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**12/30/2023**

# **LAB MID (Project Report)**

**Title: Pharmacy Store management**

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**Date: 30-12-2023**

**Task 1:** Identify the topic of your final project and explain various modules which will be present in the DBMS.

**Topic: Pharmacy Store Management System**

**System Introduction:**

The Pharmacy Store Management System is a comprehensive platform designed to facilitate seamless operations for both customers and administrators of the store. Customers can browse, order medicines, view medicine details, and manage orders, with the added convenience of getting detailed receipts upon completing their purchases/orders. The system ensures secure authentication and user-friendly interfaces for a smooth experience.

Administrators benefit from efficient inventory management tools, enabling actions like adding, updating, and deleting medicines, alongside overseeing stock levels and supply chain interactions. This system not only streamlines medication procurement but also offers transparency and record-keeping in the transaction process.

**Problem Statement:**

The manual system for managing pharmacy operations faces challenges such as limited accessibility for customers, inefficient inventory management prone to errors, lack of transparent transaction records, and inconvenient order management. The Pharmacy Store Management System aims to resolve these issues by offering remote accessibility, automated inventory tracking, transparent transaction records, convenient order management, thereby enhancing operational efficiency and customer satisfaction.

**System Modules (Solution Overview):**

**1. Customer profile Management:**

Entity: StoreCustomer

- Features: Enables customers to view their profile, and manage personal details.

**2. Order Management:**

Entity: Medicine\_Order, OrderItem

- Features: Allows customers to browse available medicines, place orders, and view order history.

**3. Medicine Information:**

Entity: Medicine

- Features: Manages information about available medicines and displays medicine details, such as name, description, dosage, price, and availability, for customers to browse.

#### 4. Admin Dashboard:

Entity: Admin

- Features: Offers tools for adding, deleting, updating medicines, restocking inventory, and managing overall system functionality.

#### 5. Authentication and Authorization:

Entity: User\_Credential

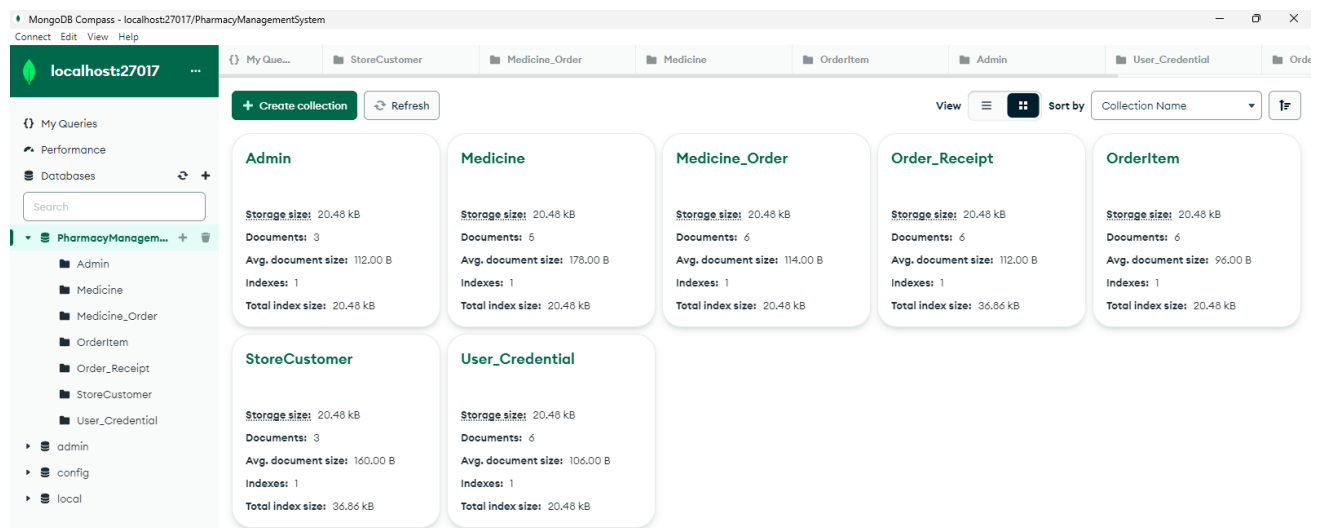
- Features: Manages user authentication through login/signup mechanisms and provides role-based access control for customers and admins.

