Stage Three

Reserving and Ordering Application

CPSC 481 Team J

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Updated Project Idea

System we are designing is still a mobile application that allows customers to make restaurant reservations by selecting date, time, number of people, and seat preference. Customers can sign in as a guest or log in to their accounts. Customers can view a list of restaurants that are grouped by categories. A restaurants information such as address, distance away, rating, review, images, etc. is displayed when clicked upon. Customers can preview restaurants menus to decide if they want to make a reservation. After making a reservation customer can preorder food items and add other accounts/people to a reservation. Customers are also able to write reviews for a restaurant.

Three Ideas

I. Customer is able to click the preorder button and is able to add things to the food cart of that reservation
   - The user is able to click on a confirmed reservation and preorder
   - The user is able to add and remove items from the food cart
   - When the user checks-out, they are taken to the payment page

II. Customer is able to modify reservation
   - The user is able to change the date and time of a confirmed reservation
   - The user host is able to add and remove other users from this reservation
   - The invited user is able to remove themselves from the reservation

III. Navigation bar with buttons at the bottom
   - The four most important buttons are displayed at the bottom. (Restaurants, Search, Reservation, Account)
   - The navigation bar is not always displayed in every screen of the app
   - The buttons have both an icon and text to display what button it is

List of updated user tasks

Horizontal
   - User can browse, search, and filter restaurants
   - User can add restaurant to favourites
   - User can remove a restaurant from favorites
   - User can edit a reservation (reselect the date, time, number of people, and seating preference)
   - User host can cancel a reservation
   - User host can add other accounts to the reservation via email
   - User host can remove accounts from the reservation
   - User can view list of reservations
   - User can view restaurant information by clicking on it
   - User can browse restaurant dishes by category
   - User can add a review to a restaurant
   - User can edit the review they wrote of a restaurant

- User can give a restaurant rating out of 5
- User can view menu prior to making a reservation
- User can view menu when preordering
- User can view dish ingredients

Vertical
- User making reservation
    - User can click on the date input to have a calendar view
    - User can select the time for the reservation
    - User can select the number of people for the reservation
    - User can select seat preference in the restaurant
- User paying for food
    - User can add a dish to the food cart
    - User can modify dish before adding it to the food cart
    - User can remove a dish from the food cart
    - User can choose method of payment and insert credit card details
- User can sign in
    - User can sign in as a guest or sign in account
    - User can create an account
    - User can log-out from account
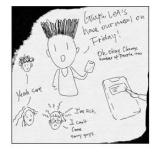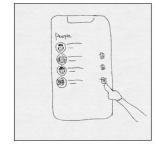   - User can view information about account

Storyboard

A group of students have a reservation on Halloween at 6pm for 4 people. Since it happened to snow recently, some roads are closed so the students decide to change the reservation for next Friday at the same time. Unfortunately, one of the students got sick the day before Friday and won't be able to come, so the students change the reservation from 4 to 3 people that will attend.

Cognitive Evaluation

During our prototyping and task-centered system cognitive walkthrough we found some of our tasks were not needed for our app and some we needed to add. We decided to break the tasks into 5 major tasks and made the steps what we could do with that task.

The restaurant tasks, where the restaurant could confirm that the group for the reservation has arrived and allowing them to customize their own page. We decided that implementing this during our prototype stage was going to be too much, we would have to create a separate UI for the restaurant.

The task where we have that users can see the menu after booking was limiting the user. We changed the task so the viewer can just view the menu when they view the restaurant instead of having to book first.

We also decided to change how the sharable link task works. Instead, people would have to have an account, the host would be able to add users by their email linked with their account. We included some of our could be included tasks and removed others that felt extra.

We also realized that a sign in/sign up option would be crucial for our app for some of our functions such as favorites. We could allow the user to sign in as a guess as well. So, we moved it up to must be included tasks. Added in our walkthrough many of the things they can do with account

Some important tasks we added are many more horizontal tasks. We made many tasks that allow users to edit their choices such as reservations and menu.

We changed the task: Allow users to pay in the counter in case their cards have issues. Users that want to pre-order must pay beforehand

Reflection

What we learned from this stage is the process of building up a project. The brainstorm part we learned how to collect our ideas and group them up in an affinity diagram. The affinity diagram allowed us to narrow down certain ideas. After choosing our most promising ideas the storyboard helped us ask questions about what the UI may look like and how it can be used. Creating the low fidelity prototype helped us look at our user tasks from a different perspective.
We added and removed some user tasks from stage two from ideas we thought of during the prototype. This stage helped us learn the process behind building a project.

What went wrong is that we did not know that Balsamiq had a cloud share option. We would share a person's screen who would make the prototype while others gave ideas and helped. We found out halfway, if we could do this again, we would know to use the cloud immediately. Another problem we had was understanding affinity diagrams. We extracted ideas from our sketches but had no idea on how we would group them. We asked the TA multiple times to explain the affinity diagram to us and eventually we were able to group them.

