MAD-2 Project Documentation

Project Name: Grocery Store  
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Introduction:  
The Grocery Store Application is a user-friendly and efficient web-based  
application that allows users to shop items under different categories. The  
application provides an easy-to-use interface for browsing items and adding them to cart. The Model-View-Controller (MVC) paradigm is used to organize the entire project. The controllers for processing requests and rendering templates are located in the views module of the application package. Classes for database tables can be found in app.py. The HTML view templates are located in the templates folder. The application provides user registration and login, CRUD of items/categories by admin, searching and adding items to cart by users.

Technology Stack:  
Flask: Flask is a Python web framework that provides tools, libraries, and patterns to build light -weight web applications.

VueJS: Vue.js is an open-source model–view–viewmodel front end JavaScript library for building user interfaces and single-page applications.

Flask SQLAlchemy: Flask SQLAlchemy is a library that provides a set of high-level API for connecting Python objects to relational databases.

SQLite: SQLite is a lightweight, embedded relational database that provides a  
simple and efficient way to store and retrieve data.

Bootstrap: Bootstrap version 5.3 is used in this project for the HTML styling and overall frontend Designing.

Celery and Redis: For backend jobs

Features:

Admin Panel - An admin panel is provided for the administrator to manage the  
application. The admin can remove users and create/update/delete categories. The admin panel is protected and can only be accessed by the admin after authentication.

Manager Panel - A manager panel is provided for the administrator to manage the application. The manager can create/update/delete items. The manager panel is protected and can only be accessed by the manager after authentication.

User Panel - A user panel is provided for the users to browse categories and items. Users can search categories and items. Users can also view their cart item added previously. The application has a login page where users can authenticate themselves.

Cart - Users can select items and buy them by adding to cart. The application  
supports adding multiple items to cart and adding one item multiple times.

Backend jobs-Caching, Download CSV, Monthly report, Daily reminder

Database Schema:

User - This table stores the details of the users and managers.

Category - This table stores the details of the categories.  
Item - This table stores the details of the items.  
Cart - This table stores the details of the items that have been added to cart.

Drive Link Containing Video:  
<https://drive.google.com/file/d/1YXeg6FWR3xSXgNljkgs12lvAZn4LMRWB/view?usp=sharing>