#### 6. Purchase Receipt Generation:

Entity: Order\_Receipt

- Features: Automatically triggers the creation of a detailed purchase receipt upon successful order completion. It includes order details such as purchased items, quantities, prices, total cost, customer information, and a transaction timestamp.

### Task 2: Creating DB for your project in Mongo DB:



### Task 3: lab final-term.

Part1: Design and Develop EERD diagram:

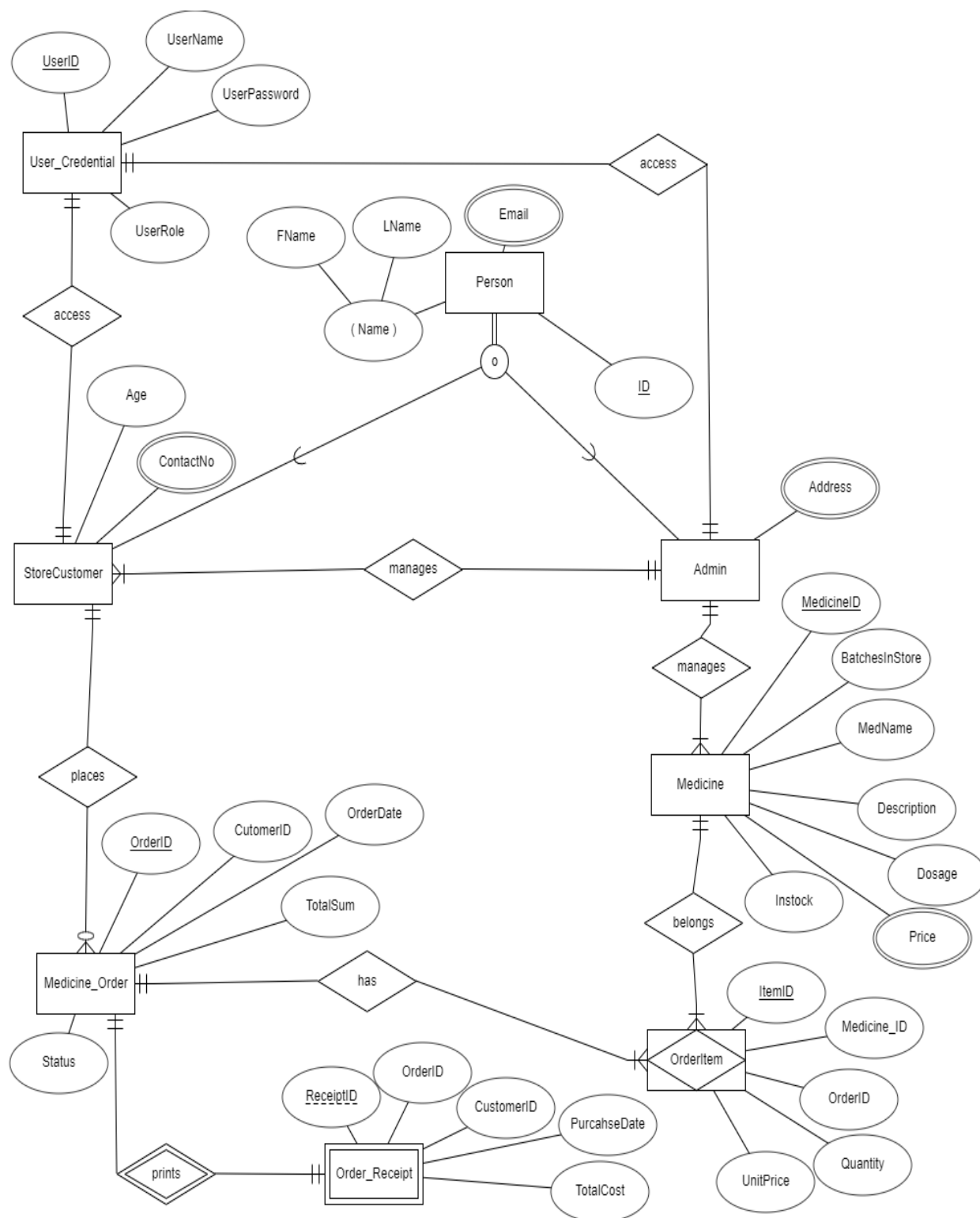


Figure 1. EERD of pharmacy store management system

## Part2: Insert few meaningful documents in the resultant collections.

Insert Into Store\_Customer:

