

Design a self-service app for a restaurant

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Project overview



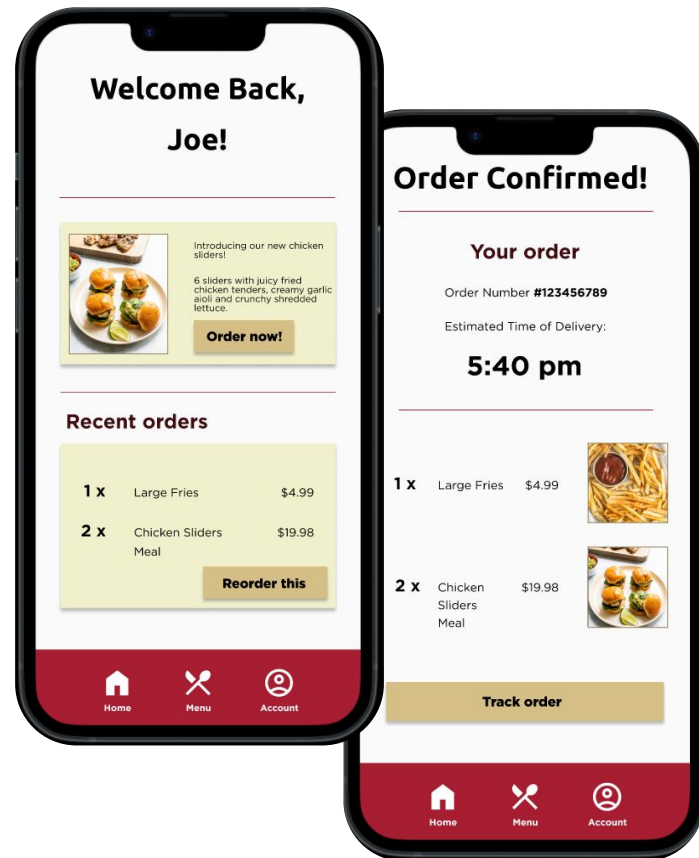
The product:

The restaurant is a local food chain located in suburban and metropolitan regions of Melbourne. They aim to deliver high quality and affordable brunch options. The restaurant's customers include busy workers and students, as well as those who are unable to prepare breakfast/lunch.



Project duration:

October to December (2022)



Project overview



The problem:

Ordering food online lacks clarity in regards to quality and quantity of food, as well as allergen and dietary information.



The goal:

Design an app that allows users to order food in a clear and efficient manner.

Project overview



My role:

UX Designer designing an app for the restaurant from conception to delivery.



Responsibilities:

Conduct competitive audits, gather research from user interviews, produce paper and digital wireframes, produce lo-fi and hi-fi prototypes, conduct usability tests, and consistent design iterations.

Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

User research: summary



Through conducting user interviews and building empathy maps, I was able to research the users, their experiences and common pain points. Doing so allows me to understand who I am designing for. The primary user group were users who were unable to prepare meals for themselves and others.

The research conducted confirmed assumptions that most users are unable to prepare meals, and opt to order from the restaurant. It was also confirmed that customers with allergy and dietary requirements have a more difficult experience when ordering online.

User research: pain points

1

Allergen/Dietary Information Clarity

Users who have allergies and/or dietary requirements have had difficult experiences with food ordering.

2

Lack of imagery

Competitors lack images to clearly identify the quality and quantity of food items.

3

Time

Users need to order in a quick and efficient manner.

Persona: George

Problem statement:

George is a single parent who needs a clear and efficient way to order food because his daughter has a peanut allergy.



George

Age: 40
Education:
Hometown: Denver
Family: Lives with daughter
Occupation: Freelance designer

"Working on my own allows me to allocate time for other things I enjoy doing everyday"

Goals

- Spending time with his daughter when possible.
- Ordering food to deliver
- Peanut-free food for daughter

Frustrations

- Tedious to note peanut allergy for food items
- Lack of pictures for items
- Confusing menu sections. Repeating items

George is a freelance designer who allocates his own work times. He likes to explore different restaurants in person, as well as order food for delivery with his daughter. George would like ordering apps to be clear and usable, in regards to allergy considerations.

