CSYE7280
User Experience Design & Testing

Under Guidance of: Prof Vishal Chawla

FINAL PROJECT
'Bon Appetite' – A Food Delivery App

Team Members – Group 05
- Nikita Gaurihar - 002980962
- Meenakshi Kumbhar - 002922024
- Nikhitha Dasi Srinivas - 002922544
- Ikra Bagwan - 002794307

Contents

- Problem Statement & Proposed Solution
- Product Objectives
- Target Audience & User Segmentation
- Design Process
- Personas
- User Needs
- UX Research methods
- Card Sorting
- User Workflow & Information Architecture
- Error Handling
- Usability Testing
- Fives Planes Implementation
- Onboarding Journey
- References

Overview

Develop and create an application with simple UI and easy navigation to help users place orders for food in an efficient manner that will support business Development.

Understand the trends and user behavior in order to give users the best experience and turn them into customers.

Provide an easy Filtering option for food based on cuisine and lifestyle

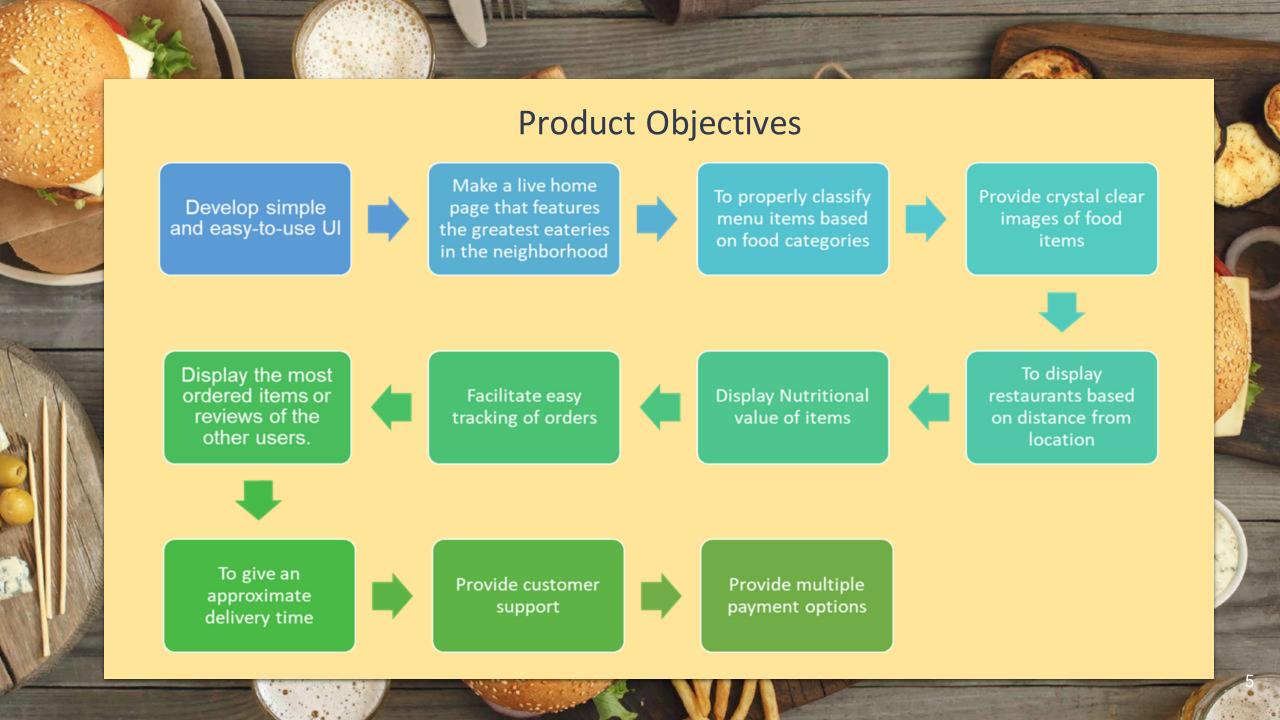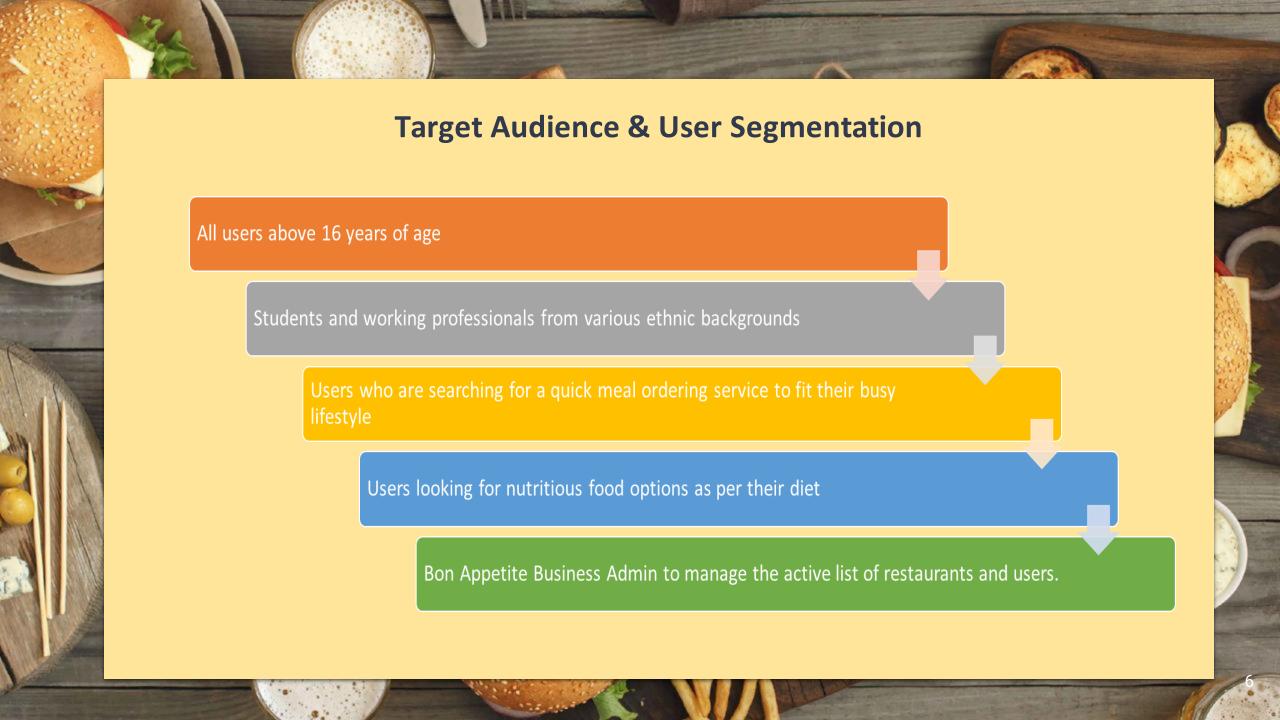Provide easy and eye catchy navigation for Users.

