

Iterative Design

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Iterative Design Approach for the Start-up Simmer

Our group has chosen to create an interface for a tech startup called Simmer. Simmer was created to provide its users with reviews for specific dishes to order via delivery apps from eateries in one's area. Users can rely on the reviews to decide what they would like to order on demand. We've chosen to design a mobile application for the convenience that comes with the device's portability.

Pre-Design Questions

1. What is a group of people that will be directly impacted by your interface?

- a. People from all walks of life who are interested in buying food to eat, especially those who would like to try out a new eatery and are unfamiliar with the dishes offered.

2. What is a group of people that will be indirectly impacted by your interface?

- a. Restaurant owners, as well as the kitchen staff of the restaurant, would be indirectly affected by the ratings that their dishes receive on the platform. The food delivery services and their employees would also potentially be affected.

3. How are these groups affected by your interface? What are some questions that your interface should address to ethically handle these effects?

- a. Consumers would like to be aware of all their options in order to make the best decision as to where they should eat. Reviews for specific dishes give customers a more acute understanding of their choices in order to reinforce the aforementioned decision making process. Customers are also responsible for providing the app with reviews for the benefit of other users.
 - i. Reviews are fundamentally biased, so our app users are taking subjective feedback to aid their decision-making. What are some ways the app can utilise design in order to collect and display information to help the user interpret that subjective feedback?

- ii. How can we ensure a constant flow of reviews into the app so as to maintain relevance and usability? Essentially, how do you maintain a community?
 - iii. How do we ensure that the ordering process goes smoothly for users, and that the information they get is accurate and helpful?

- b. Dishes with particularly rave reviews may become more well-known and popular, increasing sales. Conversely, having a few dishes that are very poorly rated could potentially deter customers from a restaurant's other food. As business owners, the quality of the reviews would determine the popularity of their establishments, and would hold the chefs accountable for any complaints customers may have over the food served. Businesses could rely on the reviews to identify popular dishes for promotions and advertising, or dishes to improve or remove. Drivers for delivery services may have to become familiar with this app's interface in case any bugs ever arise with orders made through it.
 - i. Should restaurant owners have a way to manage their restaurant's page/data with the service to do things such as respond to customer feedback, notify when changes to the menu/items have been implemented, etc.?
 - ii. How much information should restaurant owners be able to see about orders users make through the app (date, time placed, time spent making order, etc)?
 - iii. To what extent do drivers for Uber Eats and similar services need to be familiar with the app to handle orders sent through it?


Low-Fidelity Sketches

With our audiences and the start-up's goal considered, we moved on to preliminary sketches. We thought of multiple different ways that the app could be focused around the idea of sharing reviews for dishes, such as a simple map-based dish search, a system that recommends based on more broad categories that the user provides, a more social media-styled app where you keep up with friend's orders and reviews, and a system where you search for dishes and curate lists of recommendations to share.

SET A

SIMMER



BcDONALD'S  **OPEN**

ADDRESS: xxx
DISTANCE: xx miles
PHONE NO: xxx-xxx-xxxx

NEW SIMMER 15% OFF! **THANKSGIVING 5% OFF!**

ADD TO BASKET


- BcDonald's Fries Small
- BcDonald's Fries Medium
- BcDonald's Beesechurger
- BcDonald's Filet O Fisch
- BcDonald's Conk Medium

BcDonald's BeeseChurger

AVO GIRL 1/2/02
★★★★★
Delicious! Will buy again in the future

CHEESE LAD 4/20/14
★★★★★
NOT ENUF CHEESE! PLZ ADD CHEEZ!

BREAD BOI 8/6/06
★★★★★
didn't eat this, but this is great tho.





