP004', 'Matara Medics', 'No. 12, Matara Road', 'Matara Medics Pvt Ltd'),
('SP005', 'Jaffna Pharma', 'No. 45, Jaffna Town', 'Jaffna Pharmaceuticals Ltd');

-- Sample data for Supplier_Phone table
INSERT INTO Supplier_Phone (SupplierID, Phone)
VALUES
('SP001', 0774567891),
('SP002', 0775678902),
('SP003', 0776789013),
('SP004', 0777890124),
('SP005', 0778901235);

-- Sample data for Supplier_Email table
INSERT INTO Supplier_Email (SupplierID, Email)
VALUES
('SP001', 'lanka.pharma@gmail.com'),
('SP002', 'ceylon.medics@yahoo.com'),
('SP003', 'galle.pharma@outlook.com'),
('SP004', 'matara.medics@hotmail.com'),
('SP005', 'jaffna.pharma@gmail.com');

-- Sample data for Doctor table
INSERT INTO Doctor (DoctorID, Name, Phone)
VALUES
('D001', 'Dr. Ajith Perera', 0779012345),
('D002', 'Dr. Kamal Gunasekara', 0779112345),
('D003', 'Dr. Anusha Silva', 0779212345),
('D004', 'Dr. Tharindu Jayasinghe', 0779312345),
('D005', 'Dr. Chamali Samaraweera', 0779412345);

-- Sample data for Doctor_Email table
INSERT INTO Doctor_Email (DoctorID, Email)
VALUES
('D001', 'dr.ajith.perera@gmail.com'),
('D002', 'dr.kamal.gunasekara@yahoo.com'),
('D003', 'dr.anusha.silva@outlook.com'),
('D004', 'dr.tharindu.jayasinghe@hotmail.com'),
('D005', 'dr.chamali.samaraweera@gmail.com');

-- Sample data for SalesRepresentative table
INSERT INTO SalesRepresentative (StaffID, FirstName, LastName, Email)
VALUES
('S001', 'Nuwan', 'Perera', 'nuwan.perera@outlook.com'),
('S002', 'Kasun', 'Fernando', 'kasun.fernando@hotmail.com'),
('S003', 'Dinuka', 'Silva', 'dinuka.silva@yahoo.com'),
('S004', 'Tharindu', 'Wickramasinghe', 'tharindu.wick@gmail.com'),
('S005', 'Chamath', 'Gamage', 'chamath.gamage@gmail.com');

-- Sample data for SalesRepresentative_Phone table
INSERT INTO SalesRepresentative_Phone (StaffID, Phone)
VALUES

```

```

('S001', 0771234567),
('S002', 0772345678),
('S003', 0773456789),
('S004', 0774567890),
('S005', 0775678901);

-- Sample data for Customer table
INSERT INTO Customer (CustomerID, StaffID, FirstName, LastName, Address, DOB, Email)
VALUES
('C001', 'S001', 'Tharindu', 'Samarasekara', 'No. 10, Colombo', '1987-06-05',
'tharindu.s@gmail.com'),
('C002', 'S002', 'Dinusha', 'Bandara', 'No. 45, Kandy', '1990-04-18',
'dinusha.b@hotmail.com'),
('C003', 'S003', 'Janaka', 'Perera', 'No. 5, Galle', '1985-10-23',
'janaka.p@outlook.com'),
('C004', 'S004', 'Kasun', 'Silva', 'No. 20, Jaffna', '1992-02-02', 'kasun.s@yahoo.com'),
('C005', 'S005', 'Ruhan', 'Fernando', 'No. 25, Matara', '1991-12-14',
'ruwan.f@gmail.com');

-- Sample data for CustomerCart table
INSERT INTO CustomerCart (CartID, CreatedAt, LastModified, Quantity)
VALUES
('CC001', '2024-01-01', '2024-01-02', 2),
('CC002', '2024-01-02', '2024-01-03', 1),
('CC003', '2024-01-03', '2024-01-04', 3),
('CC004', '2024-01-04', '2024-01-05', 4),
('CC005', '2024-01-05', '2024-01-06', 1);

