Project Scope

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1. Overview

1.1 Project Scope

Our project aims to build a database management system for Croma's online retail store. Croma is a popular retail store for electronics and other related consumer goods. Our database application will focus solely on its online platform and exclude its offline stores from further discussions. This project's scope encompasses the management of the products, user profiles, procurement of electronic goods from suppliers, and inventory. This project will also aid in the administration of the distribution of the items, which includes the orders placed by the users and by Croma for stock replenishment. Focusing solely on the online platform makes the database system implementation precise and easily manageable. Separating back-end functions into distinct entities, like inventory, distribution, and procurement, ensures a modular design, enhancing scalability.

1.2 Technological Specifications:

1. Python   2. MySQL

1.3 Functional Requirements of the Business

1. Inventory Management
   1.1. Facilitates real-time tracking of stock levels of the products in the *warehouses*.
   1.2. Triggers alerts when the *product* quantity falls below the predefined threshold.
   1.3. Provides features to view and modify the quantity of the products.
   1.4. Checks the requested quantity against the current stock levels across all warehouses to ensure that an order is not processed for more items than are currently available.
   1.5. The availability of a product is updated whenever it goes out of stock and is made known to the *procurement management* for optimizing restocking processes.

2. Procurement Management
   2.1. Administers the goods procured from the *suppliers*.
   2.2. Generates and tracks purchase orders for products, collaborating with the *inventory* to meet customer demand.
   2.3. Manages details such as Supplier records (contract information, fees, products supplied), delivered quantities, delivery dates, and transaction amounts.
   2.4. When a product is sourced from multiple suppliers, the DBMS ensures that the product information is linked to each supplier record, thereby enabling the effective management of relationships with multiple suppliers.

3. <u>Distribution Management</u>
   3.1. This sector helps in the logistics and shipping processes of the orders placed by the customers.
   3.2. Allows the customer to track the status of the orders they have placed and keeps them updated with their order status.
   3.3. Assign *delivery agents* to a set of orders near a particular address. Communicate the details of the delivery agents and the *customer* with each other to guarantee a safe delivery. (such as quantity, delivery address, etc.)
   3.4. Store information regarding the shipment of the order, the customer, and the assigned delivery and *installation agents*.

4. <u>Product Browsing</u>
   4.1. Enables users to browse and search through *products* listed on the online store. They can view their prices, add specific quantities of items to their cart, and place an *order* for the products currently in their cart.
   4.2. Allows users to check the availability of any product near their address using their address pincode.
   4.3. Users can view the details of a product, like its brand name, manufacturing date, maximum purchase quantity, warranty period, installation guide, and other specifications, before wish listing or adding the product to their cart.
   4.4. The user will be notified before they proceed to checkout when an item in their cart goes out of stock.
   4.5. A single user can add multiple products to their cart. Each order can only have a single delivery address and payment method.
   4.6. Evaluate the popularity of a product by monitoring the number of views and orders it gets, which allows the management to ensure consistent stock availability for popular items and accordingly offer deals and discounts on such items.

5. <u>Account Management</u>
   5.1. Login/Sign-Up - Allows users to create an account using essential information like name, email, phone number, delivery address, payment mode, etc.
   5.2. Users can modify their account details, view their previous orders and wishlists, place orders, make payments, and track the status of their orders in process.
   5.3. Grievance Redressal - Equips users to request order cancellations, product returns, and refunds. (if applicable)

2. Contribution

Debjit Banerji	Kartikeya Sehgal	Ashish Bargoti
● Account Management ● Product Browsing ● Inventory Management ● Procurement Management	● Project Scope ● Distribution Management ● Procurement Management ● Final Formatting	● Inventory Management ● Procurement Management ● Product Browsing ● Distribution Management