User Research Plan

Group No.: 2021S2_REG_WE_27

Group Details

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Introduction

The project we have chosen is to redevelop an already existing food ordering and delivering mobile application so as to improve the user experience of the app. It already has the functionalities of browsing food, placing orders and viewing events. However, some of these functionalities are not working properly. For an instance, many users have complained that even though they placed food orders through the mobile app, they did not get their orders delivered properly. Also, we discovered that the app did not have a way for users to register without using their google accounts. The user interfaces also can be redesigned so that they are more user friendly. We also plan on implementing an event planning facility for users to rent the restaurant premises to hold events and a table booking functionality so that users can book a table prior to visiting the restaurant. So, in order to give the user a more satisfied experience through the app, we have conducted user research. Through this research, we plan to get a better idea on the problems that users face when using the app and understand how they would behave, think and feel when interacting with the mobile application. Also, we will be analysing the data collected to get a clearer view regarding the users and their needs. We would also be gathering ideas and suggestions from two selected test participants so as to identify what are the features that users would expect from a food ordering mobile application.

Test Objectives

- To give confidence to the customers by providing quality products.
- To ensure that the app authorize and validate the user credentials accurately.
- To make sure that the food ordering application meets the required level of usability.
- To get to know the user satisfaction regarding the current features offered by the app.
- To understand the user expectations from a food ordering app more clearly.
- To test if the sub total cost of the food items added to cart is calculating without errors.
- To test whether the dropdowns function properly in the event planning section.
- To test whether mobile application is user-friendly and convenient to use.
- To test whether the date picker functions properly in booking.

Methodology

The main objective of conducting this research is to collect information regarding customers' perspectives on features provided by the "Machan Eats" mobile application and getting their ideas to improve their user experience. A quantitative as well as a qualitative methodology was utilized to gather research data for the purpose of identifying users' expectations from a food ordering and delivery application.

For the quantitative research, a sample of 50 was selected among the potential users of the application. A questionnaire was distributed on the 15th of August 2021 and within 2 weeks, 50 responses were submitted. The questionnaire consisted of 17 questions in total. The first three questions focused on gathering demographic data (name, age, gender) about the respondents. The rest of the questions included a combination of dichotomous questions, multiple choice questions and linear scale questions. The questions covered all the main functions intended to be implemented in the mobile app. Multiple choice questions with default answers were included to allow the respondents to choose their preferences. These questions were intended to collect the users' satisfaction levels about functionalities provided by the mobile application.

For the qualitative research, two test participants were chosen so that they match the user personas of the mobile app. Their opinions regarding the mobile application were gathered by interviewing them. One online interview was conducted on 16th August 2021 at 3.30 p.m. via Microsoft Teams platform and the opinions of the interviewee regarding the login, registration and food ordering functions of the app were collected. Another online interview was conducted on 17th August 2021 at 2.52 p.m. via Zoom platform and the opinions of the interviewee regarding the table booking and event planning functions of the app were collected. These two interviews were conducted by the members responsible for the respective functions.

Interviewing

For the interview, we chose two test participants that match with the user personas we have created for the mobile app. Two online interviews were conducted so as to gather their opinions regarding the mobile application. One online interview was conducted on 16th August 2021 at 3.30 p.m. via Microsoft Teams platform. The interviewee selected was an undergraduate of SLIIT. His opinions were collected regarding the login, registration and food ordering functions of the app. A total of 33 questions were asked which included 14 questions regarding the login/registration function and 19 questions regarding the food ordering and delivery function. The questions mostly included open ended questions and some dichotomous questions. Another online interview was conducted on 17th August 2021 at 2.52 p.m. via Zoom platform. The interviewee selected was an IT administrator of a software company. His opinions were collected regarding the table booking and event planning functions of the app. A total of 31 questions were asked which included 17 questions regarding the table booking function and 14 questions regarding the event planning function. A collection of open ended and dichotomous questions was included. These two interviews were conducted by the members responsible for the respective functions.

Interview Script -

Login and Registration.

- 1. What are your ideas regarding having only a Google sign in facility to the app?
- 2. What is your opinion about having to login every time you open the app?
- 3. Are you satisfied about the security of the current app login?
- 4. If you are not satisfied with above mentioned question, what are your suggestions for a better modification?
- 5. If app has a method for verifying your identity, which method is the most suitable for that verification? Is it verifying through email or through mobile number?
- 6. Do you think that entering personal details when registering is safe?
- 7. Were there any problems you faced when signing into the app? If so, what are they?
- 8. How satisfied are you with the responsiveness of the login and registration interfaces?
- 9. Do you want to be able to update your profile details such as email, mobile number?
- 10. Do you need to upload a profile picture when registering?
- 11. Did you meet any difficulties when you reinstall the app?
- 12. Do you want to keep your data saved in the system even if you have uninstalled the app?
- 13. Do you want to have the feature to be able to deactivate your account?
- 14. What are your suggestions to improve your user experience when registering and logging into the app?