Provide an Admin View for the business to manage the Database and Business Analytics

To Implement Error Handling for user and Admin profile

Problem Statement

Lack of user- Intuitive Design

Nutritional Value not available to user

Difficulty filtering desired items

No clear images of the item

Delivery time is more

Providing Business Point of view

Anyone with the application link was able to log in

Proposed Solutions

Build app with interactive and user-friendly experience

Users can order based on calorie needs

Users can filter desired items based on cuisine and lifestyle options

Clear and actual images of the item displayed

Delivery restaurants based on nearest distance

Providing Database to active list of restaurants and user trends

Implementing Error handling for profile and login credentials

Product Objectives

Develop simple and easy-to-use UI → Make a live home page that features the greatest eateries in the neighborhood → To properly classify menu items based on food categories → Provide crystal clear images of food items

Display the most ordered items or reviews of the other users. ← Facilitate easy tracking of orders ← Display Nutritional value of items ← To display restaurants based on distance from location

To give an approximate delivery time → Provide customer support → Provide multiple payment options

Target Audience & User Segmentation

All users above 16 years of age

Students and working professionals from various ethnic backgrounds

Users who are searching for a quick meal ordering service to fit their busy lifestyle

Users looking for nutritious food options as per their diet

Bon Appetite Business Admin to manage the active list of restaurants and users.

Design Process

Understand	Research	Analyze	Sketch	Prototype	Test
Understanding the Problem	Conduct User Research (Method used- Interview & Ethnographic research & Survey)	Analyze User Insights. (Created Personas)	Create Paper Representation of Solutions	Create Prototype (Used Figma to create interactive prototype)	Perform Usability testing

Personas 1

Name:	Sam Peters
Location:	Boston
Job Title:	Chartered Accountant
Bio:	Sam is a highly experienced CA with over a decade of experience in the industry. As a busy professional, he often finds himself working long hours, leaving little time for cooking. He has come to rely on food delivery apps as a convenient way to order food.
Goal & Needs:	Convenience, speed, and reliability. Prefers order takeout or delivery from his favorite restaurants. Value an easy-to-use and streamlined ordering process. Prefers option to track orders.
Frustrations:	Limited restaurant options. Inaccurate menu information. Limited payment options

Personas 2
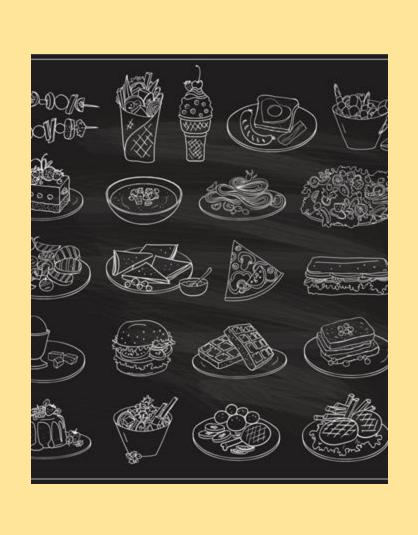
Name:	Ria Sharma
Location:	Boston
Job Title:	Student
Bio:	Ria is a hard-working college student balancing a full course load with extracurricular activities and a part-time job. With such a busy schedule, finding time to cook and prepare meals can be a challenge. That's why Ria has come to rely on food delivery apps as a convenient way to order a food.
Goal & Needs:	User-friendly interface that makes browsing menu options, placing orders, tracking deliveries, and making payments easy. Desired a variety of menu options, including healthy and dietary-specific options, to meet diverse food preferences. Affordable pricing.
Frustrations:	No live chat option available to communicate with the support team. Incorrect or Incomplete Orders. Poor Delivery Services

