

This Store Management System uses MySQL as a database to create, read, update, and delete data. The database will be used to store information about products as well as to track various business updates, including transactions. The following is a list of what the different entities and their properties are:

- Customers, has 5 attributes
CustomerID: INT, > 0
Name: VARCHAR(255)
Email: VARCHAR(255), unique
Phone: VARCHAR(255)
Address: VARCHAR(255)
- Suppliers, has 5 attributes
SupplierID: INT, > 0
Name: VARCHAR(255)
ContactName: VARCHAR(255)
Email: VARCHAR(255), unique
Phone: VARCHAR(255)
Address: VARCHAR(255)
- Products, has 8 attributes
ProductID: INT, > 0
SupplierID: INT, > 0, foreign key referencing a Supplier
Name: VARCHAR(255)
Description: VARCHAR(255)
Quantity: INT, >= 0
Price: DECIMAL(10, 2), >= 0.00, per unit
SupplyPrice: DECIMAL(10, 2), >= 0.00, per unit, this is the price paid to supplier
Expiration: VARCHAR(255), "n/a" if not applicable
- Orders, has 6 attributes
OrderID: INT, > 0
CustomerID: INT, > 0, foreign key referencing a Customer
OrderDate: DATE
TotalPrice: DECIMAL(10, 2), >= 0.00
Status: VARCHAR(255), (e.g., "Pending", "Completed", "Cancelled")
PaymentStatus: VARCHAR(255), (e.g., "Paid", "Partial", "Unpaid")
- OrderLines, has 5 attributes
OrderLineID: INT, > 0
OrderID: INT, > 0, foreign key referencing an Order
ProductID: INT, > 0, foreign key referencing a Product
Quantity: INT, > 0
PriceAtPurchase: DECIMAL(10, 2), >= 0.00

- Payments, has 5 attributes
 - PaymentID:** INT, > 0
 - OrderID:** INT, > 0, foreign key referencing an Order
 - Amount:** DECIMAL(10, 2), >= 0.00
 - PaymentDate:** DATE
 - Method:** VARCHAR(255), (e.g., "Credit Card", "Debit Card", "Cash")

There are 6 entities in total: Customers, Suppliers, Products, Orders, OrderLines, and Payments. Each product will be associated with a supplier, each order will be associated with a customer, and each payment will be associated with an order. For the case of OrderLines, this entity will track the details of an order – that is what, how many, and at what price products are sold/bought in an order. A row in OrderLines is associated with an order as well as with a product that would be marked as part of that order.