Proposal for Orbital 23

Team Name:

SS2AM

Proposed Level of Achievement:

Project Gemini

Motivation

Have you ever gone to dinner with many people you might not know, and nearing the end of the event, you guys want to pay individually, but how?

The confusion resulting from having to split bills is a regular occurrence. Someone chosen to take charge of the orders first will later be troubled by finding whose order is which, counting the total for each person (not to mention additional expenses, e.g., tax, service), etc. Efforts were made to facilitate this, taking as an example, namely LINE. LINE has provided a feature called "Split Bill" that lets us do bill splitting whether we are present on the spot or even after we go home. Unfortunately, this is not that convenient since only those using LINE can access this feature, and the sharing method is also exclusively for LINE. So, is there any way we can create such an application or software which restaurants can utilize for customers to order and track each person's menu, furthermore having the functions to choose either splitting the bill or not.

Aim

We aim to provide a menu ordering application/software, with a more efficient and effective split bill feature, which then can be utilized by restaurants or the food industry. The software will give the users ability to differentiate between each individuals' order from the start by asking how many people are ordering, therefore making bill-splitting more convenient and less of a hassle when doing manual splits.

User Stories

1.As a customer in restaurants, who is helping the group to order, I want to be able to indicate how many people are having a meal together, therefore bills can be separated accordingly.

2.As a customer, who is going to deal with the payment, I want to be able to have an organised list based on each individual's order, hence the summary will not get mixed up.

3.As a customer, before payment, I want to have the option to split the bill or pay the whole bill in one transaction.

4.As a customer or the cashier attendant who wishes to have smooth transactions, I want to be able to take note of which order is already paid for so there won't be any duplicates or confusions.

Scope of Project:

Features to be completed by early - mid June:

1. Front-end:
    - UI/UX Design
    - Flow from one page to another (The customers can refer to the previous page if they want)

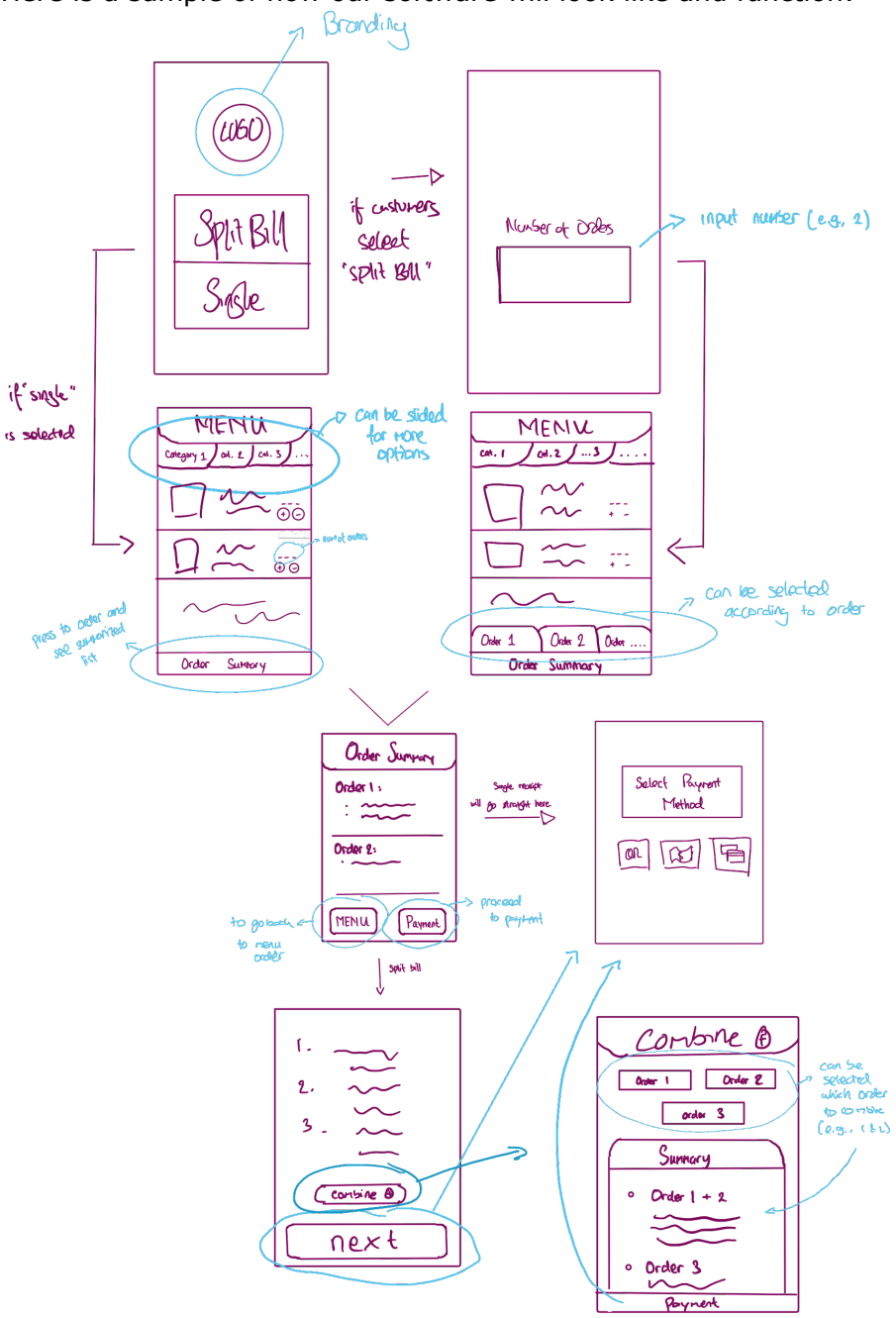
Features to be completed by mid of July:

1. Back-end:
    - Implement a data structure to store the customer orders
    - Implement codes for the software to work

Features and Timeline

Our software will consist of multiple pages, that is dependent on the customer's choice. For each page, we have a next and cancel button to proceed to the next page.

