

SQL scripts for database creation for each entity:

```
CREATE TABLE `User` (  
  `UserID` int(11) NOT NULL,  
  `Username` varchar(50) NOT NULL,  
  `Password` varchar(50) NOT NULL,  
  `Email` varchar(75) NOT NULL,  
  `FirstName` varchar(255) DEFAULT NULL,  
  `LastName` varchar(255) DEFAULT NULL,  
  `ProfilePicURL` varchar(255) DEFAULT NULL,  
  `DateOfBirth` date DEFAULT NULL,  
  `LastLogin` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE  
current_timestamp()  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `User`  
  ADD PRIMARY KEY (`UserID`),  
  ADD UNIQUE KEY `Username` (`Username`),  
  ADD UNIQUE KEY `Email` (`Email`);
```

```
ALTER TABLE `User`  
  MODIFY `UserID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;
```

```
CREATE TABLE `Address` (  
  `AddressID` int(11) NOT NULL,  
  `UserID` int(11) DEFAULT NULL,  
  `Street` varchar(255) DEFAULT NULL,  
  `City` varchar(100) DEFAULT NULL,  
  `State` varchar(100) DEFAULT NULL,  
  `PostalCode` varchar(20) DEFAULT NULL,  
  `Country` varchar(100) DEFAULT NULL,  
  `IsDefault` tinyint(1) NOT NULL DEFAULT 0,  
  `AddressType` enum('Shipping','Billing','Other') DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `Address`  
  ADD PRIMARY KEY (`AddressID`),  
  ADD KEY `fk_user_address` (`UserID`);
```

```
ALTER TABLE `Address`  
  ADD CONSTRAINT `fk_user_address` FOREIGN KEY (`UserID`) REFERENCES `User`  
(`UserID`);
```

```
ALTER TABLE `Address`  
  MODIFY `AddressID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;
```

```
CREATE TABLE `Product` (  
  `ProductID` int(11) NOT NULL,  
  `Name` varchar(75) DEFAULT NULL,  
  `Description` text DEFAULT NULL,  
  `Price` decimal(10,2) DEFAULT NULL,  
  `StockQuantity` int(11) DEFAULT NULL,  
  `BrandID` int(11) DEFAULT NULL,  
  `CategoryID` int(11) DEFAULT NULL,  
  `ImageURL` varchar(225) DEFAULT NULL,  
  `SKU` varchar(255) NOT NULL,  
  `Weight` decimal(5,2) DEFAULT NULL,  
  `Dimensions` varchar(225) DEFAULT NULL,  
  `IsActive` tinyint(1) NOT NULL DEFAULT 1  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `Product`  
  ADD PRIMARY KEY (`ProductID`),  
  ADD UNIQUE KEY `SKU` (`SKU`),  
  ADD KEY `BrandID` (`BrandID`),  
  ADD KEY `CategoryID` (`CategoryID`);
```

```
ALTER TABLE `Product`  
  ADD CONSTRAINT `product_ibfk_1` FOREIGN KEY (`BrandID`) REFERENCES `Brand`  
  (`BrandID`),  
  ADD CONSTRAINT `product_ibfk_2` FOREIGN KEY (`CategoryID`) REFERENCES  
  `Category` (`CategoryID`);
```

```
ALTER TABLE `Product`  
  MODIFY `ProductID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=13;
```

```
CREATE TABLE `Brand` (  
  `BrandID` int(11) NOT NULL,  
  `Name` varchar(75) NOT NULL,  
  `Description` text DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `Brand`  
  ADD PRIMARY KEY (`BrandID`);
```

```
ALTER TABLE `Brand`  
  MODIFY `BrandID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=7;
```

```
CREATE TABLE `Category` (  
  `CategoryID` int(11) NOT NULL,  
  `Name` varchar(75) DEFAULT NULL,  
  `Description` text DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `Category`  
  ADD PRIMARY KEY (`CategoryID`);
```

```
ALTER TABLE `Category`  
  MODIFY `CategoryID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=7;
```

```
CREATE TABLE `Order` (  
  `OrderID` int(11) NOT NULL,  
  `UserID` int(11) DEFAULT NULL,  
  `OrderDate` date NOT NULL,  
  `TotalAmount` decimal(10,2) NOT NULL,  
  `OrderStatusID` int(11) DEFAULT NULL,  
  `PaymentConfirmedDate` date DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `Order`  
  ADD PRIMARY KEY (`OrderID`),  
  ADD KEY `fk_order_user` (`UserID`),  
  ADD KEY `fk_order_orderstatus` (`OrderStatusID`);
```

```
ALTER TABLE `Order`  
  ADD CONSTRAINT `fk_order_user` FOREIGN KEY (`UserID`) REFERENCES `User`  
  (`UserID`),  
  ADD CONSTRAINT `fk_order_orderstatus` FOREIGN KEY (`OrderStatusID`)  
  REFERENCES `OrderStatus` (`OrderStatusID`);
```

```
ALTER TABLE `Order`
```

```
MODIFY `OrderID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;
```

```
CREATE TABLE `OrderItem` (  
  `OrderID` int(11) NOT NULL,  
  `ProductID` int(11) NOT NULL,  
  `Quantity` int(11) NOT NULL,  
  `Subtotal` decimal(10,2) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `OrderItem`  
  ADD PRIMARY KEY (`OrderID`, `ProductID`),  
  ADD KEY `fk_orderitem_product` (`ProductID`);
```

```
