

E-commerce Website Database Management

Database Schema:

```
CREATE SCHEMA 'ecommerce_DB' DEFAULT CHARACTER SET utf8mb4  
COLLATE utf8mb4_unicode_ci;
```

Below SQL queries are used to create the tables:

LOGIN:

```
CREATE TABLE `Login` (  
  `LoginID` int NOT NULL DEFAULT '111',  
  `Username` varchar(45) NOT NULL,  
  `Password` varchar(45) NOT NULL,  
  `PhoneNumber` varchar(15) NOT NULL,  
  `Email` varchar(45) NOT NULL,  
  `Role` varchar(45) NOT NULL,  
  PRIMARY KEY (`LoginID`),  
  UNIQUE KEY `Password_UNIQUE` (`Password`),  
  UNIQUE KEY `PhoneNumber_UNIQUE` (`PhoneNumber`),  
  UNIQUE KEY `Email_UNIQUE` (`Email`),  
  UNIQUE KEY `LoginID_UNIQUE` (`LoginID`));
```

ADMIN:

```
CREATE TABLE `Admin` (  
  `AdminID` int NOT NULL,  
  `AdminFirstName` varchar(45) NOT NULL,  
  `AdminLastName` varchar(45) NOT NULL,  
  `AdminType` varchar(45) DEFAULT NULL,  
  PRIMARY KEY (`AdminID`),  
  UNIQUE KEY `AdminID_UNIQUE` (`AdminID`),  
  CONSTRAINT `AdminID` FOREIGN KEY (`AdminID`) REFERENCES `Login` (`LoginID`));
```

SUPPLIER:

```
CREATE TABLE `Supplier` (  
  `SupplierID` int NOT NULL,  
  `SupplierName` varchar(45) NOT NULL,  
  `CompanyName` varchar(45) NOT NULL,  
  PRIMARY KEY (`SupplierID`),  
  UNIQUE KEY `SupplierID_UNIQUE` (`SupplierID`),  
  CONSTRAINT `SupplierID` FOREIGN KEY (`SupplierID`) REFERENCES `Login` (`LoginID`))
```

CUSTOMER:

```
CREATE TABLE `Customer` (  
  `CustomerID` int NOT NULL,  
  `FirstName` varchar(45) COLLATE utf8mb4_unicode_ci NOT NULL,  
  `LastName` varchar(45) COLLATE utf8mb4_unicode_ci NOT NULL,  
  `DOB` date NOT NULL,  
  `Gender` varchar(45) COLLATE utf8mb4_unicode_ci NOT NULL,  
  PRIMARY KEY (`CustomerID`),  
  UNIQUE KEY `CustomerID_UNIQUE` (`CustomerID`),  
  CONSTRAINT `CustomerID` FOREIGN KEY (`CustomerID`) REFERENCES `Login` (`LoginID`));
```

CUSTOMER BILLING INFO:

```
CREATE TABLE `CustomerBillingInfo` (  
  `CreditCardID` int NOT NULL,  
  `CustomerID` int NOT NULL,  
  `CustomerName` varchar(45) NOT NULL,  
  `CrediCardNo` varchar(50) NOT NULL,  
  `CreditCardCVV` int NOT NULL,  
  `CreditCardExp` varchar(20) NOT NULL,  
  `BillingAddress` varchar(250) NOT NULL,  
  PRIMARY KEY (`CreditCardID`),  
  UNIQUE KEY `CreditCardID_UNIQUE` (`CreditCardID`),  
  UNIQUE KEY `CrediCardNo_UNIQUE` (`CrediCardNo`),  
  KEY `CustomerID_idx` (`CustomerID`),  
  CONSTRAINT `CustomerID_Billing` FOREIGN KEY (`CustomerID`) REFERENCES `Customer`  
  (`CustomerID`));
```

CUSTOMER ADDRESS:

```
CREATE TABLE `CustomerAddress` (  
  `CustomerID` int NOT NULL,  
  `Address` varchar(250) NOT NULL,  
  `City` varchar(45) NOT NULL,  
  `State` varchar(45) NOT NULL,  
  `PostalCode` int NOT NULL,  
  `Email` varchar(45) NOT NULL,  
  `Phone` varchar(45) NOT NULL,  
  KEY `CustomerID_Address_idx` (`CustomerID`),  
  CONSTRAINT `CustomerID_Address` FOREIGN KEY (`CustomerID`) REFERENCES `Customer`  
  (`CustomerID`));
```