User journey map

Creating a user journey map for George opens up opportunities to develop an app that caters for our users.

Persona: George

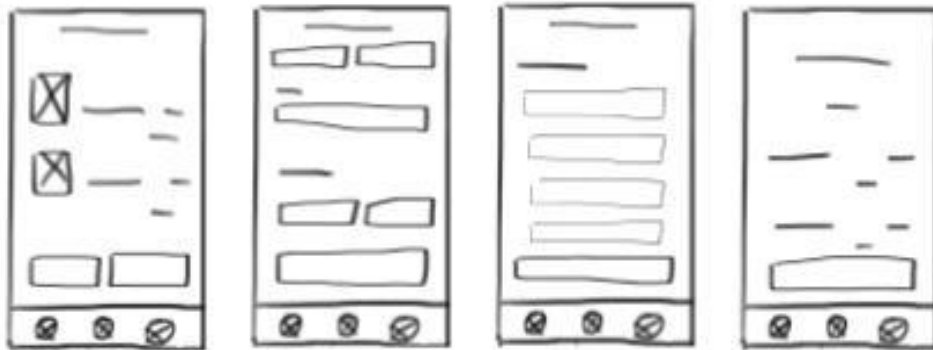
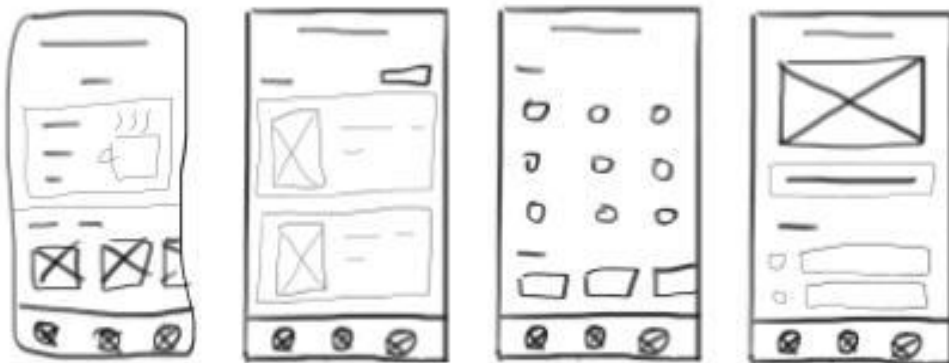
Goal: Order food for himself and his daughter who has dietary requirements

| ACTION | Confirm restaurant to order | Browse and order items | Wait for delivery | Receive and confirm order | Eat with daughter |
|---------------------------|---|---|--|--|---|
| TASK LIST | Tasks A. Decide restaurant B. Ask daughter for approval | Tasks A. Open app B. Choose items C. Note peanut allergy for each item | Tasks A. Checkout order B. Check order progress on app | Tasks A. Ensure food has arrived correctly B. Bring in food C. Check for peanuts | Tasks A. Begin eating B. Monitor if daughter has any allergy reactions |
| EMOTIONS | <ul style="list-style-type: none">DecisiveApproved | <ul style="list-style-type: none">CuriousDecisiveAnnoyed | <ul style="list-style-type: none">AssuredImpatient | <ul style="list-style-type: none">OrganisedProtective | <ul style="list-style-type: none">RelaxedWary |
| IMPROVEMENT OPPORTUNITIES | | Implement a feature that saves dietary needs and requirements for orders. Provide clear images of each food item. Include option to change font size, as George has lost his glasses. | Provide regular checkpoints for order to ensure it is progressing well. Ensure map and path is clear and visible. | Ensure delivery drivers send photos of delivered food. Opportunity to report missing order if not received. | Notify George of any potential traces. Receive confirmation note from restaurant ensuring no peanuts are included. |

Paper wireframes

These wireframes depict the user flow from opening the app to successfully ordering food. The wireframes include in order: Home, Menu, Filters, Item, Cart, Checkouts (2) and Successful order screens.

