Author:

Areeba Farooqui

22f1001053

22f1001053@ds.study.iitm.ac.in

I enrolled in the B.S Online Degree after completing my 12th. Currently I'm in my second term of diploma with MAD2, PDSA and MAD1 Project.

Description:

The Grocery Store is a multi-user app where users can buy products of different categories and all categories, the products are present on the home page. The app has features to do login and register for the users and login for admin. The admin can create/update/delete the products/categories through the CRUD operations.

Technologies used:

Python: Develop the controllers and serve as the host programming language for the app

HTML: Develop the required web-pages

Bootstrap: To make the frontend appealing and easy to navigate

SQLite: Serves as the database for the app

Flask: Serves as the web-framework for the app

Flask-SQLAlchemy: Used to access and modify the app's SQLite database **DB**

DB Schema Design:

Class User

Table users Columns : id [Integer , Primary_key , autoincrement]

name [String , Unique ,not null]

password [String , not null]

admin [Boolean , not null]

Class Product

Table products Columns : id [Integer , Primary_key , autoincrement]

name [String , Unique , not null]

stock [Integer , not null]

description [String]

availability [String , not null]

mfg_date [String , not null]

exp_date [String , not null]

m_r_p [Integer , not null]

type [String , not null]

owner [Integer , not null]

cat_id [Integer , not null]

Class Category

Table categories Columns: id [Integer , Primary_key , autoincrement]

name [String , Unique , not null]

description [String]

owner [Integer , not null]

Class Asset

Table purchases Columns : id [Integer , Primary_key , autoincrement]

owner [Integer , not null]

customer [Integer , not null]

product [Integer , not null]

qty [Integer , not null]

The database has four tables. The “users” and “products” are used to store the users and the products data respectively. The “Categories” table is used to store the data of the present categories in the Grocery Store. Then the last table is “Purchases” which used to add the product’s data which the customer/user has bought.

API Design:

I have created the CRUD operations on the Products and Categories tables i.e. admin can CREATE, READ, UPDATE and Delete the products as well as the categories once signed in from the Admin’s Dashboard using the corresponding options.

Architecture and Features:

The application works on CRUD operations. The View of the application is created using HTML and Bootstrap. The Controller is created using Python and Flask. The Model is created using SQLite. I have created the templates in the “templates” folder and images in the “static” folder.All the needed modules are present in the virtual environment.

The features of the application are as follows -->

Register and Login for users along with Login for admin

Ability to search products and categories

CRUD operation functions for the admin for the products as well as categories

Add the products which one wants to buy to the cart

Checkout from the cart along with the decrease of products followed by the purchase

Show "Out of stock" when the products have finished

Video: For the video demo, click here