GrocerEase

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I am currently pursuing B.Tech in CSE from Anurag University, Hyderabad. I am very much interested in Programming and Data Science and I am looking forward to learning more.

Description:

This application offers a basic login system that caters to both users and administrators or store managers. Admins or store managers have the privilege to efficiently manage the product inventory by adding, editing, and deleting products and categories. They can also utilize the advanced search functionality to find specific products based on various criteria, ensuring efficient stock management. Users can add their desired products to their carts for easy checkout. The search feature allows users to find products by name, category, or even price, making it convenient to locate exactly what they need.

Technologies used:

- Flask 2.2.2 for app routing, template rendering, and redirecting.
- Flask-SQL Alchemy for connecting the SQLite database as a server with the flask application.
- HTML, CSS, Bootstrap, JavaScript For styling the pages.

Database Schema:

1. User

- user_id (Primary Key)
- username
- password
- address
- phone_number

2. Admin

- id
- username
- password

3. Category

- category_id
- category_name

4. Product

- product_id
- product_name
- category_id
- price
- image_url
- quantity

5. Order

- order_id
- user_id
- order_date
- total_amount

6. Order_Item

- order_item_id
- order_id
- product_id
- quantity
- price_per_item

7. Cart

- cart_id
- user_id
- product_id
- quantity

Architecture and Features:

```
app.py
application
    config.py
    controllers.py
    database.py
    forms.py
    models.py
   -__pycache_
        config.cpython-311.pyc
        controllers.cpython-311.pyc
        database.cpython-311.pyc
        forms.cpython-311.pyc
       models.cpython-311.pyc
db_directory
    Database.sqlite3
-static
    1.js
    main.css
```

```
templates
   admin layout.html
   index.html
   user layout.html
    admin
        add product.html
       admin home.html
        admin login.html
        admin search.html
        category.html
       update_category.html
       update product.html
   -user
       buy form.html
        cart.html
        checkout.html
       home.html
        login.html
       order confirmation.html
        purchase.html
        purchase confirmation.html
        register.html
        search_results.html
       user.html
```

This application is put to use by running app.py. The folder application contains all of the buisness logic of the application. configpysets up the configuration for the application, controllerspyhas all the flask routes which render the views of the application, database.pyintegrated SQLAlchemy with Flask, forms.py has all the forms required for the application, and finally models.pyhas the db models defined in it for the application.

Video link: https://drive.google.com/file/d/1M6rVnQAy6HwJeyWxAsAHsgTiCub5zlCo/view?usp=drive_link