

Online Store Database Management System

Brainwave Matrix Solutions Internship Project

1. Objective

To design and implement a relational database system for an online store that manages products, customers, orders, and payments efficiently using SQL.

2. Entity Relationship Overview

Main Entities:

- Customers
- Products
- Orders
- OrderDetails
- Payments
- Categories

Each entity represents a core function in the online store system.

3. Schema Design

Customers(customer_id, name, email, phone, address)

Categories(category_id, category_name)

Products(product_id, name, price, stock, category_id)

Orders(order_id, customer_id, order_date, total_amount)

OrderDetails(order_detail_id, order_id, product_id, quantity, price)

Payments(payment_id, order_id, payment_date, payment_method, amount_paid)

4. Sample Data Inserted

Customers: Anil Kumar (Hyderabad)

Categories: Electronics, Books, Clothing

Products: Smartphone, Python Programming Book, T-shirt

Online Store Database Management System

Brainwave Matrix Solutions Internship Project

5. SQL Queries Implemented

- List all products with category name
- Retrieve orders of a customer
- Update stock after purchase
- Calculate total sales by date
- Display order with payment info

6. Conclusion

This project helped understand how to model real-world applications using database design concepts. It also enhanced proficiency in SQL queries for CRUD operations and relational mapping.