-- Sample data for CustomerPayments table
INSERT INTO CustomerPayments (PaymentID, CustomerID, OrderID, PaymentDate, AmountPaid,
PaymentMethod)
VALUES
('PY001', 'C001', 'O001', '2024-01-01', '3000', 'Credit Card'),
('PY002', 'C002', 'O002', '2024-01-02', '1500', 'Debit Card'),
('PY003', 'C003', 'O003', '2024-01-03', '2500', 'Cash'),
('PY004', 'C004', 'O004', '2024-01-04', '1800', 'Bank Transfer'),
('PY005', 'C005', 'O005', '2024-01-05', '4000', 'Credit Card');

-- Sample data for Report table
INSERT INTO Report (ReportID, AdminID, ReportType, ReportDate, Description, CustomerID)
VALUES
('RP001', 'A001', 'INFO', '2024-01-01', 'Daily sales report', 'C001'),
('RP002', 'A002', 'WARN', '2024-01-02', 'Customer complaint report', 'C002'),
('RP003', 'A003', 'INFO', '2024-01-03', 'Inventory report', 'C003'),
('RP004', 'A004', 'ERROR', '2024-01-04', 'Payment error report', 'C004'),
('RP005', 'A005', 'WARN', '2024-01-05', 'Late delivery report', 'C005');

-- Sample data for Product table
INSERT INTO Product (ProductID, SupplierID, Description, Price, QuantityAvailable,
ProductName)
VALUES
('P001', 'SP001', 'Blood pressure medication', '500', '100', 'BP Meds'),
('P002', 'SP002', 'Antibiotic', '250', '200', 'Antibiotic'),
('P003', 'SP003', 'Diabetes medication', '600', '150', 'Diabetes Meds'),
('P004', 'SP004', 'Pain relief medication', '400', '300', 'Pain Relief'),
('P005', 'SP005', 'Allergy medication', '350', '250', 'Allergy Meds');

-- Sample data for CustomerInquiries table

```

```

INSERT INTO CustomerInquiries (InquiryID, AdminID, Status, InquiryDate, Description,
Subject)
VALUES
('INQ001', 'A001', 'Pending', '2024-01-01', 'Product availability', 'Product Inquiry'),
('INQ002', 'A002', 'Resolved', '2024-01-02', 'Delivery delay', 'Delivery Inquiry'),
('INQ003', 'A003', 'Pending', '2024-01-03', 'Payment method inquiry', 'Payment Inquiry'),
('INQ004', 'A004', 'Resolved', '2024-01-04', 'Product return inquiry', 'Return Inquiry'),
('INQ005', 'A005', 'Pending', '2024-01-05', 'Prescription question', 'Prescription
Inquiry');

-- Sample data for DeliveryService table
INSERT INTO DeliveryService (ServicePersonID, AdminID, DeliveringDate, ContactNo)
VALUES
('DS001', 'A001', '2024-01-01', 0771234567),
('DS002', 'A002', '2024-01-02', 0772345678),
('DS003', 'A003', '2024-01-03', 0773456789),
('DS004', 'A004', '2024-01-04', 0774567890),
('DS005', 'A005', '2024-01-05', 0775678901);

-- Sample data for UserLogin table
INSERT INTO UserLogin (UserID, UserName, CustomerID, UserType, Password, Accountstatus)
VALUES
('U001', 'tharindu_s', 'C001', 'customer', 'P@ssw0rd', 'Active'),
('U002', 'dinusha_b', 'C002', 'customer', 'Dinusha!23', 'Active'),
('U003', 'janaka_p', 'C003', 'customer', 'J@nakap1', 'Active'),
('U004', 'kasun_s', 'C004', 'customer', 'K@sun!23', 'Active'),
('U005', 'ruwan_f', 'C005', 'customer', 'Ruwan123', 'Active');