Food Ordering.

- 1. Is it mobile friendly to order foods online?
- 2. What do you think about the payment method and security aspect?
- 3. Is it easy to continue the ordering process?
- 4. According to your point of view, what features should the developers include in online food ordering applications.
- 5. How often do you order and deliver foods to your doorstep?
- 6. Will it worth for the customers to look for the food items by selecting a specific category? What is your opinion about that?
- 7. How would you rate the quality of the food?
- 8. Do you think that tracking your food delivery through the mobile app is done successfully?
- 9. Do you think ordered food is fresh?
- 10. Do you face difficulties when adding food items to cart?
- 11. If yes, mention the reason for that.
- 12. How long does it generally take you to place order using the phone?
- 13. Do you think that the sub total calculation for your food order is done correctly through the app?
- 14. Did you have any doubts when placing a food order by using this app?
- 15. Do you like to get some notifications or some messages while the food order is being processed?
- 16. What is your opinion about the delivery time and was the delivery service following the health precautions?
- 17. Do the prices of the food items are affordable?
- 18. What are the benefits you derived from online food ordering through mobile apps?
- 19. What is more important to you for food delivery?

Table Booking.

- 1. Do you like to book a table by visiting the restaurant premises or contacting the management of the restaurant or using mobile application?
- 2. Did you face any difficulties in booking tables through a mobile app?
- 3. Were the table bookings you placed confirmed?
- 4. Do you think that booking tables through a mobile app is trustworthy?
- 5. Do you want to receive a notification after the confirmation of the table booking?
- 6. Do you wish to see the history of all tables booked for a particular day?
- 7. What method do you prefer to follow in order to book a table in restaurant during rush time?
- 8. What is your opinion about table booking process time?
- 9. Do you like to book some tables according to the number of invitees or according to the table size?
- 10. As a customer do you think there should be some limit for the number of tables you are allowed to book at a time? What are your suggestions regarding that?
- 11. What is your opinion about the table decorations? Should it be depending on customer satisfaction, or should it be according to the restaurant theme?
- 12. Do you think the table booking and decorating fee are fair?
- 13. Do you hope that there was some table decoration list from the restaurant?
- 14. If restaurant gives 3 hours before scheduled time to cancel the table booking using the application, do you agree with this condition? If not give some suggestions for that?
- 15. How do you feel about the speed of our service?
- 16. How do you feel about the quality of our service?
- 17. Prior to how many hours do you think that you should be able to book the table?

Event Planning -

- 1. What kind of factors would you consider when selecting a venue for holding an event?
- 2. Do you wish to plan an event according to the number of invitees or according to the location and purpose for the event?
- 3. Would you like to have the feature to view the locations to book in a specific restaurant?
- 4. Do you wish to receive a notification once the booking of the place for the event is confirmed?
- 5. Prior to how many days do you think that you should be able to book the place?
- 6. If the restaurant gets the full amount of the venue booking before the function is held, as an event planner, do you agree with that?
- 7. Did you have any issues while booking a place for the event?
- 8. If you have some issues, how should it be fixed to get a better experience?
- 9. What do you think about our event venue and service which we provide?
- 10. Are there any suggestions we could have done to make your event experience easier?
- 11. What proportion of the total cost would you be comfortable paying, if the restaurant charges in advance for the booking?
- 12. Do you think the booking place fee is fair?
- 13. Do you want to be able to view all the details regarding the past events?
- 14. Do you want to be able to delete the details of past events that are not important to you?

video recording

Interview recording link https://drive.google.com/file/d/14BSwhLzBNCiEx0dZE90bhK9iIjj_JC_N/view?usp=sharing

Questionnaire

A questionnaire was distributed among the potential users of the application on the 15th of August 2021 and within 2 weeks, 50 responses were submitted. The questionnaire was created using Google forms and it consisted of 17 questions in total. The first three questions focused on gathering demographic data (name, age, gender) about the respondents. The satisfaction of the user regarding the overall functionalities in the app were collected using a multiple-choice grid. The rest of the questions included a combination of dichotomous questions, multiple choice questions and linear scale questions. The questions covered all the main functions namely, Login and registration, Food ordering and delivery, Table booking and Event planning. Multiple choice questions, dropdowns and checkboxes with default answers were included to allow the respondents to choose their preferences. Linear scale questions were included to gather information regarding the users' satisfaction levels and ratings about functionalities provided by the mobile application.

Questionnaire -

Food ordering and Delivering Mobile Application.