Paper wireframes helped quickly develop page layouts for each wireframe. For instance I sketched a 'filter by allergy/dietary requirement' screen, taking user pain points into consideration.



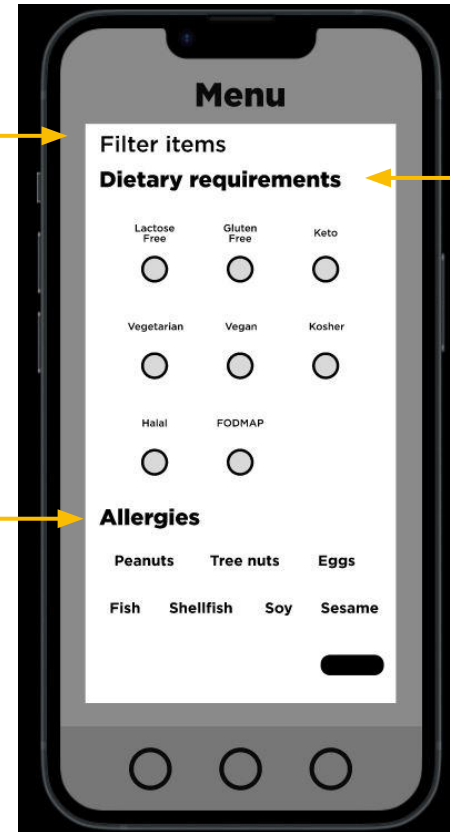
Digital wireframes - Menu filter screen

A main goal for this app is to accommodate for users with dietary requirements and allergies. With the ability to filter the menu based on these pain points, the app will deliver user experiences unhindered by user needs.

Filter pop-up page to filter menu

Filters for common allergies

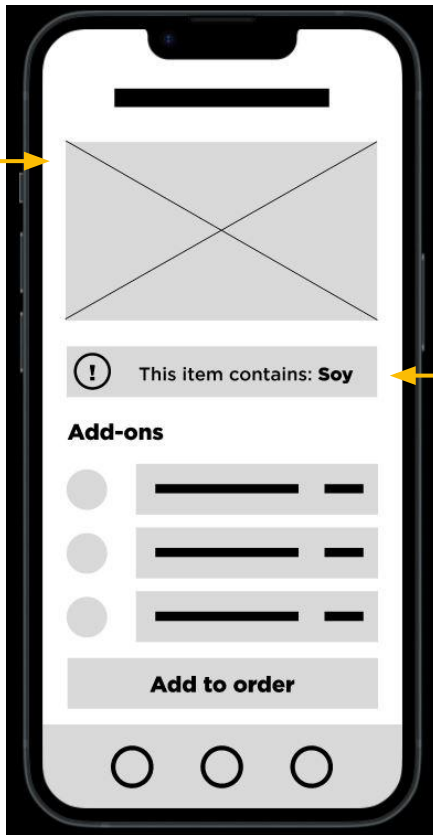
Filters based on common dietary requirements



Digital wireframes - Food item screen

To further accommodate the needs of users with allergies/dietary requirements, any food item with potential risks to these needs are clearly highlighted when selected. On this screen a clear image is also provided to allow users to see exactly what the food looks like before ordering.