Personas 3

Name:	Charles
Location:	Boston
Job Title:	Software Engineer
Bio:	Charles is currently employed as a software engineer in Boston IT based company. He works on finishing his assigned project at the office for most of the day. He won't have enough time to pack and make food. As a result, he places online orders for food from reliable restaurants.
Goal & Needs:	Streamlined ordering process that allows quick and efficient food delivery. Personalized recommendations based on preferences and history making it easier to discover new food options. Strong security measures in place to protect sensitive user information and ensure secure transactions.
Frustrations:	When application becomes slow and unresponsive. When there are no customization options, it makes difficult for him to tailor the app to his specific needs and preferences. No recommendations and suggestions based on his ordering pattern are displayed.

Personas 4

Name:	Sophia
Location:	Boston
Job Title:	Doctor
Bio:	Dr. Sophia is a health-conscious individual who values nutritious food, but often finds herself too busy to prepare healthy meals at home. By using a food delivery app, she can easily access a variety of restaurants and healthy food options, allowing her to maintain her healthy diet while still managing her busy schedule.
Goal & Needs:	Increase variety in her diet by having access to a wide range of restaurants and cuisines. Maintain a healthy diet by selecting nutritious options from the app's menus. Allow for more time to rest and recharge outside of work by not spending time on meal-related activities.
Frustrations:	Long delivery times, which can be frustrating if she's hungry and wants her food quickly. Limited menu options, which can be frustrating if she has specific dietary requirements or preferences.

User Needs

- **Location of the user**

- **Display options cuisine-wise**

- **Display options food lifestyle-wise**

- **Availability of premium membership for users**

- **Availability of Feedback/ratings/support platform**

- **Availability to access their past orders**

- **Availability of trusted payment gateway**

- **Availability of offers and Promo code**

- **Availability of the Calorie count information**

- **Availability of Order tracking system**

UX Research Methods

Research Method Used-

- Qualitative Interviews and Ethnographic Notes
- Surveys

Field Study Highlights

Qualitative Interviews and Ethnographic Notes-

Questions asked:

1. How often do you order food online?
2. What factors do you consider when ordering food online?
3. Have you used any food delivery apps in the past? If so, which ones and why did you choose them?
4. How easy or difficult is it to navigate food delivery apps?
5. Do you think the current food delivery apps meet all your requirements? If not, what are the missing features?
6. How do you feel about loyalty programs or reward systems in food delivery apps?
7. Have you ever faced any issues with food delivery apps like delayed deliveries or low-quality food? If yes, how was the customer support in addressing those issues?
8. What features do you think are essential for a food delivery app?
9. How important is it for you to have a secure payment platform while ordering food online?
10. How do you think the food delivery app can improve your overall food ordering experience?

Field Study Highlights

Key highlights:

1. Frequency of online food ordering varies widely among individuals.
2. Factors considered while ordering food online are cost, cuisine, convenience, and time.
3. Popular food delivery apps are chosen based on convenience, faster delivery, better food options, and discounts.
4. Food delivery apps are generally easy to navigate, but the delivery time can be a concern.
5. Some missing features in current food delivery apps include unreasonable fees and delivery charges, longer waiting time, food spillage, and inaccurate wait time estimates.
6. Loyalty programs and reward systems are seen as attractive only when individuals frequently use the app.
7. Issues such as delayed deliveries and low-quality food are common, and customer support may not always be satisfactory.
8. Essential features of a food delivery app include fast and cheap delivery, real-time tracking, spill-proof containers, official ratings, updated allergen information, and courteous staff.
9. Secure payment platforms are highly important to users while ordering food online.
10. Food delivery apps can improve the overall experience by making the process simple, quick, and reliable.

Responses

Response 1

Person 1= Varun Dabade
 Ethnicity- American Indian
 1. I have only done it a few times ever (I don't regularly order food online).
 2. The few times that I've done it were just to order Dominoes because I had people over at my house and didn't have time to go get it.
 3. I've used it once in India. The service is called Dunzo. I used it because others suggested it to me (it's very common in Pune)
 4. It was very easy — the website has a really simple layout and you don't need to navigate through many links to get to the order page
 5. I don't use them often so I am not sure. I think the best ones are those that let you track your order so you have a more accurate time estimate.
 6. Although I have not used them enough to try our loyalty programs, I think they make sense because it would incentivize me to use one single app rather than trying out different ones
 7. No
 8. Being able to track your order, the ability to easily contact customer service if there's an issue with the order/delivery, and having kind/courteous staff members
 9. Extremely important. One fear anytime I order things online is security if my personal information so I'd probably rate this as most important
 10. By making it very simple and easy and quick for me to order food rather than having to go to a store and waiting in line to then order

