Author

SAI ARUN PRAVIN R R
21F1003899
21f1003899@ds.study.iitm.ac.in

Description

The Online Grocery Store project is a web-based platform that offers users the convenience of shopping for groceries online. Users can browse and purchase a variety of products, manage their shopping cart, and have groceries delivered to their doorstep. The project is built using the Flask framework, integrating with a SQLite database for data storage.

Technologies used

1. Flask - for application code
2. Jinja2 templates and Bootstrap for HTML generation and styling.
3. SQLite and SQLAlchemy for data storage.
4. Vue.js is used for dynamic frontend interactions,

DB Schema Design

The project's database consists of several models/tables:

User: Stores user information, including unique IDs, usernames, and profile details.

Product: Contains details about grocery products, such as IDs, names, prices, and quantities.

Cart: Stores user-specific cart items, including product IDs, quantities, and prices.

Order: Holds information about placed orders, including order IDs, user IDs, and timestamps.

Category: Stores different grocery product categories and their details.

Architecture and Features

The project follows the Model-View-Controller (MVC) architecture:

- Model: Manages database interactions and modeling of different entities (User, Product, Cart, Order, Category).
- Controllers: Python scripts that handle routing and logic for different views and API endpoints.
- Templates: HTML templates for rendering frontend views.
- Static: Contains static assets like CSS and JavaScript files.
- Forms: Define forms for user registration, login, and other interactions using Flask-WTF.

Key Features:

- User Registration and Login: Users can register accounts and log in to access the platform.
- Browse and Search: Users can view grocery products and search for specific items by category or name.
- Shopping Cart: Users can add products to their shopping cart, adjust quantities, and review their selections.
- Order Placement: Users can place orders based on their cart contents and view order history.
- Product Management: Admin users can add new products and manage existing ones.
- Category Management: Admin users can create and manage product categories.
- Secure Authentication: User passwords are securely hashed and stored in the database.
- Responsive Design: The project utilizes Bootstrap and responsive design principles for a user-friendly experience on various devices.

Video

https://drive.google.com/file/d/1fxFyReCXl5txcMme-_OpG-DpGa1Zxp2c/view?usp=sharing