

Author

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About Me: Aspiring Data Science Student working in VMware

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Project : **Grocery Store v2**

Description:

Developing a Multiuser Online Grocery Store project (inclusive of roles such as Admin, Store Manager, and User) with features enabling users to effortlessly browse, search, select, and purchase grocery items. Additionally, the system empowers Store Managers to efficiently manage inventory, while Admins oversee and approve requests initiated by Store Managers

Technologies used:

Flask for API, VueJS for UI , Bootstrap CSS Framework for styling, SQLite for database, Redis for caching, Redis and Celery for batch jobs

Python Dependencies:

- Flask==2.3.2
- Flask-Caching==2.1.0
- Flask-Cors==4.0.0
- Flask-Ext==0.1
- Flask-JWT-Extended==4.5.3
- Flask-Login==0.6.2
- Flask-RESTful==0.3.10
- Flask-SocketIO==5.3.5
- Flask-SQLAlchemy==3.0.5

Node Package Manager Dependencies

- @vue/runtime-core: 3.3.8
- axios: 1.6.2,
- bootstrap: 5.3.2,
- bootstrap-icons: 1.11.2,
- core-js: 3.8.3,
- crypto-browserify: 3.12.0,
- jsonwebtoken-promise: 1.0.3,
- stream-browserify: 3.0.0,
- util: 0.12.5,
- vue: 3.2.13,
- vue-router: 4.2.5,
- vue-toastification: 2.0.0-rc.5,
- vuex: 4.1.0

DB Schema Design:

[ER Diagram Link](#)

Architecture and Features:

Architecture:

The online grocery store utilizes a microservices architecture with Flask as the backend framework and Vue.js as the frontend library. Flask handles server-side logic, RESTful APIs, and database interactions. Vue.js, as the client-side framework, ensures a responsive and dynamic user interface. Data is exchanged seamlessly between the frontend and backend through RESTful endpoints. This architecture ensures a smooth shopping experience, efficient inventory management, and simplified administrative oversight for a robust and user-friendly online grocery platform.

Features:

1 Base Requirements:

- User signup and login (using RBAC)
- Mandatory Admin Login (using RBAC)
- Store Manager Signup and Login (using RBAC)
- Category and Product Management
- Search for Category/Product
- Buy products from one or multiple Categories

2 Backend Jobs

- Export Jobs
- Reporting Jobs
- Alert Jobs

3 Backend Performance

4 Summary Reports

- a. Top selling product in last 7 days
- b. Top selling category/sections in last 7 days
- c. Number of orders weekday wise

5. Mark Product Unavailable (Explicitly or when Stock Quantity equals 0)

6. Historical Orders View and download all orders.

7. Buy Again Section which displays products based on previous buying patterns of the user.

Note:

- i) Core Functionality Features highlighted in Green.
- ii) Additional Functionality Features highlighted in Yellow.

Video:

Link : [Grocery Store v2](#)