BcDonald's Beesechurger
Entree
A delvve burger... served wth 2 slices of cheese.
★★★★★
SEE FULL REVIEW


ORDER NOW

BREAK FAST **LUNCH** **DINER**

SIMMER

AMERICAN 

ASIAN 

EUROPEAN 

SORT BY

NAME: _____ FROM: _____
DESCRIPTION: _____
DIST: xx miles **SEE REVIEW**

NAME: _____ FROM: _____
DESCRIPTION: _____
DIST: xx miles **SEE REVIEW**

NAME: _____ FROM: _____
DESCRIPTION: _____
DIST: xx miles **SEE REVIEW**

LI'S HOTPOT DELUXE
by PF CHIN'S

NAME: _____
REVIEW: _____

NAME: _____
REVIEW: _____

LEAVE A REVIEW **ADD TO CART**

Simmer **Reviews Near Me**

Recent Reviews

Doc McDonald's: Dani Smith 10/7
Located at 655 Hawthorne Ave, Hawthorne, CA
Reason: This place is great! I love the food and the atmosphere. I had the beese-churger and it was fantastic. And now

Doc McDonald's: Hu Yun Yi 7/10
Located at 655 Hawthorne Ave, Hawthorne, CA
Reason: This place is super mega nice. The beese-churger was awl bees and no churger I will enjoy the atmosphere though...and more

Your Friends

Recent (9) All (167) Near Me (215) Best Friends (5)

Best Friends

- Tony Two ches
- Get
- Chicken Joe
- Mom
- Sister
- Bob

Chicken Joe

From: _____
Age: _____
Interests: _____

Highest Reviews: Restaurants, Type: Noodle, Favorites

Recent Reviews:

Doc McDonald's:
Beesechurger is great

Colbie Arden:
Italian food that is bad

My profile

Name: _____
Age: _____
Interests: _____



Recent Reviews

Don/Molly on sept 10 10/7

Colbie Arden: on bee 8 2/166

Recent: All reviews, Favorites, Recent reviews, Restaurant settings

Home/Search

Simmer  

Where would you like to order from?

Sorting by location within 10.10 miles

Diner Diner 0.3mi
★★★★★ - Read 385 reviews
Open Mon - 10 - 10 Sat Full menu
[See Menu]

Burger World 1.5mi
★★★★★ - Read 18 reviews
Closed - Open Mon Sun
[See Menu]

Profile
My Lists
Followed
My Reviews
Friends
Order History
My Account
Settings
Privacy
About
Help

Restaurant Page

Burger World

★★★★★ Read 18 reviews

Closed - Open Mon Sun

Full Hours: 10 - 10 - 10 - 10 - 10 - 10

Menu: Breakfast, Lunch, Dessert, Drinks

Pop. 1000

Item Page

Burger World

Ketchup Burger

★★★★★

Reviews: Almost killed me, but great! by Jim, Alan, and Robert

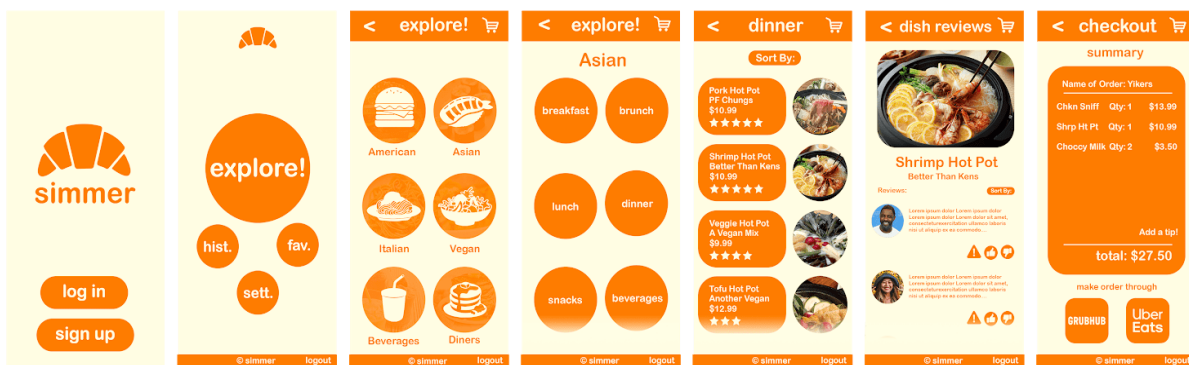
User's Lists

My Lists

- Favorites** 8 items
Incl. 10 nearby restaurants
- Mama Mia That's a Good Italian** 8 followers 013 items
Incl. 2 nearby restaurants
- Oh Boy, SAM!** 847 followers 026 items
Incl. ...

