USCDoorDrink

0. Table of Contents

1. Project Title and Authors

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Leo: Login, Register
Daniel: Menu, Checkout, Order histories, Profile
Lily: Map, Recommendations

2. Preface

This android app, USCDoorDrink, is designed as an online drink ordering and delivery platform for two types of users in the USC community: merchants and customers. USCDoorDrink is a specialized app that only supports ordering and delivery of tea or coffee, helping customers and merchants to track their order histories.

3. Introduction

Members of the USC community need intake of caffeine in various situations to help them better perform in school, so they seek something more tailored to suit their needs. During the time of COVID, people often prefer to get their favorite coffee or tea delivered to their doorsteps during school time.

USCDoorDrinks tackles this problem by stripping away all unnecessary features and specializing in only coffee/tea online ordering and delivery. It would show all available merchants (only coffee shops and tea houses) nearby in the format of a map, giving customers different ways of delivery methods and their estimated times. It also tracks order histories for merchants and tracks users' activities such as caffeine intake and store visit histories to provide customized recommendations to help users make decisions faster and healthier.

Although there are already many online food ordering and delivery systems, when using platforms like Uber Eats or Doordash, they have to go through lists of all shops to find the coffee shops or tea houses they want to order from. However, our app USCDoorDrink only focuses on the ordering and delivery of coffee or tea from coffee shops or tea houses, which could help customers to complete and get their order in an easier and more timely fashion.

This document records all changes made during the implementation process on top of the original design. The main sections include architectural design changes, detailed design changes, and requirements changes.

4. Architectural Design Change
Original Design:
Revised Design:
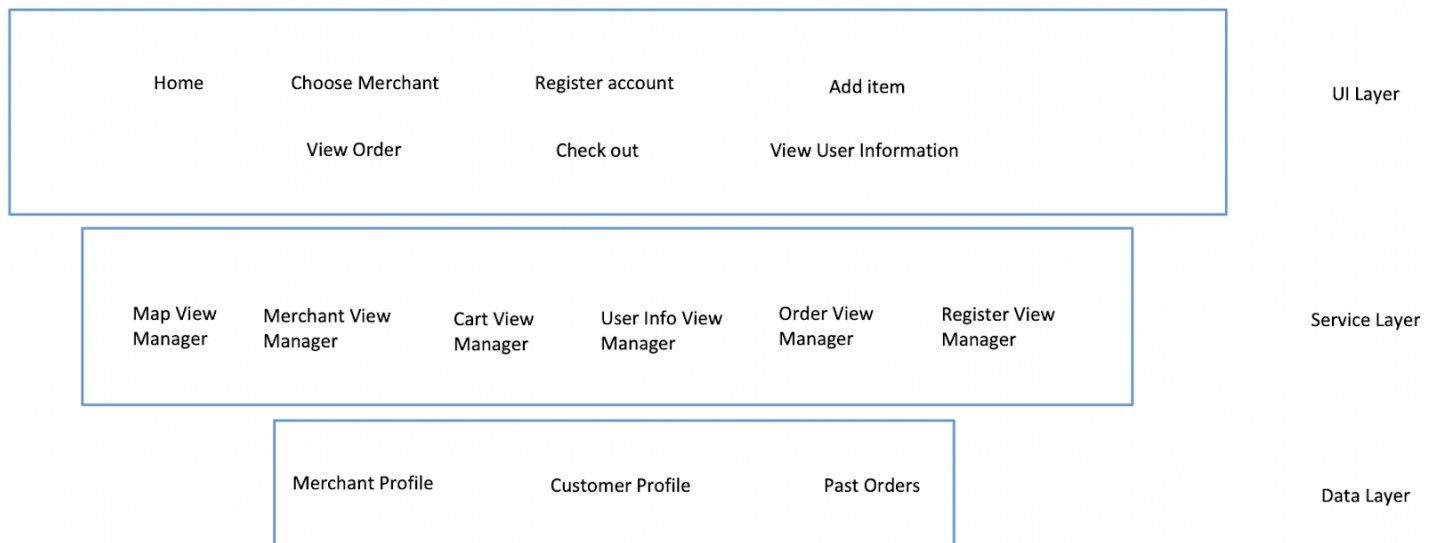
UI Layer: no change was made.

Service Layer: no change was made.

Data Layer:
      -A SQL chart called USER was added to store login information.
      -A SQL chart called ITEMS_IN_ORDER was added to assist ORDER
      -A SQL chart called MENU was added

5. Detail Design Change
Delete Customer and Merchant class
Add Cart Class: Add private variable ArrayList<Item> itemsInCart and its getter and setter methods

In User Class: Delete private variable usrID and its getter and setter methods
In Order Class: Add private variable Float totalPrice and getter and setter methods
                  Remove private variable customerID and merchantID and its corresponding methods
In Item Class: Change private variable itemPrice type from Integer to Float
                  Remove private variable itemDescription
In DeliveryRoute Class:
                  Remove private variable and its getter and setter methods for starLoc, destination
                  Add private variable and its getter and setter methods for orderPlacedDate, deliveryDate

6. Requirements Change

Map:

1. Change: When showing nearby merchants on the map, we changed from house icon to red markers
    Rational: Red markers are a more conventional way to mark location instead of house icons.
    Whether it affects the overall design: it is a minor change and does not affect the overall design.

2. Change: Also, the user has to click on the red marker to learn about specific information (such as traveling route and the estimated traveling time). This information will be displayed on the original map instead of a new page.
    Rational: It is more convenient and conventional to display route and associated information on the original map
    Whether it affects the overall design: it is again a minor change

3. Change: Instead of sending recommendation notification everyday at 12pm, we decided to allow the customers to see notification based on their past order history every time they visit the main page.
    Rational: If we only send notification to the customer once every day, they may not be able to see it.
    Whether it affects the overall design: it is a minor change and does not affect the overall design structure.

Ordering:

1. Change: Customers can choose the quantity of items on the menu page and they will go to checkout page for their order summary before they place the order, they can go back to the menu and make changes to their order
    Rational: It is easier for customer to update their order when customers could see better effects
    Whether it affects the overall design: no