Responses

Response 2

Person 2= Tyson Hart
Ethnicity - American
1. Once or twice a month
2. Time constraints with other things going on in my life (too busy to make myself a meal)
3. Doordash, I got a gift card, otherwise I'll order online from mom and pop restaurants if anything
4. They make them pretty easy
5. Saved orders would be helpful (I know it's not the best example but if you've ever order from targets online store, that is the GOLD standard for e-commerce in my opinion, everyone should match that experience)
6. Can't say, don't use them enough
7. Obviously if ur ordering takeout it ain't going to be as good as in store
8. Convenience (like I referenced before, I would mirror what target does in a restaurant app) 9. Extremely, I ain't tryna get my credit info stolen, make sure PayPal is an option
10. People doing delivery likely r lazy or trying to save time from a busy schedule, however u can make it easier to order what someone has ordered in the past, do it.

Responses

Response 3

Person 6= Muhoza Ange
 Ethnicity- Middle Eastern
 1. How often do you order food online?
On average, like once a month or so
 2. What factors do you consider when ordering food online?
 Time: if I got little time and busy with other things going on, chances are that I will be ordering online
 Individual vs Group ordering: If I'm only ordering for just me, I might not do an online order but if there's a group involved, online ordering seems ideal because it saves that trip to the store and accommodates for everyone's needs and what not
 3. Have you used any food delivery apps in the past? If so, which ones and why did you choose them?
 Domino's, DoorDash, PizzaHut...I have used or in some cases still use them when ordering late in the night because maybe I need that snack or craving pizza or some chicken wings
Instacart....when I am in need of large quantities of groceries
 4. How easy or difficult is it to navigate food delivery apps?
 If I was to put it on a scale of 1-10, I think I'd give it a solid 7
 5. Do you think the current food delivery apps meet all your requirements? If not, what are the missing features?
 I've encountered a couple of times now when ordering like bananas, and the ones that are delivered are green, green that might take a week or so to ripe...So, when it comes requirements and how some expectation are met, there could be some discrepancies
 6. How do you feel about loyalty programs or reward systems in food delivery apps?
 They do seem harmless on the surface, though they are another tool that is used to encourage shopping and spending while baiting you with their "loyalty programs/ reward systems" that are dimes on dollars spent
 7. Have you ever faced any issues with food delivery apps like delayed deliveries or low-quality food? If yes, how was the customer support in addressing those issues?
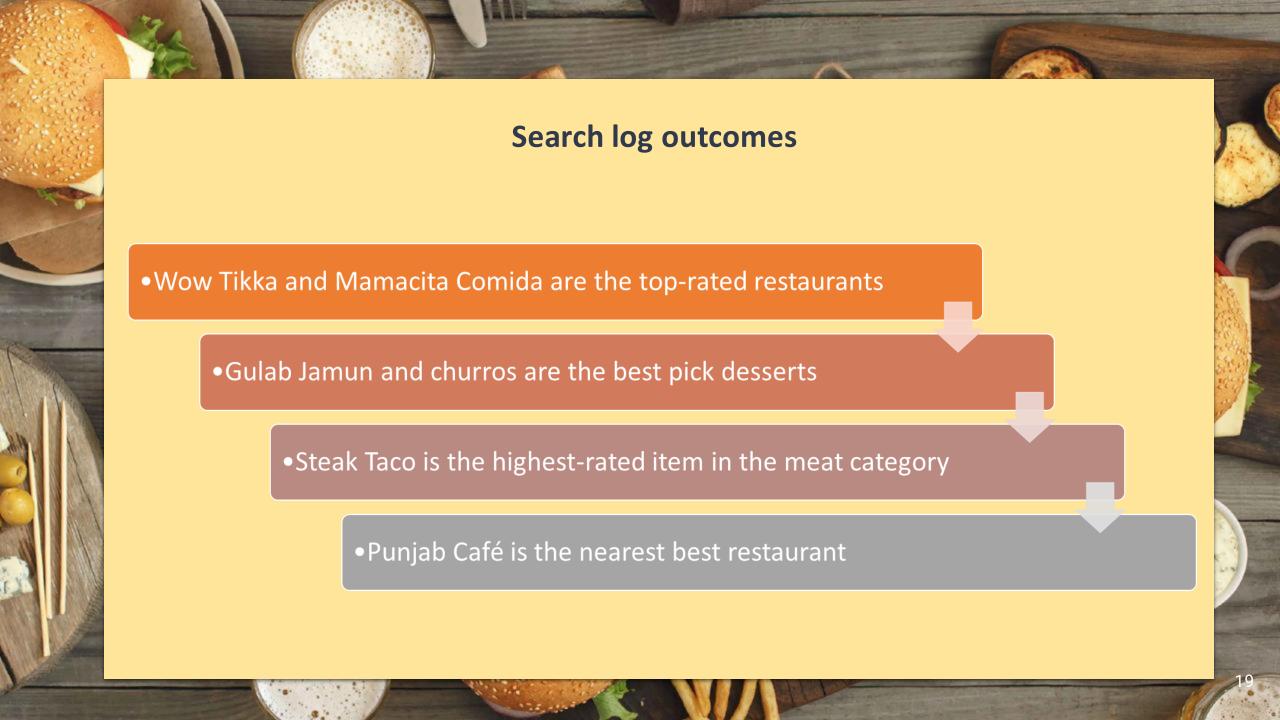 I once ordered chicken wings and a sprite if my memory serves me right, and I got chicken wings delivered but that sprite never showed up. I made the call and was promised how on the next order delivery, it was gonna be delivered; it's been months now.
 8. What features do you think are essential for a food delivery app?
 Can't think of any at the moment
 9. How important is it for you to have a secure payment platform while ordering food online? Very Important
 10. How do you think the food delivery app can improve your overall food ordering experience? Like really improve on the customer service experience after delivery to meet some of the disappointments and solve those issues.
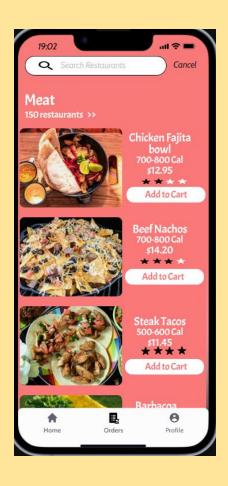
Search log outcomes