High-Fidelity Design

After discussing our sketches, we decided to hone in on the recommendations aspect of the app, as well as the focus on specific dishes rather than whole restaurants. For our prototype design, we aimed to keep it minimalistic. The app's icon buttons are evenly spaced out so as to prevent clutter or confusion. The colours orange and cream were also used, not only to retain the originality of the real Simmer app, but warm colors like red and orange have been proven to induce hunger, keeping our user interested in exploring the app for more options. We tried to keep app's flow as seamless as possible, with clear instructions, chevrons for backtracking, and step-by-step filters on each page. Lastly, large circular buttons were kept large enough for a user to tap on without committing a slip error. The interactive version of our first design can be found [here](#).

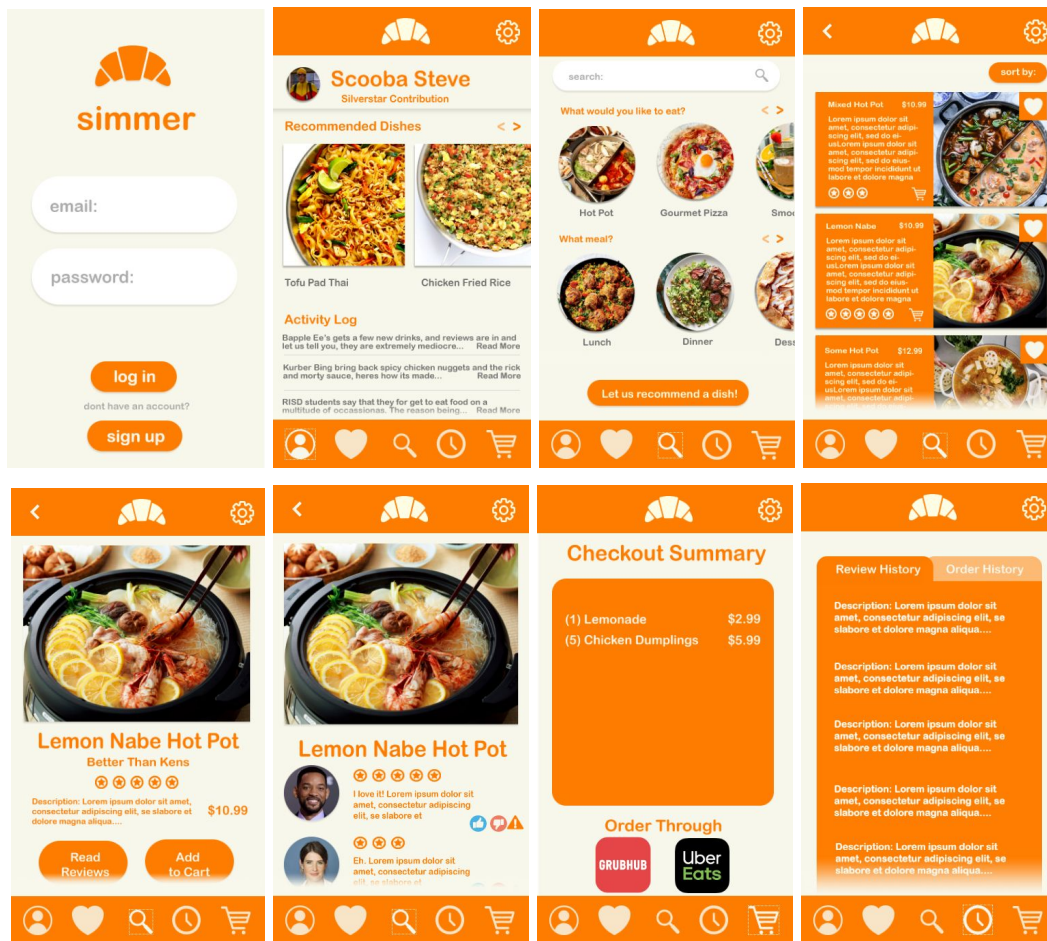


Screens from our first high-fidelity design.

High-Fidelity Re-Design

For our high-fidelity redesign, we considered most of the feedback we received from our peers during an in-class critique. One key improvement was the addition of a search bar to the search page, and a navigation bar for the app. The navigation bar removed the strictly linear flow through our app. It also decreased the number of times the user had to hit back buttons, improving efficiency. We also added a profile page and used icons for settings and user history. Other missing elements such as the display of price, star ratings, and review buttons were also added. After making these improvements, we emailed the start-up about our design, to see if they could offer any feedback. At the time of writing, we haven't heard back.