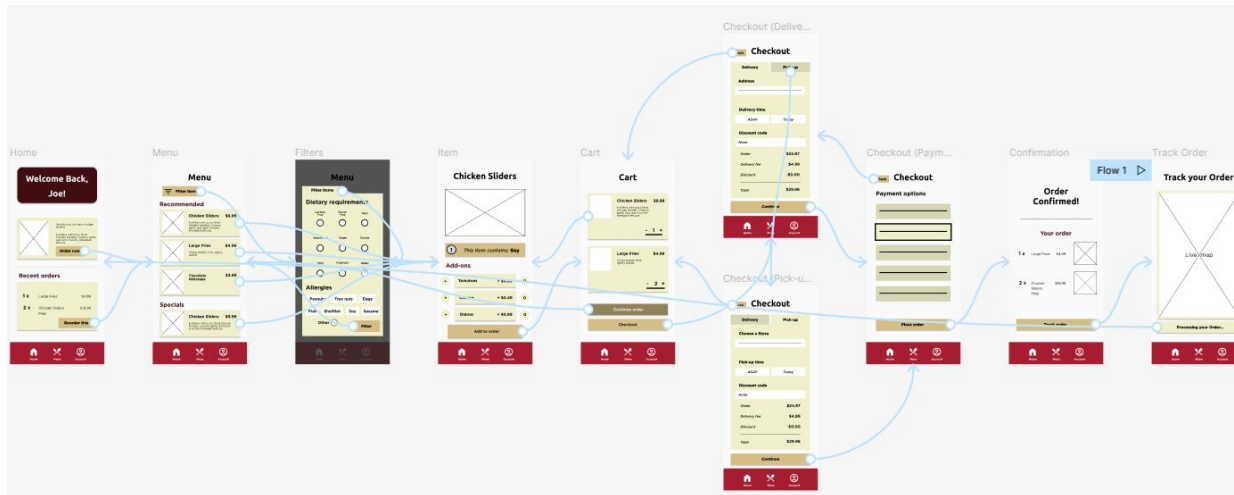
Image of product to provide maximum clarity for food item



Clear warning to address potential allergies/dietary requirements

Low-fidelity prototype

This lo-fi prototype connects the primary user flow of ordering food.



<https://www.figma.com/proto/GHMRYesLhXN47T6DXwmS0l/Portfolio-Project-Wireframes?page-id=0%3A1&node-id=1%3A2&viewport=78%2C391%2C0.27&scaling=scale-down&starting-point-node-id=1%3A2>

Usability study: findings

2 usability studies were conducted for this app, conducted once after the lo-fi and hi-fi prototypes. This is necessary to catch improvements in the first round, and to make sure the product is ready for delivery from the second round.

Round 1 findings

- 1 Lack of pictures and meaningful text
- 2 Inconsistent visual design
- 3 Missing 'Account' screen

Round 2 findings

- 1 More detailed 'Order confirmation' screen
- 2 Improved menu filter design

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

Mockups

From the second usability study, it was noted that the filter pop-up was visually awkward and not practical.

This was improved with a new layout, with drop down lists and text boxes, components that users may find more straight forward.

Before usability study

The 'Before' mockup shows a 'Menu' screen with a 'Filter items' section. Under 'Dietary requirements', there are nine radio button options arranged in a 3x3 grid: Lactose Free, Gluten Free, Keto, Vegetarian, Vegan, Kosher, Halal, FODMAP, and Other. Below this is an 'Allergies' section with eight button options: Peanuts, Tree nuts, Eggs, Fish, Shellfish, Soy, Sesame, and Other (with a radio button). A 'Filter' button is at the bottom right of the filter section. The bottom navigation bar has icons for Home, Menu, and Account.

After usability study

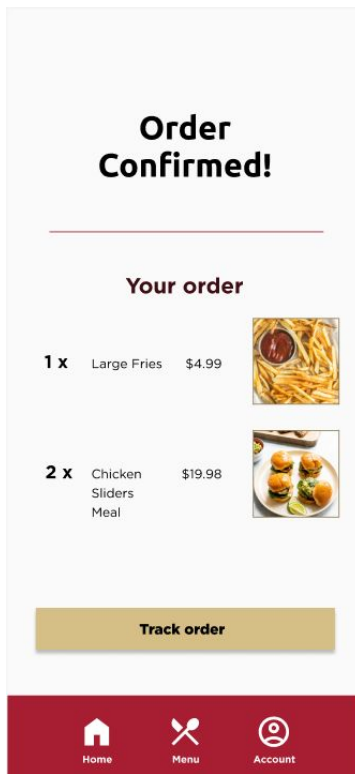
The 'After' mockup shows a 'Menu' screen with a 'Filter by:' section. It features two dropdown menus for 'Dietary requirements' and 'Allergies', both with 'Select' as the placeholder text. Below these is an 'Other' section with a text input field and a note: 'This will be added automatically as a note for ordered items. We will contact you if we cannot fulfil these requirements.' A 'Filter' button is at the bottom right of the filter section. The bottom navigation bar has icons for Home, Menu, and Account.