- Wow Tikka and Mamacita Comida are the top-rated restaurants

- Gulab Jamun and churros are the best pick desserts

- Steak Taco is the highest-rated item in the meat category

- Punjab Café is the nearest best restaurant

Survey Highlights - Survey Link

Search-Log Analysis - Implementation
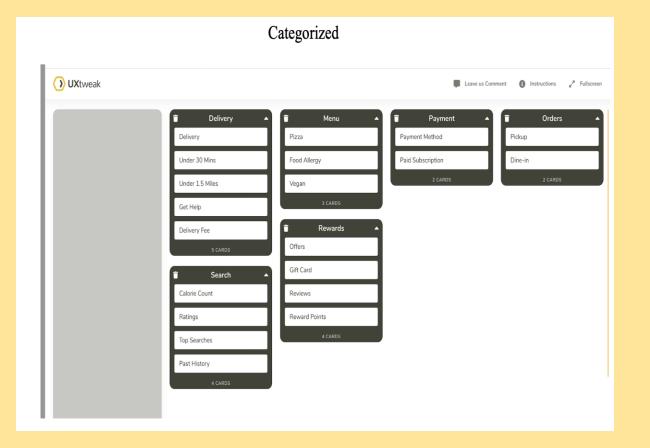
Open Card Sorting

Open Card Sorting:

Users are asked to organize cards into groups that they feel is appropriate to them. They are then asked to name each of the groups they have created with a label that best describes that group.
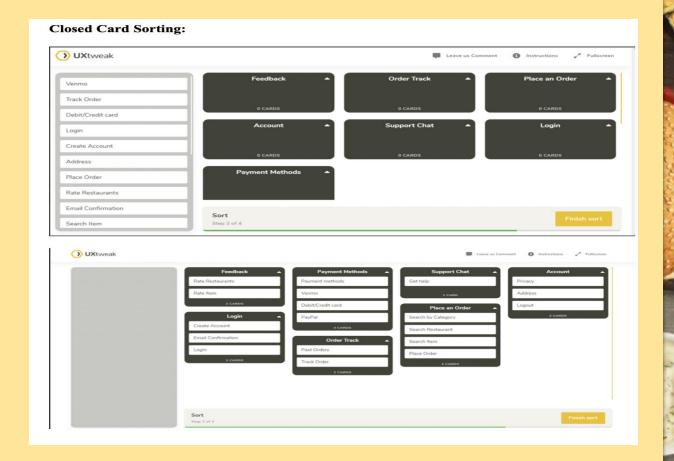
Participants were given a task from our website to classify various contents before being asked to arrange the cards in a random manner. The groupings the participants selected required labels, and they were free to give them any names they wanted. Finding parallels between various contents from this was useful.
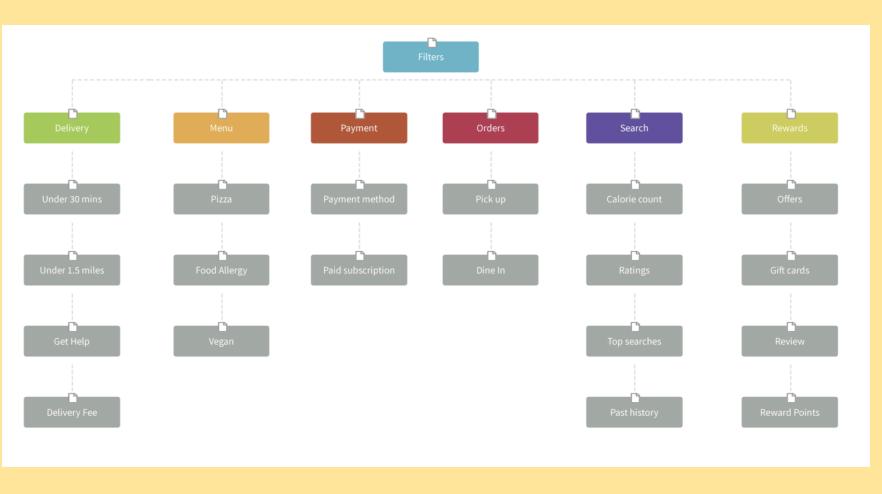
Categorized

