

# Bookstore Management System - MS Access Project

## 1. ERD / Schema

Entities and Relationships:

Books(BookID, Title, Author, Publisher, Genre, Price, StockQuantity)  
Customers(CustomerID, Name, Email, Phone, Address)  
Orders(OrderID, CustomerID, OrderDate)  
OrderDetails(OrderDetailID, OrderID, BookID, Quantity)

Relationships:

Customers (1) --- (∞) Orders (1) --- (∞) OrderDetails (∞) --- (1) Books

## 2. Inputs / Data Entry Forms

- frmBooks: Form to manage book records
- frmCustomers: Form to manage customer records
- frmOrders: Form with subform for OrderDetails

## 3. Sample Queries

Low Stock Books:

```
SELECT Title, StockQuantity FROM Books WHERE StockQuantity < 10;
```

Total Sales Per Book:

```
SELECT B.Title, SUM(OD.Quantity) AS TotalSold FROM OrderDetails AS OD  
INNER JOIN Books AS B ON OD.BookID = B.BookID GROUP BY B.Title;
```

Customer Purchase History:

```
SELECT C.Name, B.Title, OD.Quantity, O.OrderDate FROM Customers AS C  
INNER JOIN Orders AS O ON C.CustomerID = O.CustomerID  
INNER JOIN OrderDetails AS OD ON O.OrderID = OD.OrderID  
INNER JOIN Books AS B ON OD.BookID = B.BookID;
```

## 4. Output Reports

- Books Inventory Report
- Sales Report (by date or book)
- Customer Order Report
- Low Stock Alert Report