-- Sample data for Customer_CustomerInquiries table
INSERT INTO Customer_CustomerInquiries (InquiryID, CustomerID)
VALUES
('INQ001', 'C001'),
('INQ002', 'C002'),
('INQ003', 'C003'),
('INQ004', 'C004'),
('INQ005', 'C005');

-- Sample data for UserLogin_Administrator table
INSERT INTO UserLogin_Administrator (UserID, AdminID)
VALUES
('U001', 'A001'),
('U002', 'A002'),
('U003', 'A003'),
('U004', 'A004'),
('U005', 'A005');

-- Sample data for Sales table
INSERT INTO Sales (SalesID, PaymentID, AdminID, SoldDate, CustomerID, RepresentativeID,
TotalAmount)
VALUES
('S001', 'PY001', 'A001', '2024-01-01', 'C001', 'S001', '3000'),
('S002', 'PY002', 'A002', '2024-01-02', 'C002', 'S002', '1500'),
('S003', 'PY003', 'A003', '2024-01-03', 'C003', 'S003', '2500'),
('S004', 'PY004', 'A004', '2024-01-04', 'C004', 'S004', '1800'),
('S005', 'PY005', 'A005', '2024-01-05', 'C005', 'S005', '4000');

-- Sample data for Customer_Phone table
INSERT INTO Customer_Phone (CustomerID, Phone)

```

```

VALUES
('C001', 0773456789),
('C002', 0774567890),
('C003', 0775678901),
('C004', 0776789012),
('C005', 0777890123);

-- Sample data for Sales_Report table
INSERT INTO Sales_Report (SalesID, ReportID)
VALUES
('S001', 'RP001'),
('S002', 'RP002'),
('S003', 'RP003'),
('S004', 'RP004'),
('S005', 'RP005');

-- Sample data for Administrator_Report_Sales table
INSERT INTO Administrator_Report_Sales (AdminID, ReportID, SalesID)
VALUES
('A001', 'RP001', 'S001'),
('A002', 'RP002', 'S002'),
('A003', 'RP003', 'S003'),
('A004', 'RP004', 'S004'),
('A005', 'RP005', 'S005');

-- Sample data for Prescription table
INSERT INTO Prescription (PrescriptionID, DoctorID, CustomerID, MedicalDetails,
PrescriptionDate)
VALUES
('PR001', 'D001', 'C001', 'Blood pressure medication', '2024-01-01'),
('PR002', 'D002', 'C002', 'Antibiotic', '2024-01-02'),
('PR003', 'D003', 'C003', 'Diabetes medication', '2024-01-03'),
('PR004', 'D004', 'C004', 'Pain relief medication', '2024-01-04'),
('PR005', 'D005', 'C005', 'Allergy medication', '2024-01-05');

-- Sample data for Order_0 table
INSERT INTO Order_0 (OrderID, StaffID, ProductID, ServicePersonID, CustomerID,
PrescriptionID, Status)
VALUES
('O001', 'S001', 'P001', 'DS001', 'C001', 'PR001', 'Completed'),
('O002', 'S002', 'P002', 'DS002', 'C002', 'PR002', 'Completed'),
('O003', 'S003', 'P003', 'DS003', 'C003', 'PR003', 'NotCompleted'),
('O004', 'S004', 'P004', 'DS004', 'C004', 'PR004', 'Completed'),
('O005', 'S005', 'P005', 'DS005', 'C005', 'PR005', 'NotCompleted');