UXtweak   Leave us Comment   Instructions   Fullscreen

Delivery	Menu	Payment	Orders
Delivery	Pizza	Payment Method	Pickup
Under 30 Mins	Food Allergy	Paid Subscription	Dine-in
Under 1.5 Miles	Vegan		
Get Help	3 CARDS	2 CARDS	2 CARDS
Delivery Fee			
5 CARDS			

Rewards
Offers
Gift Card
Reviews
Reward Points
4 CARDS

Search
Calorie Count
Ratings
Top Searches
Past History
4 CARDS

Closed Card Sorting

Closed Card Sorting:

Users are provided with both the content cards as well as the category cards and asked to place the cards in these given categories. This method is normally used when adding new content to an existing site or gaining a second round of insights after an open card sort.

Participants were asked to place information from our website into whichever category they thought was suitable after being provided labels for the empty groups. This helped us learn more about the grouping of our website pages and which page needs to be updated.
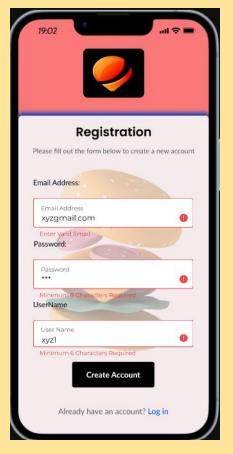
Information Architecture: Open Card Sorting
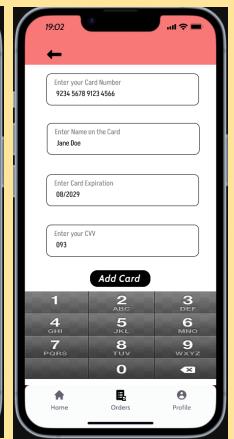
Information Architecture: Closed card Sorting

Error Handling

Usability testing objectives & task

Objectives and Goals:

- Discover any usability issues
- Data collection, both qualitative and quantitative Analyze the participant's level of product satisfaction.
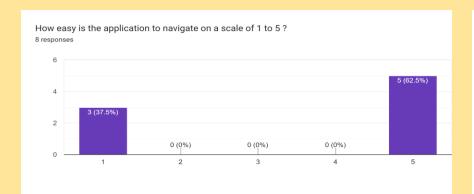
Tasks:

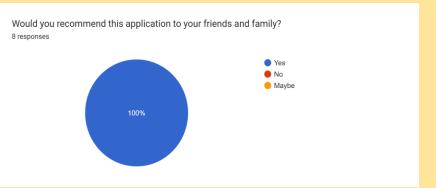Validate if the application address problems of users.

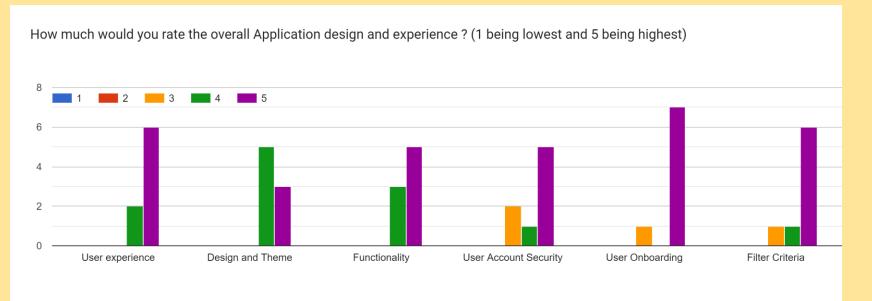Reviewing the ease of navigation and application aesthetics with users.

Understanding how users will rate the application and if they would recommend this application to their friends.

Usability testing objectives & task

How easy is the application to navigate on a scale of 1 to 5 ?
8 responses

Would you recommend this application to your friends and family?
8 responses

- Yes
- No
- Maybe

100%

How much would you rate the overall Application design and experience ? (1 being lowest and 5 being highest)
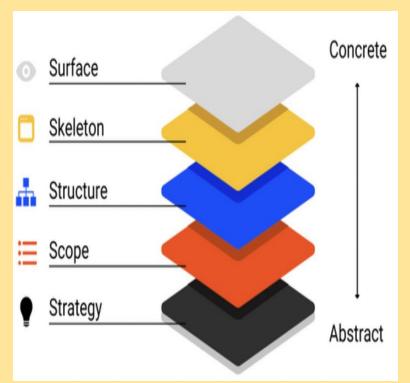
- 1
- 2
- 3
- 4
- 5

Five Plane Implementation

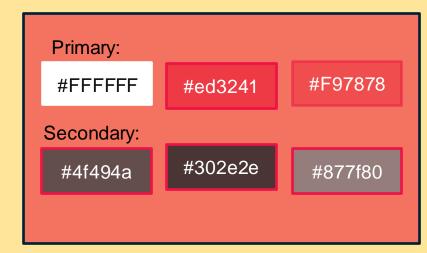- These five planes provide a conceptual framework to assist you in the process of designing a website.

