**MINI PROJECT LAB**

**PROJECT TITLE:** E-Commerce App

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**Problem Statement:**

There exists a situation in the market where the end-user finds a hard time in identifying the availability of stock in the shop nearby his location. In these new pandemic times, there’s a necessity to avoid close gatherings in the shops for safety purposes.This problem has to be solved without posing any danger to the end-user as well as to sustain the business of the seller. The second problem defined goes hand-in-hand with the third problem of reducing the waiting time for the end-user. We see a lot of shops being over-whelmed, overcrowded during the pandemic time, which not only increases the risk factor, but also increases the strain in the seller-user relationship. Our project is based on dealing with the problems stated above. We plan to build an app that lets the user find the desired product from a shop nearby the location of the user without wasting time in searching for it shop-by-shop. We hope to build modularity in such a way that the user will be able to order the product, and a pickup time for the product will be given or the user can choose the option of home delivery (depends on the seller).

**Software Requirements Specification (SRS)**

**1. Introduction:**

There's a lot of e-commerce apps like Big Basket, Jio mart, to name a few. But, as far as we know, there's an absence of an app that connects the user to all the local shops nearby. This app aims to fill in the gap and provide an easy way to shop groceries without having any physical contact with the shop. The app is really an idea born out of necessity. The necessity of 'contact-less' shopping during these troubling times. Most of the time, a consumer goes to the shop, tries to maintain social distance in the crowd, and is not even sure if his /her desired product is in stock or not. This process can be quickened if there is an app that can search for the desired product in the shops nearby and enable the user to pick up or door deliver it. This app aims to resolve this by enabling the user to choose between the pick-up and delivery options, thereby ensuring safety as well as not compromising on the shopping aspect. The app ultimately tries to balance between boundless user's choices when it comes to shopping and the safety of the user.

**1.1 Purpose:**

The purpose of **Software Requirements Specification (SRS)** document is to describe the external behaviour of the e-commerce app. The scope describes the modalities and functionalities of the app. The limitations and the scope of the app will also be discussed in detail in this document.

**1.2 Scope:**

The E-commerce app that is to be developed will create an account for the user through which the user can shop on-the-go from the shops around his location. The app will also provide an estimated time for the user before the product can be picked up or delivered. The E-commerce app is planned to have the features mentioned below:

* The app will provide easy access to find any desired product of the user anywhere in the location nearby
* The estimated time will depend based on the location, distance and traffic between the destination and the shop
* The product is developed in flutter thus it is expected to run on both major mobile phone operating systems iOS and Android.
* The other functionalities will be added to this list as the app will be developed.

**2. Overall Description:**

**Product perspective:**

The E-commerce app will be available in both android and iOS environment. This gives access to a wide range of users. It is aimed at bridging the gap between the users and the shop-owners. It will benefit both users and the shop-owners by making it easier to shop groceries on-the-go. The database will consist of the groceries which are in stock and which can be purchased. The use-case diagram given below will give a detailed definition of the functions which can be carried out by the user.

The app also has to communicate with database(firebase) to carry out the transactions.

**Product Functions:**

The app will provide users with real-time updates of stocks and enable users to order them. The product functions will be built on the basics written in the product perspective.

* The users will be required to register into the app. The users who are registered already can log-in directly and purchase the products.
* After every purchase, the history of orders under the username will be updated.
* The user will choose between delivery and pick-up and a time function will be used identify the estimated time required.
* The app will let shop-owner to edit the database of the product.
* The user can cancel the order if he has done it without his knowledge.
* The payment gateway will let the user to pay through net banking or cash in person.

**Constraints:**

* The app requires a server which runs 24 hours to keep the app awake all the time.
* The registered users must use the correct username and password to shop the groceries
* The payment gateway must not fail during the transaction

**Assumptions:**

* The shop owners must be familiar with the environment of android or iOS
* The shop owners must have the knowledge updating the correct value in the database
* The backend server must not fail during the occurrence of the transaction

**Use Case Diagram:**

**Actors:**

The E-commerce app will act as a bridge between the user and the local shop owners

**Consumer:**

The consumer will be the ultimate start and end point of the app. The user can go through list of products in shops. He/she can place order on anything that the store can offer. The collection or delivery of the product will be the ultimate completion of the transaction

**Shop-owner:**

From the skeleton model we have designed, we have just designed the basic user interface for the end-user(consumer). As the project will be developed, there may come a point in time where the back-end of this app will be developed using some web service which will lead to development of a separate app for the shop-owner which can interact with the shop-owner on the details of the groceries that has been ordered and pending order list.

**Limitations:**

The environment we are using, Flutter, supports only from android versions, 4.1(JELLY BEAN) and iOS versions (8).

Thus, the consumers using the devices which run on versions older than that will be affected.