The following survey is to collect information about the general view of users regarding food ordering and delivery through a mobile app. You may answer the questions with reference to your experience in using a food ordering and delivery app which has the additional features of table booking and event planning. If you have not used such an app, please feel free to give your opinions and suggestions regarding what you would expect from a food ordering and delivery app. All of your responses will be kept confidential and used for statistical purposes only. Thank you for your cooperation.

| *F | *Required | |
|----|---------------------|--|
| 1. | 1. Name * | |
| | | |
| 2. | 2. Age Group * | |
| | Mark only one oval. | |
| | 15 - 20 years | |
| | 20 - 25 years | |
| | 25 - 30 years | |
| | 30 - 35 years | |
| | 35 - 45 years | |
| | 45 + years | |
| | | |
| 3. | 3. Gender * | |
| | Mark only one oval. | |
| | Male | |
| | Female | |

| ustomer Overall Experience 4. Do you have any experience in using online food delivery through a mobile application? * | | | | | |
|--|---------------|--------------|--------------|---------------|----------------------|
| Mark only one oval. | | | | | |
| Yes | | | | | |
| No | | | | | |
| | | | | | |
| | | | | | |
| 5. How is your experience in us Mark only one oval per row. | sing a food o | ordering app | ? * | | |
| | Very | | | | |
| | v Ci y | C-+:-t:l | Nistrational | Discotisfical | Very |
| | Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied |
| Processing time | - | Satisfied | Neutral | Dissatisfied | • |
| Processing time Application responsive | - | Satisfied | Neutral | Dissatisfied | • |
| | - | Satisfied | Neutral | Dissatisfied | • |
| Application responsive Attractiveness Food ordering accuracy and | - | Satisfied | Neutral | Dissatisfied | • |
| Application responsive Attractiveness | - | Satisfied | Neutral O | Dissatisfied | • |
| Application responsive Attractiveness Food ordering accuracy and | - | Satisfied | Neutral O | Dissatisfied | • |

Customer Profile This section focuses on getting your opinion regarding the login and customer profile handling features of the app.

6. Do you like to use google sign in feature to login to the mobile app? *

Mark only one oval.

| Yes | |
|------------------|---|
| O No | |
| | sfied are you with the responsiveness of the login and registration interfaces of existing apps? * |
| Mark only on | ne oval. |
| | 1 2 3 4 5 |
| Very dissa | tisfied Very satisfied |
| | |
| | |
| 8. What are | e your suggestions to improve your user experience when managing your user |
| profile in to | the app? * |
| Tick all that o | прріу. |
| Allow t | to register and login using other social media login credentials. |
| Allow t | to register using custom username and password. |
| Allow t | to update my email and mobile number |
| Allow t | to upload a profile picture |
| Allow t | to deactivate my account |
| | |
| Food Ordering | This section focuses on getting your opinion regarding the food ordering and delivery feature of the app. |
| 9. H | ow often do you order and deliver foods to your doorstep? * |
| э. п | ow often do you order and deliver loods to your doorstep: |
| Mark only o | one oval. |

| | Daily |
|------------------|--|
| | Once a week |
| | 2-3 times a week |
| | Monthly |
| | Never |
| 10. succe | Do you think that tracking your food delivery through the mobile app is done ssfully? * |
| Mark | only one oval. |
| | Yes |
| | No No |
| | Sometimes |
| | It depends on the connection |
| 11. | How long does it generally take you to place order using the phone? * |
| Mark | only one oval. |
| | 5-10 mins |
| | 10-15 mins |
| | 15-20 mins |
| | 20-30 mins |
| | More than 30 mins |
| | |
| Table Booking | Sometimes you may need to book a table at the restaurant. This section focuses on getting your opinion regarding the table booking feature of the app. |
| 12. | Do you like to book a table by visiting the restaurant premises or contacting the |

12. Do you like to book a table by visiting the restaurant premises or contacting the management of the restaurant or using mobile application? * Mark only one oval.





By visiting the restaurant premises.

By contacting the management of the restaurant.



By using mobile application.

13. Do you like to book some tables according to the number of invitees or according to the table size? *

Mark only one oval.

According to the number of invitees.

According to the the table size.