- As you move from Surface to Strategy the content of each plane becomes less concrete and more abstract.

Surface Plane

LOGO

Typography

Font:
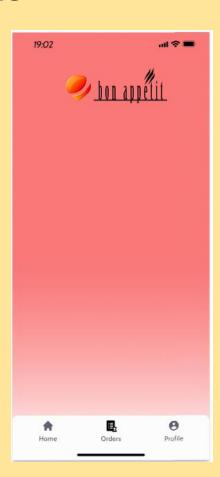
Cabin

Heading: 25px
Subheading: 22px
Label: 20px
Body text: 16px

Color Palette

Primary:

| #FFFFFF | #ed3241 | #F97878 |

Secondary:

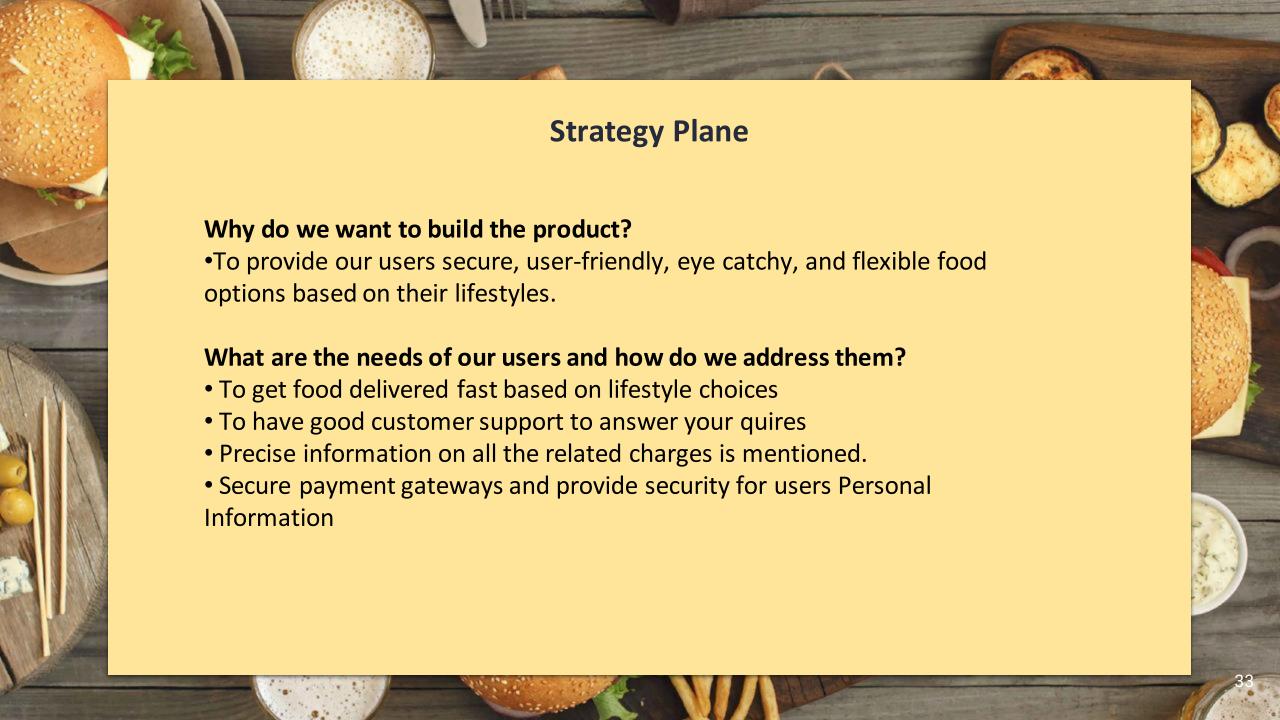| #4f494a | #302e2e | #877f80 |

Skeleton Plane

We created the application's basic framework while considering both its aesthetics and the user's ease of navigation.

Scope Plane/ MOSCOW

Must Have	Should Have	Could Have	Won't Have
• The application should provide the user with an interactive, easy interface so that they can order the items with ease. • The User Interface should be eye catchy and simple design. • The user should be able to see the most ordered items or reviews of the other users. This provides information about the quality of the food to the user. • Basic payment methods should be available for the user. • Live Tracking system of an order must be available to the customer.	• Options to provide feedback about the food quality. • Support call/ mail support for the issues faced by the customer. • Options to search for an item based on cuisine or categories. • A minimum of two payment methods must be available. • Clearly display the items which will be delivered to the user with the estimated delivery time and the order details. • Order the restaurant's availability with the minimum distance from the user's locality.	• Provide the application with chatbot support so that users can directly have conversations regarding the issues they are facing while ordering the items/ refunds for missing orders. • Flexibility to add max 5 payment methods. • There could be an option to help users split the cost of order between their friends. • Reward system for the customers which encourages the customer to use the food delivery method.	• Advanced Payment methods like Apple ID can be implemented.

