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Description:
I am a second-year diploma student at IIT Madras, and I have developed a Grocery App. This app allows users to manage their shopping experience effectively. It incorporates both user and admin functionalities. Users can browse and purchase products, while admins have access to more advanced features.

Technologies Used:

Flask: A micro web framework for building web applications.
HTML: Used for creating the structure of web pages.
SQLAlchemy: An Object-Relational Mapping (ORM) library for Python, used to interact with the database.

Vue.js: A JavaScript framework for building user interfaces.
Celery: An asynchronous task queue/job queue system.
Redis: An in-memory data structure store.
CSS and Bootstrap: Used for styling and enhancing the user interface.
VS Code: The code editor used for development.
Database Schema Design:
The application's database includes the following tables:

User (user): Stores user information, including userid, username, password, timestamp, useremail, active, and role.

Category (category): Represents product categories and has a many-to-many relationship with the produc t table.

Product (product): Stores product information, including productid, productname, manufacturingdate, expi rydate, rateperunit, maxquantity, and timeadded. It also has a many-to-many relationship with the categor y table.

Purchased (purchased): Records product purchases, containing purchasingid, userid, productname, quan tity, and timestamp. It has ForeignKey relationships with the user and product tables.

Request (request): Stores requests, possibly from store managers, with fields id, option, modification, cat egor, and storemanagerid. It has a ForeignKey relationship with the user table.

Cart (cart): Represents a shopping cart, with id, userid, productname, and quantity. It has ForeignKey rela tionships with the user and product tables.

Store Manager Request (storemanagerrequest): Records requests related to store managers and include s id, name, password, email, and approved columns.

Architecture and Features:

User and Admin Roles: The application distinguishes between user and admin roles. Users can browse a nd purchase products, while admins have access to advanced features.

Product Management: The store manager handles product management. They can create, edit, and delet e products.

Category Management: Admins are responsible for managing categories.

Shopping Cart: Users can add products to their shopping cart and complete the purchase.

Request Handling: The app supports handling requests from users and store managers.

Asynchronous Tasks: Celery is used for handling asynchronous tasks, such as exporting shows as CSV a nd sending alerts via Google Chat space.

Email Notifications: Users receive email notifications for booking confirmations.

This application provides a user-friendly and efficient solution for grocery shopping, allowing users to bro wse, purchase products, and interact with store managers and administrators effectively.

Video Link-
https://drive.google.com/file/d/1wkwxYr2nYJSyt-MYHFmgNEa5BbSFlYWM/view?usp=sharing