-- Sample data for Customer_Prescription_Order table
INSERT INTO Customer_Prescription_Order (CustomerID, PrescriptionID, OrderID)
VALUES
('C001', 'PR001', 'O001'),
('C002', 'PR002', 'O002'),
('C003', 'PR003', 'O003'),
('C004', 'PR004', 'O004'),
('C005', 'PR005', 'O005');

```

7.0 Sample Data

The screenshot displays the Microsoft SQL Server Management Studio interface. The left pane shows the Object Explorer with the database structure of 'ISDM Online Pharmacy Portal'. The central pane shows a SQL query titled 'SQLQuery1.sql - D:\BPTT3Q2\ASUS (58)*'. The query includes an INSERT statement for the 'Customer_Prescription_Order' table and several SELECT statements to retrieve data from various tables.

Query Results:

Table 1: Customer_Prescription_Order

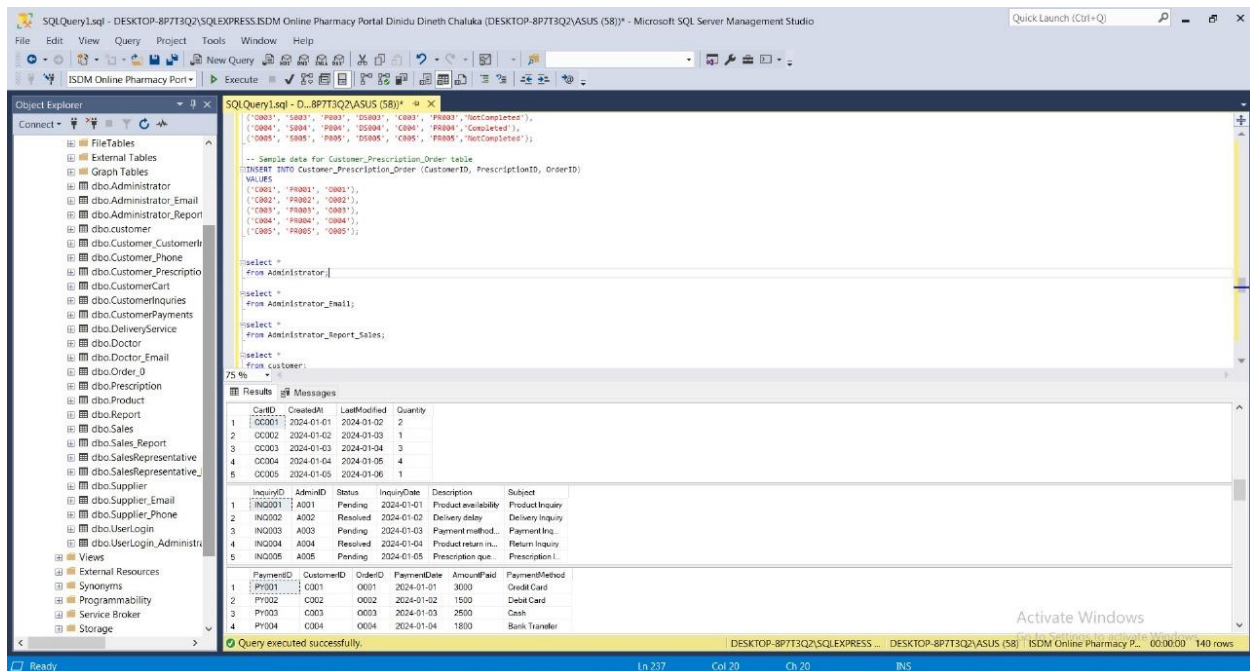
OrderID	StaffID	ProductID	ServicePersonID	CustomerID	PrescriptionID	Status
1	0001	0001	P001	D0001	C001	Completed
2	0002	0002	P002	D0002	C002	Completed
3	0003	0003	P003	D0003	C003	NotComp...
4	0004	0004	P004	D0004	C004	Completed
5	0005	0005	P005	D0005	C005	NotComp...

Table 2: Prescription Details

PrescriptionID	DoctorID	CustomerID	MedicalDetails	PrescriptionDate	
1	P001	D001	C001	Blood pressure medication	2024-01-01
2	P002	D002	C002	Antibiotic	2024-01-02
3	P003	D003	C003	Diabetes medication	2024-01-03
4	P004	D004	C004	Pain relief medication	2024-01-04
5	P005	D005	C005	Allergy medication	2024-01-05

Table 3: Product Details

ProductID	SupplierID	Description	Price	Quantity/Available	ProductName
1	P001	Blood pressure medication	500	100	BP Meds
2	P002	Antibiotic	250	200	Antibiotic
3	P003	Diabetes medication	600	150	Diabetes M...
4	P004	Pain relief medication	400	300	Pain Relief



SQLQuery1.sql - DESKTOP-8P7T3Q2\SQLEXPRESS\ISDM Online Pharmacy Portal Dinidu Dineth Chaluka (DESKTOP-8P7T3Q2\ASUS (58)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

Connect

FileTables

External Tables

Graph Tables

dbo.Administrator

dbo.Administrator_Email

dbo.Administrator_Report

dbo.Customer

dbo.Customer_CustomerInquiry

dbo.Customer_Phone

dbo.Customer_Prescription

dbo.CustomerCart

dbo.CustomerInquiries

dbo.CustomerPayments

dbo.DeliveryService

dbo.Doctor

dbo.Doctor_Email

dbo.Order_0

dbo.Prescription

dbo.Product

dbo.Report

dbo.Sales

dbo.Sales_Report

dbo.SalesRepresentative

dbo.SalesRepresentative_Inquiry

dbo.Supplier

dbo.Supplier_Email

dbo.Supplier_Phone

dbo.UserLogin

dbo.UserLogin_Administrator

Views

External Resources

Synonyms

Programmability

Service Broker

Storage

SQLQuery1.sql - D:\8P7T3Q2\ASUS (58)

