

Live MART- Online Delivery System

Brief Description:

In a year that witnessed the world navigating the onset of a global pandemic, the e-commerce grocery landscape quickly pivoted and charged forward. The shift in consumer habits propelled new platforms and provided a boon to grocery retailers and wholesalers. While today's grocery retailers are benefitting from a similar shift in consumer habits, they must go beyond simply offering e-commerce to retain their competitive edge. Grocery retailers will no longer get credit for simply having an e-commerce option; they'll need to offer a user experience that truly makes consumers' lives more convenient. Consumers will be looking for the ability to easily filter items by dietary preference and expect category pages and search results to adapt based on their personal browsing and purchase history. Therefore, the students are required to develop an application (Android/Web based/Stand-alone) for e-marketing that connects customers (individuals who shop for home purpose) to retailers (people dealing with multiple items who stores items in large quantities) and retailers to wholesalers (warehouse maintaining people) with the below mentioned mandatory functionalities.

Hierarchy of Users:

Customers —————> Retailers —————> Wholesalers

Roles of Users: (Mandatory but not limited to)

- **Customers:** selection of items (by search, by using filters or by browsing), adding to cart, place order, payment of order, feedback/queries.
- **Retailers:** adding new items, deleting items, deciding the price of items while adding, maintaining record of each customer (items they have bought, transactions they have done till now etc..), update item quantities (after every order placed by customer), place order, order payment, feedback/queries, etc.
- **Wholesalers:** adding new items, deleting items, deciding the price of items while adding, adding or deleting retailers, maintaining record of each retailer (items they have bought, transactions they have done till now etc..), items that they supply to the retailers, update item quantities (after every order placed by retailer) etc.

Functionalities:

Module 1: Registration and Sign-Up

Registration and signup using username and password or any social media (Gmail, Facebook login or Instagram)

Login must be done using OTP verification (phone/email) every time.

A Customer can belong to any one or multiple user categories.

- Registration page should have (but not limited to) following fields:
username, password, retype password, type of user Select one of three, Location (better if enabled with Google API)
- Signup Page

Module 2: Dashboards for every type of users

Dashboard should have all categories of items food and other items (Vegetables, Readymade foods, grocery). Feel free to identify your categories and sub-categories.

When pressed on a category, user must navigate to a page having various options/ items for that particular category.

Every item should have the following fields: cost, in stock/not in stock, if not in stock will be available at what date next. (Same as all e-commerce sites)

All categories and items of the category should be represented with appropriate images.

Module 3: Search Module/Navigation Module

Once the user selects the item with required quantity, API must show all the shops having the required quantity with location, cost per unit and total cost.

Include a location distance filter and all the shops should be listed area wise. (should have but not limited to)

Module 4: Place order and status of order

User (Customer/ Retailer) can make the purchase either **online or offline mode**.

If purchase is to be made offline mode, the time and date should be stored as an event in calendar and the event should be notified to the user before 30 minutes. You can think of notifying the retailer that XYZ customer on XX date would be coming to buy ABC item.

If order is placed in **online mode**, Tracking details should appear on both the customers and retailers' dashboard. Details such as name of the delivery person along with his phone number, tentative delivery date should appear on both the user and retailers or (retailers and wholesalers) dashboard.

The same should be sent to the user mobile phone/e-mail.

Once the order is placed by user/retailer there should be an updating of quantities on retailer/wholesaler pages respectively. Cancellation option can be provided.

After placing the order, the status of the order should be updated periodically (Order placed/ Order Dispatched/ In transit/ Delivered). The status should be shown and updated periodically on the dashboard of the users.

Module 5: Feedback and Queries

After placing the order, the status of the order should be updated periodically (Order placed/ Order Dispatched/ In transit/ Delivered). The status should be shown and updated periodically on the dashboard of the Customer/Retailer/Wholesaler.

After delivery of the product, a SMS/e-mail should be sent to the user using the registered mobile number/e-mail id for feedback of the product and delivery as well.

The feedback of the product has to be updated periodically on the page of the concerned item.

If multiple items are orders, feedback has to be taken for each product individually.

Important Note:

- Students to work in groups. A group may consist of 2-4 students only. Larger groups will not be allowed. You can form your own groups. The evaluation will be done for the group and all the members will get the same score. It will be up to the members to have fair share of contribution for the successful implementation/development of the project. Arguments or feedback on individual member's contribution will not be entertained. If someone is not giving valuable contribution, then it depends upon other members to decide how to engage with the non-performing member. IC will not indulge.
- You are free to design the GUI for the above project as per your creativity. Appropriate links should be provided to transit from one option to another. Difference in GUI need to be maintained for both user and delivery person. Feel free to make your assumptions in order to make the implementation better. Not everything can be mentioned in the description.
- Above mentioned basic functionalities are mandatory for mini-project evaluation. Each of the mandatory functionality carries 5 marks. Students are free to add more innovative functionalities which helps in enhancement of the problem statement, and it carries 5 marks. Hence, if any group has implemented the mandatory functionalities will be evaluated from 25 marks. If you add some extra innovative functionality, then you will be evaluated from 30 marks.
- You are not expected to develop from scratch. You can feel free to make use of available APIs or packages etc. The idea is to expose you to project experience. High use of modern advanced technology, platform, paradigm will definitely attract high grades. For each functionality GUI carries 2 marks, so 10 marks for 5 mandatory modules. Correct implementation and usage of high technology, platform, paradigm carries 5 marks.
- So tentatively total marks will be 45, which can be scaled up or down, as required to suit the weightage of this evaluation component.
- The marking will purely depend upon the evaluators and their evaluation will be final. No arguments in this regard will be entertained and will attract negative marking as per IC's discretion. A working software is expected, if your code will not execute then it will not be evaluated and some default mark will be awarded. In case of unethical practices, if observed, or brought to my notice, then without any discussion (as cannot engage in forensic investigations nor act as a moral police) all the groups involved will be awarded 0 marks.
- **Project Evaluation will be on 24.04.2021 and 25.04.2021.** No extension will be provided.
- Do a good work so that you will be able to reflect in your resume and feel proud of your efforts.

Best Wishes