ADD DATA	EXPORT DATA	1 - 3 of 3
<pre>_id: ObjectId('658fc1b35db30cd021bd946a') CustomerID: 1 CustmFName: "John" CustmLName: "Doe" Email: "john@example.com" Address: "123 Main St" ContactNo: "12345678901"</pre>		
<pre>_id: ObjectId('658fc1ed5db30cd021bd946c') CustomerID: 2 CustmFName: "Alice" CustmLName: "Smith" Email: "alice@example.com" Address: "456 Elm St" ContactNo: "98765432109"</pre>		
<pre>_id: ObjectId('658fc1ed5db30cd021bd946d') CustomerID: 3 CustmFName: "Bob" CustmLName: "Johnson" Email: "bob@example.com" Address: "789 Oak St" ContactNo: "56789012345"</pre>		

Insert Into Admin:

ADD DATA	EXPORT DATA	1 - 3 of 3
<pre>_id: ObjectId('658fc34e5db30cd021bd947c') AdminID: 1 AdminFName: "Ayesha" AdminLName: "Siddiqa" AdminEmail: "ayesha@gmail.com"</pre>		
<pre>_id: ObjectId('658fc34e5db30cd021bd947d') AdminID: 2 AdminFName: "Aiman" AdminLName: "Khan" AdminEmail: "aiman@outlook.com"</pre>		
<pre>_id: ObjectId('658fc34e5db30cd021bd947e') AdminID: 3 AdminFName: "Ume" AdminLName: "Rubab" AdminEmail: "rubab@gmail.com"</pre>		

## Insert Into Medicine\_Order:

ADD DATA	EXPORT DATA	1 - 6 of 6				
<pre>_id: ObjectId('658fc2755db30cd021bd946f') OrderID: 101 CustomerID: 1 OrderDate: "2023-01-10" TotalSum: 100.5 Status: "Pending"</pre>						
<pre>_id: ObjectId('658fc2755db30cd021bd9470') OrderID: 102 CustomerID: 2 OrderDate: "2023-02-15" TotalSum: 95.25 Status: "Delivered"</pre>						
<pre>_id: ObjectId('658fc2755db30cd021bd9471') OrderID: 103 CustomerID: 3 OrderDate: "2023-03-20" TotalSum: 250 Status: "Shipped"</pre>						
<pre>_id: ObjectId('658fc2755db30cd021bd9472') OrderID: 104 CustomerID: 1 OrderDate: "2023-01-10"</pre>						

## Insert Into OrderItem:

ADD DATA	EXPORT DATA	1 - 6 of 6				
<pre>_id: ObjectId('658fc4c65db30cd021bd9487') ItemID: 301 OrderID: 101 MedicineID: 201 Quantity: 3 UnitPrice: 10.99</pre>						
<pre>_id: ObjectId('658fc4c65db30cd021bd9488') ItemID: 302 OrderID: 102 MedicineID: 202 Quantity: 2 UnitPrice: 8.5</pre>						
<pre>_id: ObjectId('658fc4c65db30cd021bd9489') ItemID: 303 OrderID: 103 MedicineID: 202 Quantity: 5 UnitPrice: 5.25</pre>						
<pre>_id: ObjectId('658fc4c65db30cd021bd948a') ItemID: 304 OrderID: 102 MedicineID: 201</pre>						

## Insert Into Order\_Receipt:

ADD DATA	EXPORT DATA	1 - 6 of 6				
<pre>_id: ObjectId('658fc53c5db30cd021bd948e') ReceiptID: 401 OrderID: 101 CustomerID: 1 PurchaseDate: "2023-01-10" TotalCost: 32.97</pre>						
<pre>_id: ObjectId('658fc53c5db30cd021bd948f') ReceiptID: 402 OrderID: 102 CustomerID: 2 PurchaseDate: "2023-02-15" TotalCost: 17</pre>						
<pre>_id: ObjectId('658fc53c5db30cd021bd9490') ReceiptID: 403 OrderID: 103 CustomerID: 3 PurchaseDate: "2023-03-20" TotalCost: 26.25</pre>						
<pre>_id: ObjectId('658fc2755db30cd021bd9472') ReceiptID: 404 OrderID: 104 CustomerID: 4</pre>						