```

-- Sample data for Customer_Prescription_Order table
INSERT INTO Customer_Prescription_Order (CustomerID, PrescriptionID, OrderID)
VALUES
('C001', 'P0001', 'O0001'),
('C004', 'S004', 'P004', 'O004', 'P004', 'Completed'),
('O005', 'S005', 'P005', 'O005', 'P005', 'NotCompleted');

-- Sample data for Customer_Prescription_Order table
INSERT INTO Customer_Prescription_Order (CustomerID, PrescriptionID, OrderID)
VALUES
('C001', 'P0001', 'O0001'),
('C002', 'P0002', 'O0002'),
('C003', 'P0003', 'O0003'),
('C004', 'P0004', 'O0004'),
('C005', 'P0005', 'O0005');

--select *
--from Administrator;

--select *
--from Administrator_Email;

--select *
--from Administrator_Report_Sales;

--select *
--from Customer;

```

75 %

Results Messages

SupplierID	Email
SP001	janaka.pharma@gmail.com
SP002	ceylonmeds@yahoo.com
SP003	galle.pharma@outlook.co...
SP004	matara.medical@hotmail...
SP005	jafna.pharma@gmail.com

SupplierID	Phone
SP001	774567891
SP002	775678902
SP003	776789013
SP004	777890124
SP005	778901235

UserID	Username	CustomerID	UserType	Password	AccountStatus
U001	tharindu_s	C001	customer	P@ssw0rd	Active
U002	dinidu_s	C002	customer	Dinidu@23	Active
U003	janaka_s	C003	customer	j@naka@1	Active
U004	kasun_s	C004	customer	K@sun@23	Active

Query executed successfully.

DESKTOP-8P7T3Q2\SQLEXPRESS ... DESKTOP-4P7T3Q2\ASUS (58) ISDM Online Pharmacy P... 00:00:00 140 rows

SQLQuery1.sql - DESKTOP-8P7T3Q2\SQLEXPRESS\ISDM Online Pharmacy Portal Dinidu Dineth Chaluka (DESKTOP-8P7T3Q2\ASUS (58)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

Connect

FileTables

External Tables

Graph Tables

dbo.Administrator

dbo.Administrator_Email

dbo.Administrator_Report

dbo.Customer

dbo.Customer_CustomerInquiry

dbo.Customer_Phone

dbo.Customer_Prescription

dbo.CustomerCart

dbo.CustomerInquiries

dbo.CustomerPayments

dbo.DeliveryService

dbo.Doctor

dbo.Doctor_Email

dbo.Order_0

dbo.Prescription

dbo.Product

dbo.Report

dbo.Sales

dbo.Sales_Report

dbo.SalesRepresentative

dbo.SalesRepresentative_Inquiry

dbo.Supplier

dbo.Supplier_Email

dbo.Supplier_Phone

dbo.UserLogin

dbo.UserLogin_Administrator

Views

External Resources

Synonyms

Programmability

Service Broker

Storage

SQLQuery1.sql - D:\8P7T3Q2\ASUS (58)

