

P1. Group-18 Database Management and Database Design

Database System for an E-Commerce

Background of E-Commerce Systems

Buying and selling goods is a common activity all throughout the world. A platform that enables clients to purchase various products from various categories is necessary to meet daily customer demand. Users of e-commerce platforms can purchase goods at the best price and have them delivered to their doorsteps around the clock. Additionally, it offers the seller the chance to trade the goods to any location in the world. Thus, the database of the e-commerce platform ensures orderly and secure trading of items and daily satisfaction of customer needs.

Mission Statement/Objectives

- Build an E-Commerce Database system to manage, store and retrieve data pertaining to an E-Commerce Platform.
- The E-commerce Database system will provide real-time tracking of online purchase operations.
- Provides an online platform for all the interested retailers who supply different types of products, to sell and make a profit.
- Maintains the customer and orders specific customer information, which is helpful for customer support and analytics.
- It will also maintain the Product catalog that provides information about the product categories.
- Maintains an inventory of products which lets the customers know about the product availability.

- Order-related information helps the customer to track the order delivery status.
- Operations Cost and Revenue help the E-Commerce platform to analyze the operational costs like marketing and overall profitability.

Scope

The E-commerce Database system will have the following entities which will store the data.

- A. Customers
- B. Orders
- C. Product Catalog
- D. Products
- E. Retailers
- F. Inventory
- G. Shipments
- H. Payments
- I. Inquiry
- J. Feedback
- K. Operation Cost and Revenue
- L. Order Tracking
- M. Returns

- Such data is crucial to streamlining a profitable E-commerce supply chain and business processes.
- To tackle the common problem of packages being stolen/lost, Order Tracking will be incorporated to address this specific issue.
- The operation cost and revenue entity will be used to store the data pertaining to various platform expenditures like marketing, and promotions and store the profitable revenue.

Future Work

Based on the returns, order tracking, feedback and customer activity, customer behaviour can be derived in order to analyse and identify fraudulent buyers and users.