The interactive redesigned version can be found [here](#).



Screenshots of our redesigned high-fidelity prototype.

User Testing

The task was for our users to add a dish that has been recommended to them through filters on the search page into their cart for checkout. Our hypothesis is that our user would navigate relatively well through our app, as the clear allocation of the search icon and the easy-to-use filter function would most likely lead the user to the desired pages. There may be a bit of confusion as there is also a “recommended dishes” function located in their profile page. However, the distinction between the recommended dishes on the profile page and the ones found through the search page is that the former relies on information of the user’s past history and reviews, whereas the latter’s results depend on the user’s search criteria.

We sent the prototype out for remote user testing, with questions about the tasks and general feedback. After getting the videos, we analyzed them for usability metrics, detailed below:

<u>Task #1: Completing Recommendation Search and Adding Item to Order</u>			
	Completion Rate	Error Count	Time on Task* (seconds)
User #1	completed	1	178
User #2	completed	0	157
User #3	completed	0	112
Average	100%	0.33	149
<u>Navigating to User Review/Order History</u>			
	Completion Rate	Error Count	Time on Task* (seconds)
User #1	completed	1	42
User #2	completed	0	7
User #3	completed	0	12
Average	100%	0.33	20.33

*Time taken includes the time each user spent speaking about the app/doing think aloud during the task

For the first task, users had to log in, go to the search/recommendation page, select the appropriate filters (we asked them to find hot pot for lunch) and search for recommendations, then select an item and add it to their order. For the second task, users simply had to determine the correct button in the navigation bar to click to access their User History.

Taking into account the time taken by their thinking aloud, most of the user's task times were more or less what we expected. The errors made by User #1 in each task were from a misunderstanding of the UI. In the first task, she was confused by how the filters worked for dish recommendations, and spent some time clicking around before realizing what to do. In the second, she spent some time thinking, then first tried the button for Favorited dishes before determining the correct button. These errors would be considered lapses. Our other users understood both tasks fairly quickly and navigated the app easily, so it may have been partially due to a lack of familiarity with certain affordances. All three users were able to complete each task, and seemed satisfied after doing so.

Feedback from User Testing

Upon analyzing our user testing results, we realized one major difficulty that our users encountered was the font size of the dish description text. In addition to increasing the font size, we would consider cutting the text short with an ellipsis, and adding a “Read More” button. Clicking on this button will take the user to our current reviews page, which would now contain the full description of the dish in a legible font size.

One user mentioned how using real-life images of food to represent certain categories in our search page was confusing, as it led her to believe that the food displayed in the category icon was a specific option she could choose. She was also confused by the specificity of the categories, and mentioned it would feel more like a search filter if they went from broad categories to more specific ones. To rectify that, we would keep the icons that were used in our first high fidelity iteration and adjust our search categories accordingly.

Lastly, a user noted how our dishes did not display the number of times it has been reviewed. This is a critical flaw, as that statistic would greatly improve the reliability of the dish’s rating. The same problem is present in the like to dislike ratio of individual reviews. We would adjust our interface by adding those missing statistics.

User Testing Experience

There were a few challenges regarding the testing phases we did. A few of the users, despite having the main option to do so, were not able to or did not go through the app as though it were an app, and bypassed the whole testing process by going through protio.io’s screen list on the side of the tester. This made it so their feedback and results was based on reading the different pages as separate, and not elements that were supposed to flow from one to another.

We learned many things from the user testing. Most of the initial comments we picked up on were based around legibility and comfortability of text size and ease of understanding the interface, as well as its arrangement. We also learned how applications are tested, the various ways in which the testers give their feedback, and how to gauge whether it is helpful or not. Our were successful in prompting users for the interactions and feedback that we needed.

Our users showed we successfully provided helpful images and displayed elements in a satisfying way. We provided easy navigation through the application, and users navigated it in

an appropriate order, going from checking their profile after logging in to searching for a dish and checking out.

Overall, this was a great exercise in design and idea iteration.