ALTER TABLE `OrderItem`  
  ADD CONSTRAINT `fk_orderitem_order` FOREIGN KEY (`OrderID`) REFERENCES  
  `Order` (`OrderID`),  
  ADD CONSTRAINT `fk_orderitem_product` FOREIGN KEY (`ProductID`) REFERENCES  
  `Product` (`ProductID`);
```

```
CREATE TABLE `OrderStatus` (  
  `OrderStatusID` int(11) NOT NULL,  
  `StatusName` varchar(255) NOT NULL,  
  `Description` text DEFAULT NULL,  
  `CreatedAt` datetime DEFAULT current_timestamp(),  
  `UpdatedAt` datetime DEFAULT current_timestamp() ON UPDATE current_timestamp()  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `OrderStatus`  
  ADD PRIMARY KEY (`OrderStatusID`);
```

```
ALTER TABLE `OrderStatus`  
  MODIFY `OrderStatusID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;
```

```
CREATE TABLE `Payment` (  
  `PaymentID` int(11) NOT NULL,  
  `OrderID` int(11) DEFAULT NULL,  
  `PaymentMethod` varchar(255) NOT NULL,  
  `Amount` decimal(10,2) NOT NULL,
```

```
`PaymentDate` date NOT NULL,  
`PaymentStatusID` int(11) DEFAULT NULL,  
`TransactionID` varchar(225) DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `Payment`  
ADD PRIMARY KEY (`PaymentID`),  
ADD KEY `fk_payment_order` (`OrderID`),  
ADD KEY `fk_payment_status` (`PaymentStatusID`);
```

```
ALTER TABLE `Payment`  
ADD CONSTRAINT `fk_payment_order` FOREIGN KEY (`OrderID`) REFERENCES `Order`  
(`OrderID`),  
ADD CONSTRAINT `fk_payment_status` FOREIGN KEY (`PaymentStatusID`) REFERENCES `PaymentStatus` (`PaymentStatusID`);
```

```
ALTER TABLE `Payment`  
MODIFY `PaymentID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;
```

```
CREATE TABLE `PaymentStatus` (  
`PaymentStatusID` int(11) NOT NULL,  
`StatusName` varchar(75) DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `PaymentStatus`  
ADD PRIMARY KEY (`PaymentStatusID`);
```

```
ALTER TABLE `PaymentStatus`  
MODIFY `PaymentStatusID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;
```

```
CREATE TABLE `ShippingDetail` (  
`ShippingID` int(11) NOT NULL,  
`OrderID` int(11) DEFAULT NULL,  
`RecipientName` varchar(255) DEFAULT NULL,  
`AddressID` int(11) DEFAULT NULL,  
`ShippingMethod` varchar(100) DEFAULT NULL,  
`ShippingCost` decimal(10,2) NOT NULL,  
`ExpectedDeliveryDate` date DEFAULT NULL,  
`TrackingNumber` varchar(255) DEFAULT NULL,  
`IsDelivered` tinyint(1) NOT NULL DEFAULT 0,
```

```
`DeliveryDate` date DEFAULT NULL,  
`BaseCost` decimal(10,2) DEFAULT NULL,  
`WeightSurcharge` decimal(10,2) DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `ShippingDetail`  
  ADD PRIMARY KEY (`ShippingID`),  
  ADD KEY `fk_shipping_order` (`OrderID`),  
  ADD KEY `fk_shipping_address` (`AddressID`);
```

```
ALTER TABLE `ShippingDetail`  
  ADD CONSTRAINT `fk_shipping_order` FOREIGN KEY (`OrderID`) REFERENCES `Order`  
  (`OrderID`),  
  ADD CONSTRAINT `fk_shipping_address` FOREIGN KEY (`AddressID`) REFERENCES  
  `Address` (`AddressID`);
```

```
ALTER TABLE `ShippingDetail`  
  MODIFY `ShippingID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;
```

```
CREATE TABLE `Taxes` (  
  `TaxID` int(11) NOT NULL,  
  `Description` text DEFAULT NULL,  
  `TaxPercent` decimal(5,2) DEFAULT NULL,  
  `ApplicableToCategoryID` int(11) DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `Taxes`  
  ADD PRIMARY KEY (`TaxID`),  
  ADD KEY `ApplicableToCategoryID` (`ApplicableToCategoryID`);
```

```
ALTER TABLE `Taxes`  
  ADD CONSTRAINT `taxes_ibfk_1` FOREIGN KEY (`ApplicableToCategoryID`) REFERENCES  
  `Category` (`CategoryID`);
```

```
ALTER TABLE `Taxes`  
  MODIFY `TaxID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=7;
```

```
CREATE TABLE `Wishlist` (  
  `WishlistID` int(11) NOT NULL,  
  `UserID` int(11) NOT NULL,
```

```
`ProductID` int(11) NOT NULL,  
`AddedDate` date DEFAULT NULL,  
`Name` varchar(75) DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_danish_ci;
```

```
ALTER TABLE `Wishlist`  
  ADD PRIMARY KEY (`WishlistID`, `UserID`, `ProductID`),  
  ADD KEY `fk_wishlist_user` (`UserID`),  
  ADD KEY `fk_wishlist_product` (`ProductID`);
```

```
ALTER TABLE `Wishlist`  
  ADD CONSTRAINT `fk_wishlist_product` FOREIGN KEY (`ProductID`) REFERENCES  
  `Product` (`ProductID`),  
  ADD CONSTRAINT `fk_wishlist_user` FOREIGN KEY (`UserID`) REFERENCES `User`  
  (`UserID`);
```

```
ALTER TABLE `Wishlist`  
  MODIFY `WishlistID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=3;
```