Mockups

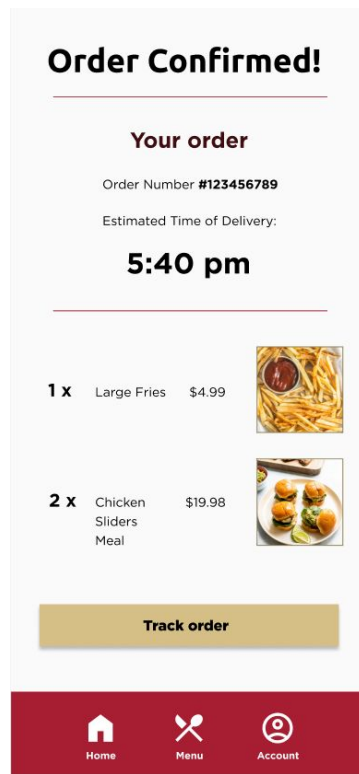
The second usability study also indicated the lack of information on the 'Order confirmation' screen.

Here more details were added alongside some minor layout adjustments.

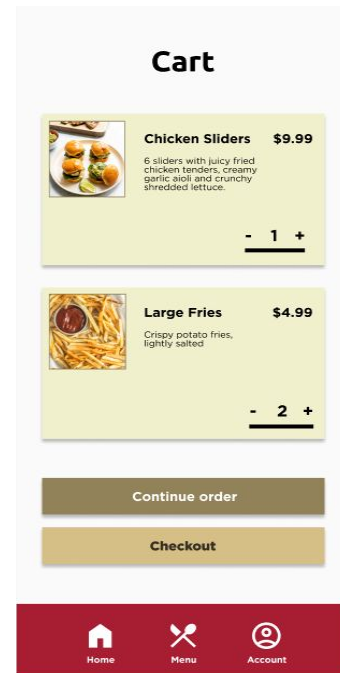
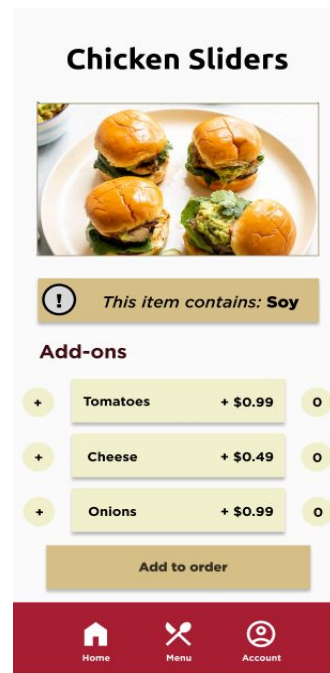
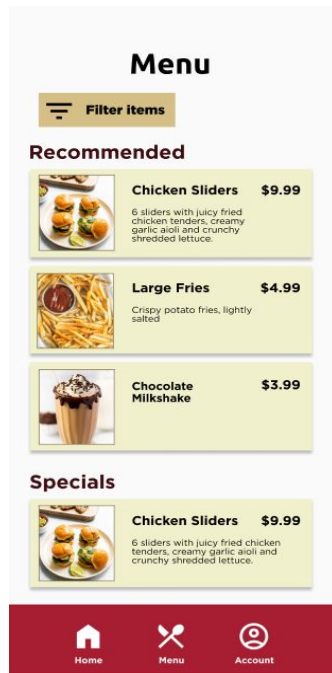
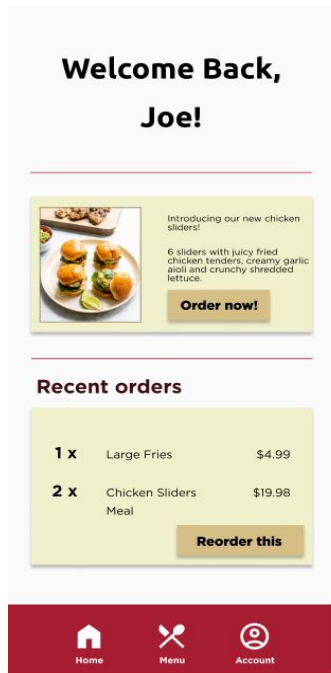
Before usability study