Strategy Plane

Why do we want to build the product?
•To provide our users secure, user-friendly, eye catchy, and flexible food options based on their lifestyles.

What are the needs of our users and how do we address them?
• To get food delivered fast based on lifestyle choices
• To have good customer support to answer your quires
• Precise information on all the related charges is mentioned.
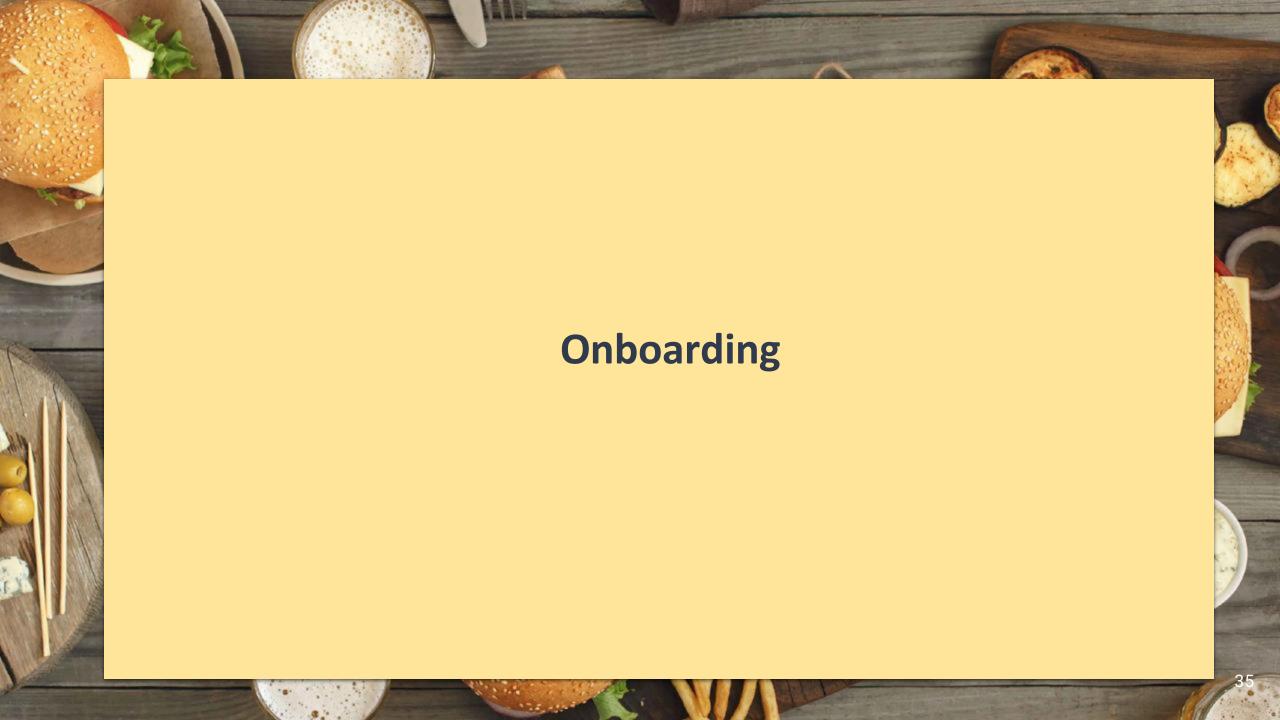• Secure payment gateways and provide security for users Personal Information
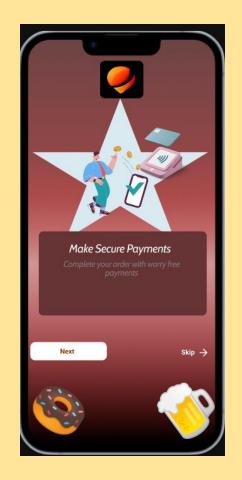
Plugin

🧑 Icon8 – for images and icon

📂 Lottie Files – For GIF's

🎨 Logo Creator– for designing logo

Onboarding

Onboarding

Onboarding

Figma Interactive Prototype

Bon Appetite Figma Prototype

References

- Qureshi, U. (2022, March 30). UX Design using the Five Planes Method - DesignCentered - Medium. *Medium*. https://medium.com/designcentered/ux-design-5-planes-method-b1b1d6587c05

- Bektas, A. (2022, January 3). 18 Figma Plugins You Need to Have to Perfect your Designs. *UserGuiding*. https://userguiding.com/blog/best-figma-plugins/

- UXPin. (2023, March 10). *8 Best Design System Examples - by UXPin*. Studio by UXPin. https://www.uxpin.com/studio/blog/best-design-system-examples/

- What is Usability Testing? (2021). *The Interaction Design Foundation*. https://www.interaction-design.org/literature/topics/usability-testing

Thank You!