Grocery Store

Problem definition

Frameworks to be used

- Django for application code
- Bootstrap for HTML generation and styling
- MySQL for data storage
- All demos should be possible on a standalone platform like replit.com and should not require setting up new servers for database and frontend management

Grocery Store

- It is a multi-user app (one required admin/store manager and other users)
- Used for buying grocery
- User can buy many products for one or multiple sections
- Store manager can add section/category and products
- Each section/category will have
  - ID
  - Name etc.
- Each product will have
  - ID
  - Name
  - Manufacture/Expiry date
  - Rate per unit etc. (Rs/Kg, Rs/Liter)
- Every category can have a number of products
- System will automatically show the latest products added

Terminology

- Inventory
- Section/Category - List of products, amount etc.
- Product - Name, Price etc.

Similar Products in the Market:

1. BigBasket
   - Web, IOS and Android

2. Blinkit
   - Web, IOS and Android

- These are meant for exploring the idea and inspiration
- Don't copy, get inspired

Refer to the wireframe given below;
GroceryStoreApp

Core Functionality

- This will be graded
- Base requirements:
    - Admin/Store Manager login and User login
    - Category Management
    - Product Management
    - Buy products from one or multiple Categories
    - Search for Category/Product

Core - Admin and User Login

- Form for username and password for user
- Separate form for admin login
- You have to use a proper login framework (Django Auth) and use a simple HTML form with username and password - we are concerned with how secure the login or the app is
- Suitable model for user

Core - Inventory Management (Only for Store Manager)

- Create a new section/category
- Edit a section/category
  - Change name/type or image
- Remove a section/category
  - With a confirmation from the admin

Core - Product management (Only for Store Manager)

- Create a new product
- Edit a product
    - Change price/available quantity or image
- Remove a product
    - With a confirmation from the admin
- Allocate section while creating product

Core - Search for and Cart multiple products

- Ability to search sections based on section/category
- Ability to search products based on price, manufacture date etc.
- Ability to add multiple products in a cart (may or may not belong to same category)

Core - Buy Products

- Display all the products available for a given category to the users
- Ability to buy multiple products from one or multiple sections.
- Ability to show out of stock for the products that are not available.
- Ability to show the total amount to be paid for the transaction.

Recommended

- APIs for interaction with sections and products
  - CRUD on sections
  - CRUD on products
  - Additional APIs for getting the sections/products to display
- Validation
  - All form inputs fields - text, numbers, dates etc. with suitable messages
  - Backend validation before storing / selecting from database

Additional

- Styling and Aesthetics
- Proper login system
- Export section/product engagement (number of products bought, frequently bought products, most demanded sections)