ORDERS:

```
CREATE TABLE `Orders` (  
  `OrderID` int NOT NULL,  
  `OrderDate` datetime NOT NULL,
```

```

`CustomerID` int NOT NULL,
`TotalAmount` decimal(10,0) NOT NULL,
`Discount` decimal(5,0) NOT NULL,
`CourierID` int NOT NULL,
`ShippedDate` datetime NOT NULL,
`ShippedAddress` varchar(250) NOT NULL,
`ShippedCity` varchar(250) NOT NULL,
`ShippedState` varchar(250) NOT NULL,
`ShippedPincode` int NOT NULL,
`ContactNumber` varchar(15) NOT NULL,
PRIMARY KEY (`OrderID`),
UNIQUE KEY `OrderID_UNIQUE` (`OrderID`),
UNIQUE KEY `ContactNumber_UNIQUE` (`ContactNumber`),
KEY `CustomerID_Order_idx` (`CustomerID`),
KEY `CourierID_Ordd_idx` (`CourierID`),
CONSTRAINT `CourierID_Ordd` FOREIGN KEY (`CourierID`) REFERENCES `Courier` (`CourierID`),
CONSTRAINT `CustomerID_Order` FOREIGN KEY (`CustomerID`) REFERENCES `Customer`
(`CustomerID`));

```

COURIER:

```

CREATE TABLE `CCourier` (
  `CourierID` int NOT NULL,
  `CompanyName` varchar(45) COLLATE utf8mb4_unicode_ci NOT NULL,
  `Phone` varchar(15) COLLATE utf8mb4_unicode_ci NOT NULL,
  PRIMARY KEY (`CourierID`),
  UNIQUE KEY `CourierID_UNIQUE` (`CourierID`));

```

CATEGORY:

```

CREATE TABLE `Category` (
  `CategoryID` int NOT NULL,
  `CategoryName` varchar(45) COLLATE utf8mb4_unicode_ci NOT NULL,
  `Description` varchar(300) COLLATE utf8mb4_unicode_ci NOT NULL,
  PRIMARY KEY (`CategoryID`),
  UNIQUE KEY `CategoryID_UNIQUE` (`CategoryID`),
  UNIQUE KEY `CategoryName_UNIQUE` (`CategoryName`));

```

ORDER ITEMS:

```

CREATE TABLE `OrderItems` (
  `OrderID` int NOT NULL,
  `ProductID` int NOT NULL,
  `UnitPrice` decimal(20,0) NOT NULL,
  `Quantity` int NOT NULL,
  KEY `ProductID_idx` (`ProductID`),
  KEY `OrderID_idx` (`OrderID`),

```

```
CONSTRAINT `OrdID` FOREIGN KEY (`OrderID`) REFERENCES `Orders` (`OrderID`),  
CONSTRAINT `ProductID` FOREIGN KEY (`ProductID`) REFERENCES `Product` (`ProductID`));
```

PAYMENT:

```
CREATE TABLE `Payment` (  
  `PaymentID` int NOT NULL,  
  `PaymentType` varchar(45) NOT NULL,  
  `PaymentDate` date NOT NULL,  
  `Amount` decimal(10,0) NOT NULL,  
  `OrderID` int NOT NULL,  
  PRIMARY KEY (`PaymentID`),  
  UNIQUE KEY `PaymentID_UNIQUE` (`PaymentID`),  
  KEY `OrderID_idx` (`OrderID`),  
  CONSTRAINT `OrderID` FOREIGN KEY (`OrderID`) REFERENCES `Orders` (`OrderID`));
```

PRODUCT:

```
CREATE TABLE `Product` (  
  `ProductID` int NOT NULL,  
  `ProductName` varchar(100) NOT NULL,  
  `Description` varchar(500) NOT NULL,  
  `UnitPrice` varchar(45) NOT NULL,  
  `UnitWeight` varchar(45) NOT NULL,  
  `Manufacturer` varchar(100) NOT NULL,  
  `UnitsInStock` varchar(45) NOT NULL,  
  `Rating` decimal(5,0) DEFAULT NULL,  
  `CategoryID` int NOT NULL,  
  PRIMARY KEY (`ProductID`),  
  UNIQUE KEY `ProductID_UNIQUE` (`ProductID`));
```

SHOPPING CART:

```
CREATE TABLE `ShoppingCart` (  
  `CartID` int NOT NULL,  
  `NoOfProducts` int NOT NULL,  
  `TotalPrice` decimal(10,0) NOT NULL,  
  `PaymentID` int DEFAULT NULL,  
  PRIMARY KEY (`CartID`),  
  UNIQUE KEY `CartID_UNIQUE` (`CartID`),  
  KEY `PaymentID_Cart_idx` (`PaymentID`),  
  CONSTRAINT `PaymentID_Cart` FOREIGN KEY (`PaymentID`) REFERENCES `Payment`  
  (`PaymentID`));
```