

Modern Application Development-1

Project Report

Author

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About: I am currently pursuing my BE in AIML along with the diploma in Data Science and Programming. I like to take up new challenges and interesting projects to learn more about the current technologies.

Description

This project consists of a user-friendly online grocery shopping portal, which includes separate Manager and User functionalities. The manager can upload, change or remove details about products and sections, while the users can filter, view, cart, and add a wallet.

Technologies used

- Flask : Framework
- Jinja: Exporting and importing templates
- Flask SQLAlchemy: To manipulate backend Database
- Sqlite3: Database
- HTML, CSS, Bootstrap: Front End

API Design

All the functionalities regarding creation, update, read, and deletion are properly managed by the flask app with specific routing and handling.

- API for password validation for user and admin login.
- Separate APIs for admin to add, remove and update categories and products.
- API for users to add products to cart, and change cart items.
- API for adding money to users' wallet.

Architecture and Features

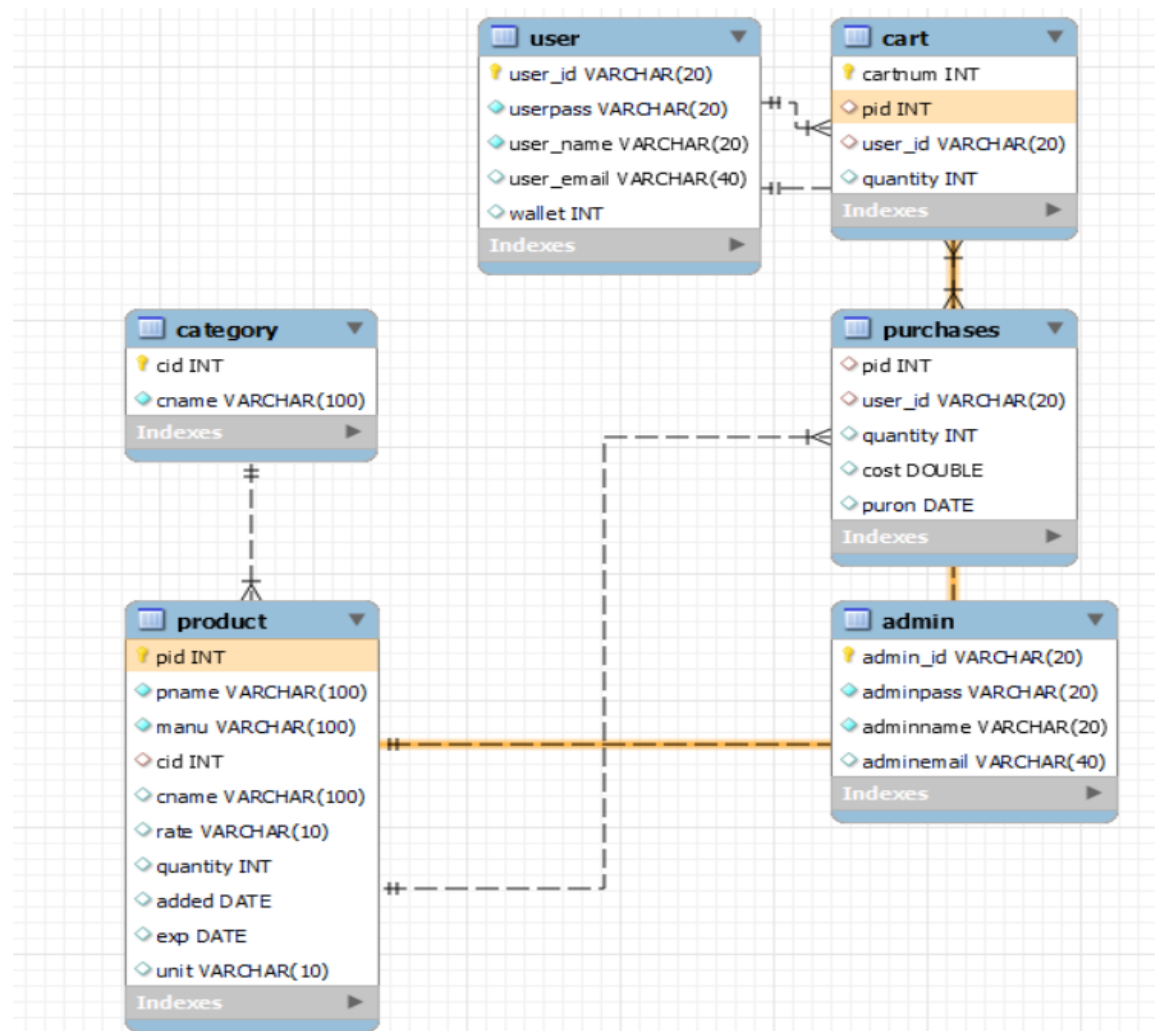
This project follows a simple MVC architecture.

- 1)The view is handled by all the html and css files in the form of jinja templates.
- 2)The python flask application acts as the controller, handling different URLs, routes, and manipulation of data.
- 3)An SQLite3 database acts as the backend model

It contains multiple features such as separate login systems for users and admins. Admins can create, change or remove details about sections and categories.

Users can sort, filter, and search for products based on different parameters. They have the option to add multiple products from different categories to their cart. Users can view and change all products in the cart. A wallet feature is also included where users can load money after password validation.

DB Schema Design



Video

https://drive.google.com/file/d/1h_ZQd9BBXma_93XtOFLxdVojlePiNt8g/view?usp=drive_link