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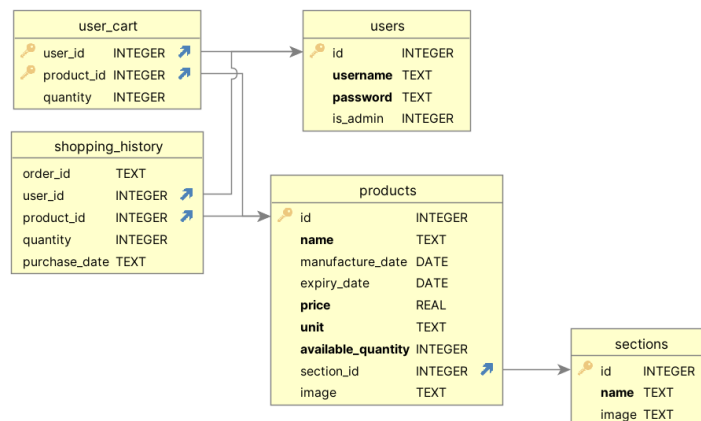
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Description

This project involves creating a grocery store management system using Flask. The system allows users create account and login to browse and purchase products, manage their cart, view purchase history, and search. Admin can manage products and sections in the admin dashboard and provides insights for the admin, such as most sold products, registered users count, and products with low quantities.

Technologies Used

- Flask: A web framework used for creating the application.

- SQLite: A lightweight database for storing user, product, and purchase data.

- Matplotlib: A library for generating data visualizations, used to create graphs for insights.

- Bootstrap: A front-end framework for styling the user interface.

- Jinja: It is a web template engine for the Python programming language.

- Replit: A online IDE

DB Schema Design

The database schema includes tables for users, sections (categories), products, user cart, and shopping history. Relationships are established between these tables to store user-related data, product information, cart contents, and purchase history.

Architecture and Features

The project follows the MVC (Model-View-Controller) architecture. The main components include:

- **Controllers:** Handled by the Flask app routes defined in **main.py**.
- **Views:** HTML templates in the **templates** folder for rendering pages.
- **Static:** All images, css are in static folder.

The project features include user registration and login, browsing products by categories, adding/removing products to/from the cart, viewing cart, searching products, making purchases. Admin can manage products and sections in the admin dashboard.

Note on Features Implemented

Additional features, viewing purchase history, and admin insights such as most sold products, registered users count, and products with low quantities, product quantity validation during checkout.

Video

https://drive.google.com/file/d/18bFO-S-Ti5PBT7zNvjAi7YP5rJIEuiPT/view?usp=sharing