Author

Anant vats

21f2000371

21f2000371@ds.study.iitm.ac.in

I am student and currently in the 4ᵗʰ year of B.Tech and also doing the diploma level in this bs degree

Description

The system is an online shopping platform that allows users to browse and buy products from different sections. It includes a user interface for searching sections and products, adding products to the cart, and making purchases.

Technology used

The system is designed using the Flask web framework with a backend database managed by SQLite. Jinja2 templates and Bootstrap for HTML generation and styling for frontend.

It is light framework and I can design anything with the help with minimal requirement.

DB Schema Design

1.User Model:

-Attributes: id(primary key), username(string, max 50 characters), password(string, max 50 characters)

2. Section Model:

   - Attributes: id (primary key), name (string, max 100 characters), section_type (string, max 50 characters).

- Relationships: One-to-Many with Product model (each section can have multiple products).

3. Product Model:

   - Attributes: id (primary key), name (string, max 100 characters), manufacture_date (DateTime), expiry_date (DateTime), quantity (integer), rate_per_unit (float), section_id (foreign key).

   - Relationships: Many-to-One with Section model (each product belongs to one section).

I choose these three database for one for login and one for Section/Category and one for the Product.

Architecture and Features

The Project folder contains the main.py file .It contains the codes for the controller of the app. In the folder itself it contains the templates folder in that folder it contains html files.

 Home Page Controller: -Renders the home page with the user login and links for register and admin login. Renders the home page with sections and products for display.

Section Search Controller: Handles the search query for sections and retrieves sections based on the query. Renders the search_sections.html template with the search results.

Product Search Controller: Handles the search criteria for products and retrieves products based on the criteria. Renders the search_products.html template with the search results.

Add to Cart Controller: Adds products to the cart with the specified quantity. Updates the cart in the session.

View Cart Controller: Retrieves the cart from the session and calculates the total amount. Renders the cart.html template with the cart contents.

Buy Products Controller: Processes the purchase of products in the cart. Decreases the product quantity in the database if the purchase is successful. Clears the cart in the session after purchase. Renders the thank_you.html template with the order details.

Frontend:

User Page (sections.html):Displays sections and products available for browsing. Provides links to search sections and view cart.

Search Sections Page (search_sections.html): Provides a search form to search for sections by name. Displays search results.

Search Products Page (search_products.html): Provides a search form to search for products by various criteria (e.g., price, manufacture date). Displays search results.

Cart Page (cart.html): Shows the products in the cart along with their quantities and total price. Provides a button to proceed with the purchase.

Thank You Page (thank_you.html): Displays a thank you message for the successful purchase. Shows the order details and the total amount.

Overall System Flow:

1. Users can browse sections and products on the home page (section.html).

2. They can search for specific sections using the search_sections.html page.

3. Users can also search for products based on criteria using the search_products.html page.

4. They can add products to the cart and view the cart contents on the cart.html page.

5. When ready to buy, users can proceed to purchase the products in the cart.

6. The buy_products controller will handle the purchase, update the product quantities in the database, and display a thank you message with the order details on the thank_you.html page.

7.Admin section can create, edit and delete the section/category and product (admin_dashboard.html)

 Video:

https://drive.google.com/file/d/1_aAhgOetpt9ps6Cykp4jT5MXtU3krj7D/view?usp=sharing