MODERN APPLICATION DEVELOPMENT - II
PROJECT REPORT

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Project Description:

In Mad2 Project Iam Supposed to build a web app which functions similar to a online grocery store.It is Multi User,Multi Store Manager and Single Admin Web App.In this app user can have the details about different categories , products and can Order them.They can easily check and search for products and add them to carts.
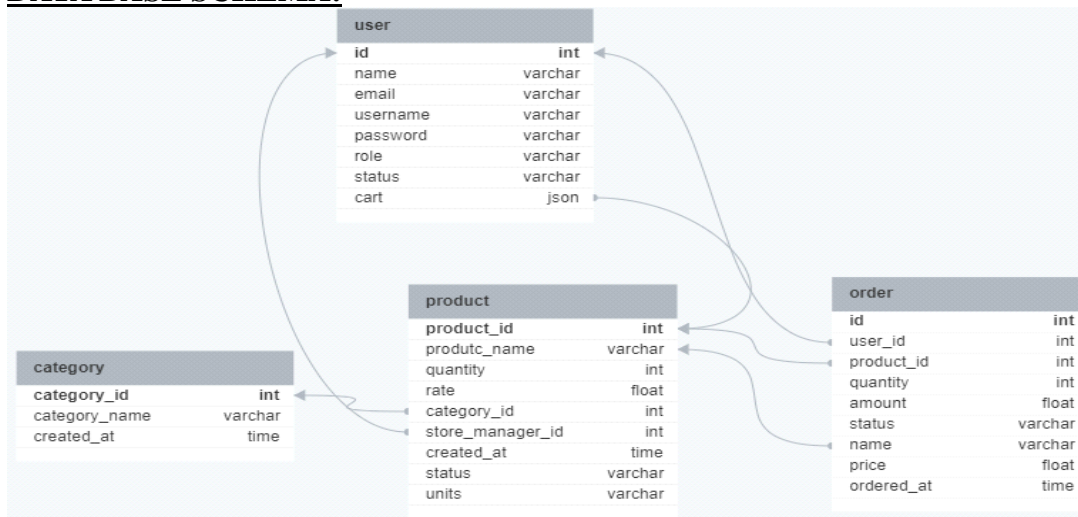
Technologies Used:

Frontend

1.Vue JS: For User Interface
2.HTML :Templates For Generating Reports

Backend

1.Python Flask Framework : Used to Create Flask app and Initiate It
2.SQLite DB : Used for Data Storage
3.SQLAlchemy : SQLAlchemy is used to interact with Database for CRUD Operations , and extracting information from SQLITE DB
4.JWT : Token generation for authentication
5.CORS : Cross - Origin Resource Sharing
6.Redis : For Caching
7.Redis & Celery : For sending Monthly Reports,Daily Remainders(Jobs) and generating csv files
8.Node Modules:Generated Frontend and Integrated CSS
9.AXIOS : Connection between frontend and backend

DATA BASE SCHEMA:

The Database contains 4 tables named
I. Product
II.Category
III.Order
IV. User
In User table we have all roles defined where there is only one admin along with variable number of managers and users ,on managers getting signed up the status is set to pending ,on Admin Approval the status is set to the approved, we store the emails of the users and the managers.

API DESIGN:
 I have written the apis for the following sections
CRUD operations used in Category Management Only accessed by the role "Admin"
CRUD operations used in Product Management Only accessed by the role "StoreManager"
Backend Updations,Deletions and Validations

FEATURES:
- User Sign Up, Store Manager Sign Up with JWT Token Generation
- User Login,StoreManager Login ,Admin Login using JWT
- ADMIN: Admin has the AdminHome which on login displays the StoreManager signup requests,Admin can accept or reject the sign up of Store Manager
- AdminHome also has the delete product requests from the storemanagers which can be accepted to delete and the recent categories he has added
- Admin can Add Category,Remove Category and Edit a Category
- STORE MANAGER:Store Manager has StoreManager Home which displays the recent Categories he added
- Store Manager can add a product,Edit a Product and Delete a Product with Admins approval
- USER:User has User home page in which all products are rendered and can be added to Shopping Cart
- Shopping Cart :Individual User has individual Cart which is like wishlist and products in that Cart can be ordered
- StoreManager has Dowload Report sections onclicking generates a csv report of the montly product details
- User gets Daily Remainders whether he/she visits the cart and orders or not
- User also gets monthly report regarding the Order Details in that particular Month
- Caching is done to improve app performance

DEMO LINK: mad2_demo_video