

Kapde.in



Project Documentation

Online Multi-Brand Retail Store & E-commerce Management System

Project Scope

The project aims to create a DBMS for an online clothing store inspired by platforms like Myntra, Ajio, and Shoppers Stop. It will have three user roles: Website Admin, Warehouse Manager, and End Users/Customers. The Admin will manage suppliers & brands and handle product details. Warehouse managers will manage inventory. End Users / Customers will browse and place orders effortlessly. Flask & SQL shall be used for the back-end.

Introduction

The E-commerce Management System is a SQL & Python-based application designed to manage various aspects of an online retail platform. It provides functionalities for users and administrators to interact with the system, manage products, place orders, and perform administrative tasks.

System Architecture

Modules and Components

The system comprises several modules and components:

- Database Management: Handles database operations such as creating tables, inserting data, and executing queries. Utilises SQLite for data storage.
- User Interface: Provides interfaces for users and administrators to interact with the system through command-line prompts.
- Business Logic: Implements the core business logic of the system, including user authentication, product management, cart operations, and order processing.

Database Design

The database schema consists of several tables:

- User: Stores information about users, including their username, password, address details, and gender.
- Brand: Contains details of product brands.
- Product: Stores product information, including name, description, price, and brand.
- CartItem: Manages the items added to the user's shopping cart.
- Orders: Records orders placed by users.
- OrderItem: Tracks the items included in each order.

Functionality

User Features

- User Authentication: Users can log in with their credentials (user ID and password).
- Product Browsing: Users can view available products and search for specific items by name.
- Cart Management: Users can add products to their shopping cart, view the cart's contents, and place orders.
- Order Placement: Users can place orders for the items in their cart.

Admin Features

- Product Management: Admins can add new products, remove existing products, and view all products.
- Database Management: Admins can view all tables in the database and perform administrative tasks.

Usage

Installation

- Clone the repository containing the project code.
- Ensure Python and the required dependencies (SQLite, tabulate, rich) are installed.
- Set up the SQLite database by executing the provided SQL script (db.sql).
- Run the main Python script (main.py) to start the system.

Running the System

- Upon running the system, users will be prompted to log in as either a user or an admin.

-
- Users can browse products, add items to their cart, and place orders.
 - Admins can manage products and perform database-related tasks.

Conclusion

Summary

The E-commerce Management System provides a comprehensive online retail platform management solution. It offers a user-friendly interface for users and administrators to interact with the system efficiently.

Future Enhancements

- Implement a graphical user interface (GUI) for a more intuitive user experience.
 - Integration with external payment gateways for secure online transactions.
 - Implementation of user registration functionality to create new user accounts.
-



Project Group & Contributors

Aryan Jain - 2022111

Arjun Tandon - 2022095

Sarthak Sharma - 2022456

Sameer Singh Godara - 2022439