E-COMMERECE DATABASE MANAGEMENT SYSTEM

Project Group 18

Harsh Shahdev (001496305)

Kamini Prem Prakash (001388352)

Nandika Vasanthmurali (001323501)

Sakshi Gupta (001057137)

Database Purpose

The purpose of our database is to deliver an E-commerce solution that is used for operations like view products, place orders, make payment, review products, provide recommendations and perform data analysis to extract valuable insights for the benefit of an organization. We would be designing an EER diagram to deduce the relationships between different entities while covering all the associated attributes. We would be utilizing features such as queries, joins, views, stored procedures, etc. to query the database and a few analytical queries to showcase the functioning of the project.

Database Objectives

This database is used by different types of users and their objectives are partitioned into different corresponding parts per user type. Moreover, our database would serve as a recommendation-based system for the customers where they will get recommendations to purchase based on their last purchases.

To gain more insights about how we can lure more customers, we would run some analytical queries to get the highest order placed, top orders, category which has top sales, manufacturer with highest sales, top 5 most expensive products etc.

1. **Customer**
   - The database contains customer information such as name, address, phone, e-mail, etc.
   - Preserve the items he/she has searched for or the orders that has been placed
2. **Manufacturer**
   - Preserve manufactures information such as unique id, name, additional_info, category
   - Every manufacturer would belong to a category type, therefore for every manufacturer we would maintain a category id
   - Search for specific manufacturers
3. **Carrier/ Logistics**
   - Preserve Shipment ID, Order details, Shipment Date and Time
   - To match up shipment ID with the Carrier Company (eg: FedEx, UPS)
4. **Supplier**
   - The supplier will be providing raw materials to the manufacturer depending upon the category and requirements of the products
   - Every supplier will have its own unique identification number (supp_id), name, contact location for ordering the part
   - Suppliers may also have other attributes which provides specific information in relation to the raw materials provided by the supplier viz. part_num, num_of_parts produced which can be supplied, cost_per_part and so on