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3rd term in Diploma Level in IITM BS Degree.

3rd Year in B.Tech CSE in Future Institute of Engineering and Management

Description

"7 to 11" is a simple online grocery shopping website, with common e-commerce features, like shopping cart and coupon codes. A proper database management system, well-built functions, and a clean UI contribute to a seamless shopping experience.

Technologies used

1. Python (Flask framework and sqlite3 package)

The combination of Python and Flask enabled the development of a scalable backend that could handle concurrent user requests and provide real-time updates.

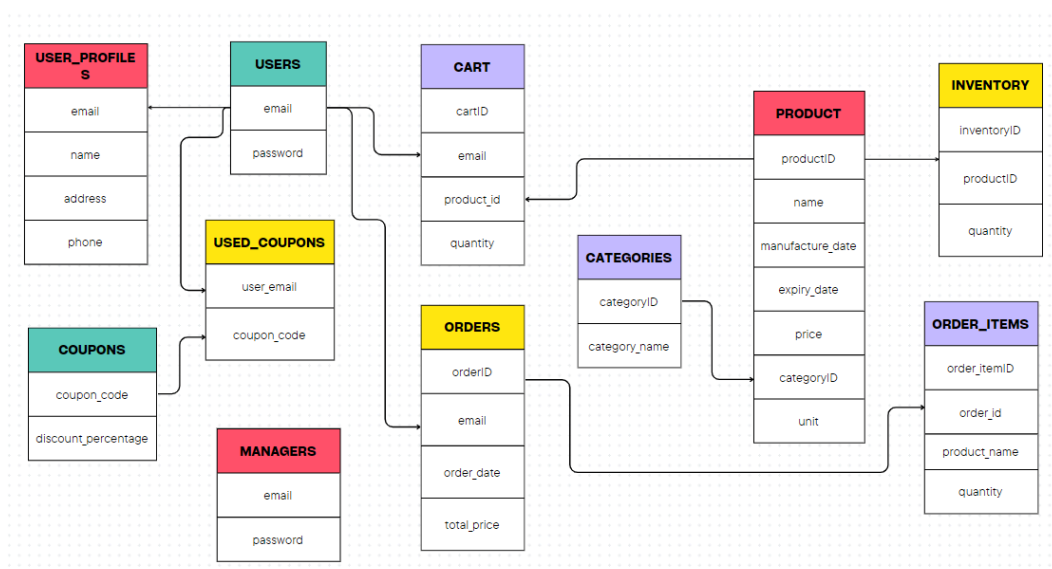
2. SQLite Database (with the help of DB Browser)

SQLite ensured efficient data management, enabling seamless storage, retrieval, and manipulation of product details, orders, coupons, and more.

3. HTML, CSS, Bootstrap

HTML, CSS, and Bootstrap facilitated the creation of an intuitive and responsive user interface.

DB Schema Design



Project Structure

Controller Files: The controllers are responsible for handling the routing and logic of the application. They define the various routes and connect the users' and manager's actions to the appropriate functions.

Function Files: There are various function files that group the important functions according to their functionalities. For instance, the cart-related functions are in a file "cart_functions.py".

Views: The views are the templates that define how the user interface is presented. The templates are designed using HTML, CSS, and Bootstrap, with the integration of Jinja2 templating engine to dynamically generate content based on the data from the controllers.

Features Implemented

User-end

Authorization and Security: The users and manager can register and log in securely. The passwords are hashed using the SHA-256 cryptographic hashing algorithm before being stored in the database.

Searching and Filtering: Users can search for products using keywords and apply filters based on price, manufacture date, and expiry date. The project facilitates a user-friendly search experience to help users find products efficiently.

Shopping Cart: Users can add products to their shopping carts, update quantities, and remove items. The shopping cart functionality is designed to provide real-time feedback to users and ensure a smooth checkout process.

Coupon Application: Users can apply coupon codes during the checkout process to receive discounts on their orders. The project validates coupon codes and adjusts the total price accordingly.

Order Processing and Confirmation: Once users are satisfied with their shopping cart, they can proceed to checkout. The checkout process involves capturing user information, validating the order, and recording the order in the database.

Manager-end

Product Management: Managers are granted the authority to not only add new products to the system but also update existing product details, such as prices, quantities, manufacturing dates, and expiry dates.

Category and Coupon Code Management: Although product categories can be automatically added and deleted during product management, Managers may create and delete categories. Also, Managers can add, remove, and monitor the use of coupons.

Video

<https://youtu.be/is0M89xOgHQ>