## Insert Into User\_Credentials:

ADD DATA	EXPORT DATA	1 - 6 of 6						
<pre>_id: ObjectId('658fc4015db30cd021bd9480') UserID: 101 Username: "ayasha" UserPassword: "admin123" UserRole: "Admin"</pre>								
<pre>_id: ObjectId('658fc4015db30cd021bd9481') UserID: 102 Username: "aiman" UserPassword: "admin456" UserRole: "Admin"</pre>								
<pre>_id: ObjectId('658fc4015db30cd021bd9482') UserID: 103 Username: "rubab" UserPassword: "admin789" UserRole: "Admin"</pre>								
<pre>_id: ObjectId('658fc4015db30cd021bd9483') UserID: 104 Username: "john_doe" UserPassword: "customer123" UserRole: "Customer"</pre>								

## Insert Into Medicine:

ADD DATA
EXPORT DATA

1 - 5 of 5

```

_id: ObjectId('658fc2e65db30cd021bd9476')
MedicineID: 201
MedName: "Medicine A"
Description: "Pain Reliever"
Dosage: "1 pill per day"
Price: 10.99
Instock: "Yes"
BatchesInStore: "20"

```

```

_id: ObjectId('658fc2e65db30cd021bd9477')
MedicineID: 202
MedName: "Medicine B"
Description: "Cold and Flu"
Dosage: "2 pills per day"
Price: 8.5
Instock: "Yes"
BatchesInStore: "15"

```

```

_id: ObjectId('658fc2e65db30cd021bd9478')
MedicineID: 203
MedName: "Medicine C"
Description: "Allergy Relief"
Dosage: "1 pill every 12 hours"
Price: 5.25
Instock: "No"
BatchesInStore: "0"

```

**Part 3:** Now in this part, you are going to first create a meaningful query in English and then in Mongo Compass for each of the following situations:

- QUERYING COMMANDS:**

**English Statements:**

- Find all StoreCustomer documents:
- Retrieve details of a specific StoreCustomer by CustomerID:
- List all Admins in the Admin collection:
- Retrieve the OrderID, OrderDate, and Status for a specific order in the Medicine\_Order collection:
- Get details of all medicines in the Medicine collection:
- Find the OrderItem details for a specific OrderID and customerID:
- Get the Username and UserRole for all customers in documents:
- Retrieve Order\_Receipt details for a specific CustomerID:

**Queries in Mongo Compass:**



## 1. Find all StoreCustomer documents: {}

Filter {} Generate query  Explain Reset Find  Options

ADD DATA EXPORT DATA 1 - 3 of 3

```

_id: ObjectId('658fc1b35db30cd021bd946a')
CustomerID: 1
CustmFName: "John"
CustmLName: "Doe"
Email: "john@example.com"
Address: "123 Main St"
ContactNo: "12345678901"

_id: ObjectId('658fc1ed5db30cd021bd946c')
CustomerID: 2
CustmFName: "Alice"
CustmLName: "Smith"
Email: "alice@example.com"
Address: "456 Elm St"
ContactNo: "98765432109"

_id: ObjectId('658fc1ed5db30cd021bd946d')
CustomerID: 3
CustmFName: "Bob"
CustmLName: "Johnson"
Email: "bob@example.com"
Address: "789 Oak St"
ContactNo: "56789012345"

```

## 2. Retrieve details of a specific StoreCustomer by CustomerID:

{ "CustomerID": 1 }

Filter { "CustomerID": 1 } Generate query  Explain Reset Find

ADD DATA EXPORT DATA 1 - 1 of 1

```

_id: ObjectId('658fc1b35db30cd021bd946a')
CustomerID: 1
CustmFName: "John"
CustmLName: "Doe"
Email: "john@example.com"
Address: "123 Main St"
ContactNo: "12345678901"

```

## 3. List all Admins in the Admin Collection: {}

Filter {} Generate query  Explain Reset Find

ADD DATA EXPORT DATA 1 - 3 of 3

```

_id: ObjectId('658fc34e5db30cd021bd947c')
AdminID: 1
AdminFName: "Ayesha"
AdminLName: "Siddiqa"
AdminEmail: "ayesha@gmail.com"

_id: ObjectId('658fc34e5db30cd021bd947d')
AdminID: 2
AdminFName: "Aiman"
AdminLName: "Khan"
AdminEmail: "aiman@outlook.com"

_id: ObjectId('658fc34e5db30cd021bd947e')
AdminID: 3
AdminFName: "Ume"
AdminLName: "Rubab"
AdminEmail: "rubab@gmail.com"