Appendix

1. Sketches

2. Affinity Diagram

FUNCTIONALITY

Communication

- Tap to see details of reservations
- Display approximately wait time
- Available seats are displayed
- Summary of items are shown in cart
- Total price is shown on cart at the bottom

Choices

- Using filter while browsing menus
- Filter types of restaurants
- Adding favourite restaurants
- Multiple Payment Methods
- "Pre Order" to reserve dishes to cart

Display

- Button
- Textfield
- Card
- Checkbox
- Combo Box

Display

- Pop up alerts
- Next/load new page
- Pictures
- Button with icon and text
- Information cards
- Larger text for main information
- Price rating = $, ratings shows as stars

Account

- User can sign in/sign up
- Invite other people to a reservation
- Saved credit card to account
- Add to favourites
- Guest user option
- Edit profile information
- Add/Edit reviews on restaurants

PROTOTYPE

Workflow

- User must have an account to pre-order
- Must enter date, time, number of people, contacts to reserve table
- Customer can reserve as a guest user- without account
- Customer can modify their reservations (cancel/edit)
- Customer can remove/add people invites for reservation

Look & Feel

- Scroll down for different restaurant types and scroll right for similar places
- Restaurant information is placed in a box
- Each button on navigation bar contains icons & text
- Summary of all items before processing payments
- Customer can see the menu before making reservation

Layout

- Sidebar popup for more options on top right
- Search bar on the top of main restaurant page
- Navigation Bar at the bottom of the screen

  Restaurants   Search   Reservations   Account

3. User-centered Task Table

Main Task	Description of task step	Does user have training or knowledge to do this step?	Is it believable that they would do it?	Are they motivated?	Comments (including possible solutions)
Reserving	Browse, search, and filter restaurants	Yes	Yes	Yes	Scroll through restaurants, search and filter
	View the restaurant information	Yes	Yes	Yes	Customers can view the detailed information of a restaurant, including the name, address, rates and reviews, and categories
	Add a restaurant to favorite	Yes	Yes	Yes	On the restaurant information page, they would tap the heart icon to add the restaurant as favorite
	Remove a restaurant from favorite	Yes	Yes	Yes	On the restaurant information page, tap the heart icon again to remove
	Reserve a table at a restaurant (select the date, time, number of people, seating preferences and customers' details) MUST	Yes	Yes	Yes	Reservation page for users to select options for date, time, number of people and seat preference
	Edit a reservation (reselect the date, time, number of people, seating preferences and customers' details)	Yes	Yes	Yes	Customers can click on the reservation card to edit information about the reservation
	Delete a reservation	Yes	Yes	Yes	Customers will see the delete button on the reservation card to cancel a reservation. A pop up will appear to confirm it

	View restaurant menu MUST	Yes	Yes	Yes	Have a menu button when they select a restaurant
	Invite other customers to a reservation by their accounts, to make the reservation into a group reservation and order together	Yes	Yes	Yes	A customer can make a reservation as the reservation owner. After the reservation is official and confirmed by the hostess. The customers can invite other accounts to the reservation. All the customers in the group can all order their food for their own.
	View other customers in a group reservation	Yes	Yes	Yes	For all customers in a group reservation, they can view other customers in the group
	Remove other customers from a group reservation	Yes	Yes	Yes	For a group reservation owner, they can remove any other customers in the group if necessary
Account	Sign in as a guest or a user MUST	Yes	Yes	Yes	Have a main screen to determine if the user wants to sign in or be a guest
	Create an account	Yes	Yes	No	Give an option to create an account. Give quick sign in options by third parties, like Google / Facebook
	View account information	Yes	Yes	Yes	
	Modify account preference setting	Yes	Yes	Yes	
	Modify account privacy setting	Yes	Yes	Yes	

	Visit help center	Yes	Yes	Yes	
	Sign out from account	Yes	Yes	Yes	
Ordering	Browse dishes by categories	Yes	Yes	Yes	Customers can browse dishes by categories by clicking the name of categories
	Add dishes to food cart	Yes	Yes	Yes	Customers can choose to order when they arrive the restaurant
	Remove dishes from food cart	Yes	Yes	Yes	Customers can remove dishes by certain amount too
	Pay for food cart MUST	Yes	Yes	Yes	Customers presses checkout on the food cart and is taken to the bill screen
	Review the order to confirm and see the total price	Yes	Yes	Yes	After adding all the dishes, users will have to review the order to confirm on order page
Payment	Review summary of the order	Yes	Yes	Yes	
	Choose payment method	Yes	Yes	Yes	Customers can pay with PayPal, credit/debit cards
	Add tips	Yes	Yes	No	Customer can pay tip for a reservation after finishing meal through app
Reviewing	Rate restaurant comment	Yes	Yes	No	A "Rate this restaurant" button will be displayed when a reservation is ended, and they will be asked to rate the

				restaurant and write comments as review
	Edit or delete rating comment	Yes	Yes	No	On review section, customers can see their previous review and edit or delete them
	Add a rating out of 5 to the restaurant	Yes	Yes	Yes	User can click whichever star they think is best adequate for the restaurant