Here is a sample of how our software will look like and function:



Development Plan

4th week of May: Making the LogIn and Register features
5th week of May: Update poster, proposal, and made project log
1st week of June: Brainstorm ideas on how to make the page flow nicely and implement the split order feature.
2nd week of June: Start coding
3rd week of June: Testing and debugging
4th week of June: Finalizing needed details
1st week of July: Implementation of peer teams' suggestions
2nd week of July: Implement additional capabilities – payment methods
3rd week of July: Final testing and debugging

Tech Stack

1. API
2. HTML/CSS/Javascript
3. React Native
4. Supabase

How are we different from similar platforms

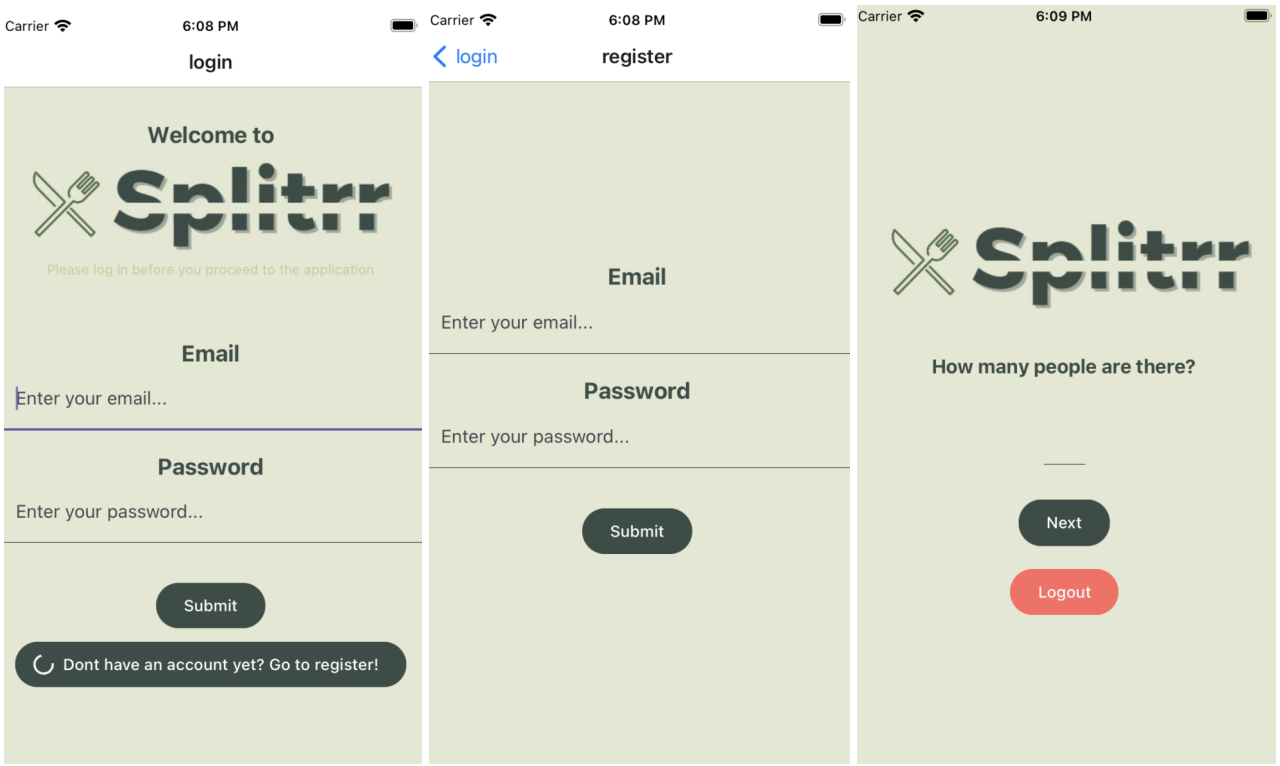
1. Efficiency:
   Our application does not require multiple users to do one split bill payment since we do all the calculations directly on the app. (One user is plenty to do all the work)

2. Integrated:
   We do not need any additional applications, since our orders and split bill feature is integrated in one single app.

Qualifications

1. Python (CS1010S, CS1010E)
2. HTML/CSS/Javascript
3. Pandas
4. Power Point
5. Basic Firebase
6. Excel
7. Figma
8. Basic MeteorJS

The technical proof is as shown below:



https://drive.google.com/file/d/1T51twbQS_DkrDW6QGMNt3L1V4gHa3zNZ/view?usp=share_link