```

## 4. Retrieve the OrderID, OrderDate, and Status for all orders of a specific customer in the Medicine\_Order collection:

{ "CustomerID": 2 }

Filter {CustomerID : 2} Generate query  Explain Reset Find

ADD DATA EXPORT DATA 1 - 3 of 3

<pre> _id: ObjectId('658fc2755db30cd021bd9470') OrderID: 102 CustomerID: 2 OrderDate: "2023-02-15" TotalSum: 95.25 Status: "Delivered" </pre>
<pre> _id: ObjectId('658fc2755db30cd021bd9473') OrderID: 105 CustomerID: 2 OrderDate: "2023-02-15" TotalSum: 75.25 Status: "Delivered" </pre>
<pre> _id: ObjectId('658fc2755db30cd021bd9474') OrderID: 106 CustomerID: 2 OrderDate: "2023-03-20" TotalSum: 200 Status: "Shipped" </pre>

5. Get details of all medicines in the Medicine collection: {}

Filter {} Generate query  Explain Reset Find

ADD DATA EXPORT DATA 1 - 5 of 5

<pre> _id: ObjectId('658fc2e65db30cd021bd9476') MedicineID: 201 MedName: "Medicine A" Description: "Pain Reliever" Dosage: "1 pill per day" Price: 10.99 Instock: "Yes" BatchesInStore: "20" </pre>
<pre> _id: ObjectId('658fc2e65db30cd021bd9477') MedicineID: 202 MedName: "Medicine B" Description: "Cold and Flu" Dosage: "2 pills per day" Price: 8.5 Instock: "Yes" BatchesInStore: "15" </pre>
<pre> _id: ObjectId('658fc2e65db30cd021bd9478') MedicineID: 203 MedName: "Medicine C" Description: "Allergy Relief" Dosage: "1 pill every 12 hours" </pre>

6. Find the OrderItem details for a specific OrderID:

{OrderID : 102}

Filter {OrderID : 102} [Generate query](#) [Explain](#) [Reset](#) [Find](#)

[ADD DATA](#) [EXPORT DATA](#) 1 - 3 of 3

```

_id: ObjectId('658fc4c65db30cd021bd9488')
ItemID: 302
OrderID: 102
MedicineID: 202
Quantity: 2
UnitPrice: 8.5

```

---

```

_id: ObjectId('658fc4c65db30cd021bd948a')
ItemID: 304
OrderID: 102
MedicineID: 201
Quantity: 3
UnitPrice: 10.99

```

---

```

_id: ObjectId('658fc4c65db30cd021bd948c')

```

7. Get the Username and UserRole for all Users with role customer in documents:  
 {UserRole : "Customer"}

Filter {UserRole : "Customer"} [Generate query](#) [Explain](#) [Reset](#) [Find](#)

[ADD DATA](#) [EXPORT DATA](#) 1 - 3 of 3

```

_id: ObjectId('658fc4015db30cd021bd9483')
UserID: 104
Username: "john_doe"
UserPassword: "customer123"
UserRole: "Customer"

```

---

```

_id: ObjectId('658fc4015db30cd021bd9484')
UserID: 105
Username: "alice_smith"
UserPassword: "customer456"
UserRole: "Customer"

```

---

```

_id: ObjectId('658fc4015db30cd021bd9485')
UserID: 106
Username: "bob_johnson"
UserPassword: "customer789"
UserRole: "Customer"

```

8. Retrieve Order\_Receipt details for a specific CustomerID: and orderID:  
 { "CustomerID": 3, OrderID : 103 }

Filter { "CustomerID": 3, OrderID : 103 } [Generate query](#) [Explain](#) [Reset](#) [Find](#)

[ADD DATA](#) [EXPORT DATA](#) 1 - 1 of 1

```

_id: ObjectId('658fc53c5db30cd021bd9490')
ReceiptID: 403
OrderID: 103
CustomerID: 3
PurchaseDate: "2023-03-20"
TotalCost: 26.25

```