

# PROJECT REPORT

## MODERN APPLICATION DEVELOPMENT - 1

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**Me :** An upcoming Datascience graduate working in various fields of Technology and is always dedicated and enthusiastic towards learning new things with sheer will of self-improvement.

### Description

It is a multi user GROCERY STORE web app in which i have to implement basic html login for user and admin and proper crud operation system for category and product management for admin and basic search for user for categories etc.

### Technologies Used

**HTML & css :** used for creating web pages from Bootstrap

**Jinja2:** For templating

**SQLite DB:** For Data Storage

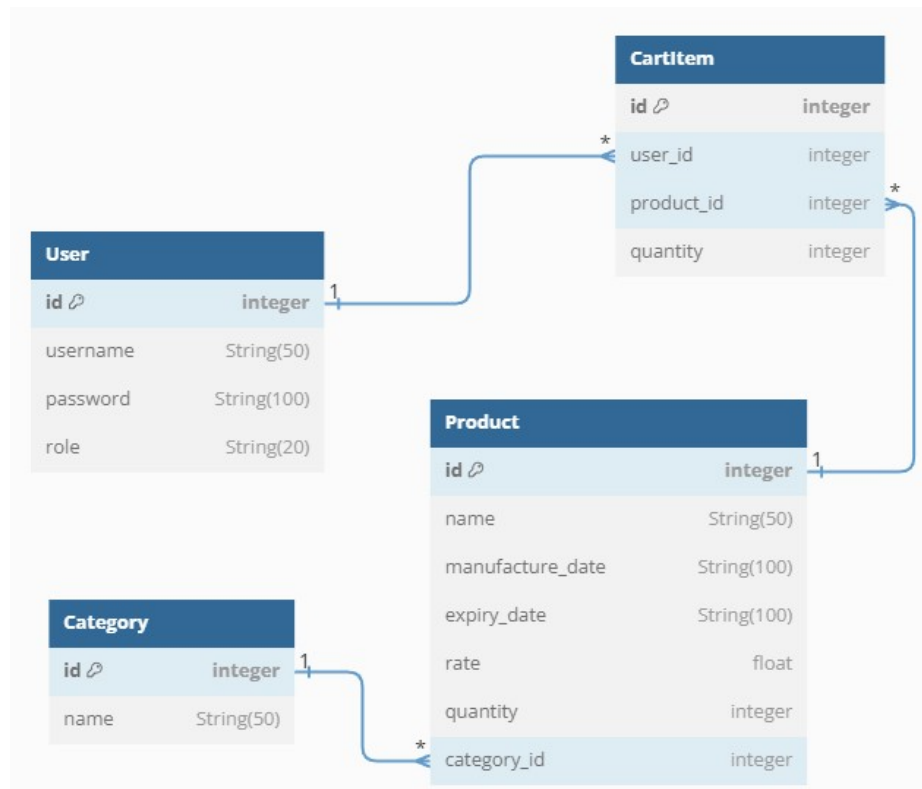
**Flask :** Application Coding

**Flask-SQLAlchemy :** Enabling Database operations

**SQLAlchemy :** Used for working with databases using python

**Werkzeug :** used for secure file operations

### DB Schema Design



As described in the above figure this db has 4 tables

1. **User** (username, password, role)
2. **cartitems** (id, user\_id(foreign key), product\_id(foreign key), quantity)
3. **Category** (id, name)
4. **Product**(id, name, manufacture\_date, expiry\_date, rate, quantity, category\_id(foreign key))

**Reason:** It is the basic structure I used for implementing and this design allows for efficient organization of users, products, categories, and cart items. It establishes relationships between these entities using foreign keys, which helps maintain data integrity and enables powerful querying.

## Architecture and Features

The project Folder contains

- **instance** - contain grocery\_store.db (database)
- **templates** - All the html files which are used in this project
- **app.py** - All the python code including code for database, models, configuration, controllers
- **requirements.txt** - contains all the installed libraries and modules
- **readme.md** - shows how to implement the project
- **project report.pdf** contains all the details regarding project

Features implemented :

- Admin Login and User Login
- Category Management (for only admin, crud operations implemented)
- Product Management (for only admin, crud operations implemented)
- Buy products from one or multiple Categories
- Search for Category/Product
- Display all the products available for a given category
- Ability to show the total amount to be paid for the transaction
- validation

## Video

[https://drive.google.com/file/d/1b\\_uue6i0ZVPOkZN0Hlx-ic5dyizTA8o/view?usp=sharing](https://drive.google.com/file/d/1b_uue6i0ZVPOkZN0Hlx-ic5dyizTA8o/view?usp=sharing)