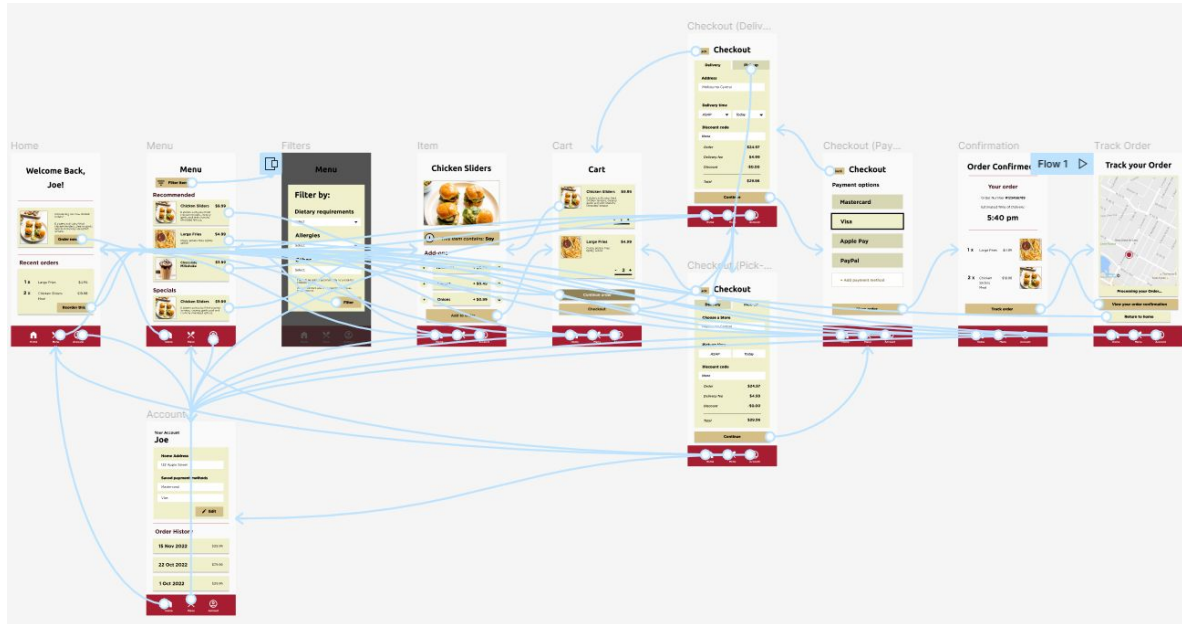
After usability study



Mockups



High-fidelity prototype



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Accessibility considerations

1

Large images of food items were implemented to cater for those who have vision impairments.

2

Colors were chosen in accordance to WCAG contrast ratios. This ensures users with visual impairments can comprehend different colors.

3

Text was used as often and necessary as possible to ensure users with screen-readers can experience the app.

Going forward

- Takeaways
- Next steps

Takeaways



Impact:

The final product ensures all users regardless of ability and requirements are considered.



What I learned:

From this project I have learnt the full design process from concept to final product. I now understand the thorough research that is necessary to empathise with users, and the constant iterations of prototypes that have to be made with the assistance of usability studies.

Next steps

1

Conduct further user research to understand if the app could be more accessible or functional.

2

Conduct usability studies to ensure pain points are solved and minimized.

3

Observe community feedback through reviews and statistics to stay aware of any pain points.

Let's connect!



Thank you for taking a look at my work for this project. I have loads of more potential ideas I am looking to work on, so be sure to check out more of my projects!

Email:
Website: