

# Grocery Store web Application

## Introduction:

This is a multiuser application. Used for buying and selling groceries. Users can buy many products from one or more sections. Admin can create new sections and products.

The purpose of the application is to fulfill the requirements of one of the subjects of the BS in Data Science and application.

## Description:

The application has two interfaces, one for user, and one for admin

Users can search for products based on categories, product name, product price, expiry date, and appropriately add products to carts, and finally place orders.

The user can see the full profile, update the profile, and check past orders.

Admin can search for a product based on its name, quantity, expiry date, and categories. Admin can create, update, and delete categories, and create updates and delete products.

New user/admin registration and password reset for both admin and user are also present.

## Technology used:

- Python flask for application logic
- Jinja2 for html template generation and bootstrap for styling
- SQLite and SQLAlchemy for data storage and class mapping.
- Flask login from user login functionality
- Flask restful for API
- Flask session for storing admin login data in session
- bcrypt for password hashing

## Database Schema:

The following are the database tables with their attributes:

- **section** (*id, name, image\_url*)
- **product** (*id, name, brand, manufacturing\_date, expiry\_date, price, stock, image\_url, section\_id*)

- **user** (*id, name, username, password, email, mobile, address, city, state, pin*)
- **cart** (*id, user\_id, product\_id, quantity*)
- **order** (*id, user\_id, order\_date, total\_amount*)
- **order\_item** (*id, product\_name, brand, manufacturing\_date, expiry\_date, price, quantity, order\_id*)
- **admin** (*id, username, name, password, email*)

## API

Using the flask\_restful library, API endpoints were created for the section and product table to perform the CRUD operation.

## References

- <https://flask.palletsprojects.com/en/2.3.x/>
- <https://flask-restful.readthedocs.io/en/latest/>
- <https://flask-sqlalchemy.palletsprojects.com/en/3.0.x/>
- <https://pypi.org/project/Flask-Login/>
- <https://chat.openai.com>
- <https://getbootstrap.com/>

## Video Link

[https://drive.google.com/file/d/1lOPBtMcIYgS09LbK7HPBQ\\_F5xTXW2S8R/view?usp=sharing](https://drive.google.com/file/d/1lOPBtMcIYgS09LbK7HPBQ_F5xTXW2S8R/view?usp=sharing)