

“technical foundation ecommerce Bandage shopping platform”

Business Goal for E-Commerce platform

1. Overview of the Platform

This E-commerce platform aims to revolutionize the way customers shop online by offering a seamless, efficient, and user-friendly experience. The platform is designed to cater to a wide range of products, from clothing and accessories to electronics and household goods. Our mission is to make online shopping convenient, reliable, and fast while ensuring the highest quality of service.

2. Business Goals

1. Convenience: Allow customers to browse and purchase a variety of products from the comfort of their homes.
2. Fast Delivery: Achieve quick delivery times (e.g., same day or within 1–2 days) to enhance customer satisfaction.
3. Wide Product Range: Offer a diverse range of categories, including clothing, accessories, electronics, and home essentials.
4. Personalized Experience: Provide AI-powered product recommendations tailored to each customer's preferences.
5. Customer Trust: Build a platform that ensures secure transactions, easy returns, and exceptional customer service.

3. Key Features

1. Product Listings: Detailed product pages with images, descriptions, reviews, and stock availability.
 2. Advanced Search: Filters by price, category, brand, and ratings to help customers find the right product quickly.
 3. Order Management: Real-time tracking of orders, easy cancellations, and refunds.
 4. Customer Profiles: Personalized accounts with saved addresses, payment methods, and purchase history.
 5. Promotions & Discounts: Regular deals, seasonal sales, and discount codes to attract and retain customers.
 6. Multiple Payment Options: Credit/debit cards, digital wallets, cash on delivery, and more.
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4. Enhanced Data Schema

Entities and Attributes

1. Product
 - id: Unique identifier for each product (SKU).
 - name: Product name (e.g., T-shirt, Mobile Phone).
 - price: Cost per unit.
 - stock: Quantity available.
 - category: Classification of products (e.g., Clothing, Electronics).
 - tags: Keywords for search optimization.

- rating: Average customer rating.
- 2. Customer
 - id: Unique identifier for each customer.
 - name: Full name.
 - contactInfo: Email and phone number.
 - address: Delivery address.
 - orderHistory: List of previous orders.
- 3. Order
 - id: Unique identifier for each order.
 - productId: Reference to the product(s) ordered.
 - quantity: Number of items ordered.
 - totalPrice: Total cost of the order.
 - status: Current order status (Pending, Shipped, Delivered).
- 4. Shipment
 - id: Unique shipment identifier.
 - orderId: Associated order ID.
 - deliveryZone: Location-specific delivery area.
 - assignedDriver: Driver responsible for delivery.

4. Payment

- id: Payment transaction ID.
- orderId: Linked order ID.
- amount: Total payment amount.
- status: Payment status (Paid, Pending).

5. Workflow of the Platform

1. Customer Browsing: Users explore product listings using advanced search and filtering options.
2. Adding to Cart: Customers add desired items to their cart.
3. Placing Orders: Orders are placed through a streamlined checkout process.
4. Order Fulfillment:
 - The system verifies stock availability and processes payments.
 - The order is assigned to a shipment.
5. Tracking & Notifications: Customers receive real-time updates on the order's progress.

6. Delivery: Products are delivered within the promised timeframe.

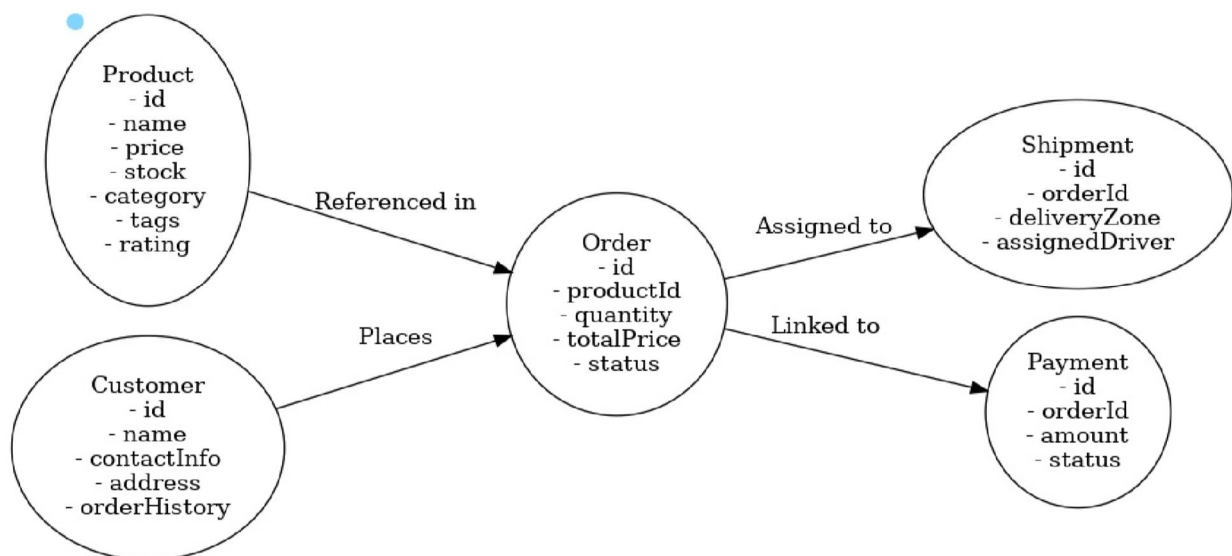
6. Business Metrics

1. Order Fulfillment Time: Average time taken to process and deliver an order.
 2. Customer Acquisition Cost (CAC): Cost of attracting new customers to the platform.
 3. Lifetime Value (LTV): Total revenue generated by a customer over their relationship with the platform.
 4. Cart Abandonment Rate: Percentage of customers who add items to their cart but do not complete the purchase.
 5. Churn Rate: Percentage of customers who stop using the platform.
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Sketch of E-commerce Platform Data Schema

I'll create a professional diagram showcasing the relationships between entities like Product, Customer, Order, Shipment, and Payment. Let me prepare and share it shortly!

The professional data schema diagram for your e-commerce platform has been created. You can download it using the link below:



This diagram illustrates the relationships between key entities like Product, Customer, Order, Shipment, and Payment. It focuses on the core functionalities needed for an efficient and scalable e-commerce platform.

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