```

-- Sample data for Customer_Prescription_Order table
INSERT INTO Customer_Prescription_Order (CustomerID, PrescriptionID, OrderID)
VALUES
('C001', 'P0001', 'O0001'),
('C004', 'S004', 'P004', 'O004', 'P004', 'Completed'),
('O005', 'S005', 'P005', 'O005', 'P005', 'NotCompleted');

-- Sample data for Customer_Prescription_Order table
INSERT INTO Customer_Prescription_Order (CustomerID, PrescriptionID, OrderID)
VALUES
('C001', 'P0001', 'O0001'),
('C002', 'P0002', 'O0002'),
('C003', 'P0003', 'O0003'),
('C004', 'P0004', 'O0004'),
('C005', 'P0005', 'O0005');

--select *
--from Administrator;

--select *
--from Administrator_Email;

--select *
--from Administrator_Report_Sales;

--select *
--from Customer;

```

75 %

Results Messages

CustomerID	Email	FirstName	LastName	Address	DOB	Email
C001	S001	Tharindu	Benarasekera	No. 10, Colombo	1987-09-09	tharindu.s@gmail.com
C002	S002	Dinidu	Bandula	No. 43, Kandy	1990-04-18	dinidu.s@hotmail.com
C003	S003	Janaka	Penna	No. 6, Galle	1985-10-23	janaka.j@outlook.com
C004	S004	Kasun	Silva	No. 20, Jaffra	1992-02-02	kasun.s@yahoo.com
C005	S005	Ruvan	Fernando	No. 25, Matara	1991-12-14	ruven.r@gmail.com

InquiryID	CustomerID
INQ001	C001
INQ002	C002
INQ003	C003
INQ004	C004
INQ005	C005

CustomerID	Phone
C001	774567891
C002	774567890
C003	775678901
C004	776789012

Query executed successfully.

DESKTOP-8P7T3Q2\SQLEXPRESS ... DESKTOP-4P7T3Q2\ASUS (58) ISDM Online Pharmacy P... 00:00:00 140 rows

SQLQuery1.sql - DESKTOP-8P7T3Q2\SQLEXPRESS\ISDM Online Pharmacy Portal Dinidu Dineth Chaluka (DESKTOP-8P7T3Q2\ASUS (58)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Connect to Server | New Query | Execute | SQL Server Enterprise Edition |

Object Explorer | SQLQuery1.sql - D:\8P7T3Q2\ASUS (58) |

FileTables | External Tables | Graph Tables |

dbo.Administrator | dbo.Administrator_Email | dbo.Administrator_Report | dbo.Customer | dbo.Customer_Customer | dbo.Customer_Phone | dbo.Customer_Prescription | dbo.CustomerCart | dbo.CustomerInquiries | dbo.CustomerPayments | dbo.DeliveryService | dbo.Doctor | dbo.Doctor_Email | dbo.Order_0 | dbo.Prescription | dbo.Product | dbo.Report | dbo.Sales | dbo.Sales_Report | dbo.Sales_Representative | dbo.Sales_Representative | dbo.Supplier | dbo.Supplier_Email | dbo.Supplier_Phone | dbo.UserLogin | dbo.UserLogin_Administrator |

Views | External Resources | Synonyms | Programmability | Service Broker | Storage |

SQLQuery1.sql - D:\8P7T3Q2\ASUS (58) |

```
-- Sample data for Customer_Prescription_Order table
INSERT INTO Customer_Prescription_Order (CustomerID, PrescriptionID, OrderID)
VALUES
('C001', 'P001', 'O001'),
('C002', 'P002', 'O002'),
('C003', 'P003', 'O003'),
('C004', 'P004', 'O004'),
('C005', 'P005', 'O005');

