

MAJOR PROJECT

Online Retail Application Database:

CODE:

-- Table to store user information

```
CREATE TABLE Users (
    UserID INT AUTO_INCREMENT PRIMARY KEY,
    Username VARCHAR(50) NOT NULL UNIQUE,
    PasswordHash VARCHAR(255) NOT NULL,
    Email VARCHAR(100) NOT NULL UNIQUE,
    CreatedAt TIMESTAMP DEFAULT CURRENT_TIMESTAMP);
```

```
INSERT INTO Users (Username, PasswordHash, Email) VALUES ('john_doe',
'hashed_password_here', 'john.doe@example.com');
```

```
SELECT * from Users;
```

-- Table to store product details

```
CREATE TABLE Products (
    ProductID INT AUTO_INCREMENT PRIMARY KEY,
    ProductName VARCHAR(100) NOT NULL,
    Description TEXT,
    Price DECIMAL(10, 2) NOT NULL,
    Stock INT NOT NULL,
    Discount DECIMAL(5, 2) DEFAULT 0.00,
    CreatedAt TIMESTAMP DEFAULT CURRENT_TIMESTAMP );
```

```
INSERT INTO Products (ProductName, Description, Price, Stock, Discount) VALUES
('Laptop', 'High-performance laptop', 1500.00, 10, 10.00);
```

```
SELECT * from Products;
```

-- Table to store orders

```
CREATE TABLE Orders (
    OrderID INT AUTO_INCREMENT PRIMARY KEY,
    UserID INT NOT NULL,
    OrderDate TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    TotalAmount DECIMAL(10, 2) NOT NULL,
    FOREIGN KEY (UserID) REFERENCES Users(UserID) ON DELETE CASCADE);
```

```
INSERT INTO Orders (UserID, TotalAmount) VALUES (1, 2700.00);
```

```
SELECT * from Orders;
```

-- Table to store order items (relation between orders and products)

```
CREATE TABLE OrderItems (
    OrderItemID INT AUTO_INCREMENT PRIMARY KEY,
    OrderID INT NOT NULL,
    ProductID INT NOT NULL,
    Quantity INT NOT NULL,
    Price DECIMAL(10, 2) NOT NULL,
    Discount DECIMAL(5, 2) NOT NULL,
    Subtotal DECIMAL(10, 2) AS (Quantity * (Price - (Price * Discount / 100)))
STORED,FOREIGN KEY (OrderID) REFERENCES Orders(OrderID) ON DELETE CASCADE,
FOREIGN KEY (ProductID) REFERENCES Products(ProductID) ON DELETE CASCADE);
```

```
INSERT INTO OrderItems (OrderID, ProductID, Quantity, Price, Discount)
VALUES (1, 1, 2, 1500.00, 10.00);
```

```
SELECT * from OrderItems;
```

-- Table to store billing information

```
CREATE TABLE Bills (
    BillID INT AUTO_INCREMENT PRIMARY KEY,
    OrderID INT NOT NULL,
    BillDate TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    TotalAmount DECIMAL(10, 2) NOT NULL,
    FOREIGN KEY (OrderID) REFERENCES Orders(OrderID) ON DELETE CASCADE);
```

```
INSERT INTO Bills (OrderID, TotalAmount) VALUES (1, 2700.00);
```

```
SELECT * from Bills;
```

OUTPUT:

Output:

User ID	Username	Password Hash	Email	Created At
1	john_doe	hashed_password_here	john.doe@example.com	2024-12-06 12:55:48

Product ID	Product Name	Description	Price	Stock	Discount	Created At
1	Laptop	High-performance laptop	1500.00	10	10.00	2024-12-06 12:55:48

Order ID	User ID	Order Date	Total Amount
1	1	2024-12-06 12:55:48	2700.00

Order Item ID	Order ID	Product ID	Quantity	Price	Discount	Subtotal
1	1	1	2	1500.00	10.00	2700.00

Bill ID	Order ID	Bill Date	Total Amount
1	1	2024-12-06 12:55:48	2700.00