-- Sample data for Customer_Prescription_Order table
SELECT * FROM Customer_Prescription_Order;

-- Sample data for Customer_Prescription_Order table
SELECT * FROM Customer_Prescription_Order;

-- Sample data for Customer_Prescription_Order table
SELECT * FROM Customer_Prescription_Order;

-- Sample data for Customer_Prescription_Order table
SELECT * FROM Customer_Prescription_Order;
```

Results | Messages

AdminID	UserID	Phone	Name
1	A001	774567890	Anas Pereira
2	A002	775678901	Kamal Fernando
3	A003	776789012	Nirosha Silva
4	A004	777890123	Thilina Gunasekara
5	A005	778901234	Chamara Jayawardena

AdminID	Email
1	A001
2	A002
3	A003
4	A004
5	A005

AdminID	ReportID	SalesID
1	A001	R001
2	A002	R002
3	A003	R003
4	A004	R004

Query executed successfully. DESKTOP-8P7T3Q2\SQLEXPRESS... DESKTOP-8P7T3Q2\ASUS (58) ISDM Online Pharmacy P... 00:00:00 140 rows

Ready | Ln 237 | Col 20 | Ch 20 | BNS

SQLQuery1.sql - DESKTOP-8P7T3Q2\SQLEXPRESS\ISDM Online Pharmacy Portal Dinidu Dineth Chaluka (DESKTOP-8P7T3Q2\ASUS (58)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Connect to Server | New Query | Execute | SQL Server Enterprise Edition |

Object Explorer | SQLQuery1.sql - D:\8P7T3Q2\ASUS (58) |

FileTables | External Tables | Graph Tables |

dbo.Administrator | dbo.Administrator_Email | dbo.Administrator_Report | dbo.Customer | dbo.Customer_Customer | dbo.Customer_Phone | dbo.Customer_Prescription | dbo.CustomerCart | dbo.CustomerInquiries | dbo.CustomerPayments | dbo.DeliveryService | dbo.Doctor | dbo.Doctor_Email | dbo.Order_0 | dbo.Prescription | dbo.Product | dbo.Report | dbo.Sales | dbo.Sales_Report | dbo.Sales_Representative | dbo.Sales_Representative | dbo.Supplier | dbo.Supplier_Email | dbo.Supplier_Phone | dbo.UserLogin | dbo.UserLogin_Administrator |

Views | External Resources | Synonyms | Programmability | Service Broker | Storage |

SQLQuery1.sql - D:\8P7T3Q2\ASUS (58) |

```
-- Sample data for Customer_Prescription_Order table
INSERT INTO Customer_Prescription_Order (CustomerID, PrescriptionID, OrderID)
VALUES
('C001', 'P001', 'O001'),
('C002', 'P002', 'O002'),
('C003', 'P003', 'O003'),
('C004', 'P004', 'O004'),
('C005', 'P005', 'O005');

-- Sample data for Customer_Prescription_Order table
SELECT * FROM Customer_Prescription_Order;

-- Sample data for Customer_Prescription_Order table
SELECT * FROM Customer_Prescription_Order;

-- Sample data for Customer_Prescription_Order table
SELECT * FROM Customer_Prescription_Order;

-- Sample data for Customer_Prescription_Order table
SELECT * FROM Customer_Prescription_Order;
```

Results | Messages

UserID	UserName	CustomerID	UserType	Password	AccountStatus
1	U001	C001	customer	P@ssw0rd	Active
2	U002	C002	customer	Dinusha23	Active
3	U003	C003	customer	J@shak1	Active
4	U004	C004	customer	K@sun23	Active
5	U005	C005	customer	Ruwan123	Active

UserID	AdminID
1	U001
2	U002
3	U003
4	U004
5	U005

Query executed successfully. DESKTOP-8P7T3Q2\SQLEXPRESS... DESKTOP-8P7T3Q2\ASUS (58) ISDM Online Pharmacy P... 00:00:00 140 rows

Ready | Ln 237 | Col 20 | Ch 20 | BNS