14. Prior to how many hours do you think that you should be able to book the table? *

Mark only one oval.

| | 2 Hours |
|---------------------------|---|
| \bigcirc 3 | 3 Hours |
| | More than 3 Hours |
| Event Planning | Sometimes you may need to host an event at the restaurant premises. This section focuses on getting your opinion regarding the event planning feature of the app. |
| 15. event? Tick all | What kind of factors would you consider when selecting a venue for holding an * that apply. |
| Ca Ser But Eve Am Gu | cation and Accessibility pacity rvices and Amenities dget ent Type nbiance est count od and beverages rking facilities |
| | Prior to how many days do you think that you should be able to book the place? * nly one oval. 5 days before 1 week before 2 weeks before |
| | 1 month before |
| 17. | How would you rate our event venue and service which we provide? * |

Mark only one oval.

| | 1 | 2 | 3 | 4 | 5 | |
|------|---|---|---|---|---|-----------|
| Poor | | | | | | Excellent |

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Google Forms

Participant Profiles

| Name | Demography | Location, Date and Time |
|----------------------|--|--|
| Sulochana Rupasinghe | Age: 23 years | Via Microsoft Teams platform On 16 th August 2021 at 3.30 p.m. |
| Tharindu Dissanayake | Job title: IT administrator Age: 25 years | Via Zoom Meetings platform On 17 th August 2021 at 2.52 p.m. |

User Research – Tasks/Scenarios

| No. | Task Instruction | Target | Probes |
|-----|-----------------------------------|--|---|
| 01. | Login | Login Successfully with toast message. | Login button was not clickable. Displaying an error. |
| 02. | Registering using google sign in. | Register successfully with toast message. | Server error. Displaying an error in google sign in. |
| 03. | Updating the profile details | Display the updated profile information | Profile details didn't get updated even if update button is pressed. |
| 04. | Order a food. | Order successfully added. | Server error. Result was not display in order list in proceed payment page. |
| 05. | Add food items to cart | Display the added food item in the cart and update the item count. | Display a blank cart, food product not added to the cart. |

| 06. | Update the quantity of food item to order | Display the updated quantity and total charge accordingly | Display error message in calculating the total charge and quantity remains the same. |
|-----|---|--|--|
| 07. | Select a table size. | Display all table sizes in a drop-down list. | Display a blank drop down without displaying any table size. |
| 08. | Book a table. | Display successful toast message and display the details in ordered table details list. | Newly booked table details not displaying in the ordered table details lists. |
| 09 | Add new event. | Display all the newly added event details. | Newly added event details are not displayed on the event details page |
| 10. | Select a location to host a new event. | Display all the available locations for selected restaurants. | Display blank dropdown without displaying available locations. |
| 11. | Update selected event details | Display the updated event details. | Display event details without updating |

Plan for Data analysis

- <<Interviews>>
- << Qualitative or quantitative collected data>>
- <<Detail analysis plan>>

The responses received by interviewing the two test participants are included below.

Customer Profile -

- 1. What are your ideas regarding having only a Google sign in facility to the app? According to my point of view I think there should be other ways to login to the system apart from google sign in. Because there may be some users who are not willing to login using their google account. In case of such situations there should be a proper way for them to sign in.
- 2. What is your opinion about having to login every time you open the app? Since it is a mobile application, I would like to be logged in to my account unless I have clicked on the logout.
 - 3. Are you satisfied about the security of the current app login?

No

4. If you are not satisfied with above mentioned question, what are your suggestions for a better modification?

I think that it is better if my password will be masked when I am entering login credentials to sign-in to the app.

5. If app has a method for verifying your identity, which method is the most suitable for that verification? Is it verifying through email or through mobile number?

I think that it is better to use my email to verify me.

6. Do you think that entering personal details when registering is safe?

Yes, I think that entering details like my name, email, mobile number is all right.

7. Were there any problems you faced when signing into the app? If so, what are they?

Yes. I would like to login to the system using my username and password instead of google sign in. But that function is currently unavailable in the application.

- 8. How satisfied are you with the responsiveness of the login and registration interfaces? I think the response time should be a bit faster.
- 9. Do you want to be able to update your profile details such as email, mobile number? **Yes**
 - 10. Do you need to upload a profile picture when registering?

No, I don't think it is necessary

11. Did you meet any difficulties when you reinstall the app?

No.

12. Do you want to keep your data saved in the system even if you have uninstalled the app? Yes, I think that it is better to have my details saved in my account so that I can access them when I reinstall the app.

13. Do you want to have the feature to be able to deactivate your account?

Yes

14. What are your suggestions to improve your user experience when registering and logging into the app?

Provide facility to login to the app using username and password.

Food Ordering -

1. Is it mobile friendly to order foods online?

Yes, it is mobile friendly, every user can place their order directly using the mobile device.

2. What do you think about the payment method and security aspect?

According to my point of view, payment method is safe. Because these mobile payments use the encryption technologies and securely storing this sensitive information.

3. Is it easy to continue the ordering process?

Yes, it has a step-by-step process where users can easily go through the interfaces.

4. According to your point of view, what features should the developers include in online food ordering applications.

Effective cost calculation methods.

Updates about the process of food ordering and real-time delivery tracking.

Rate and review options.

Include Multiple payment options.

View order history.

5. How often do you order and deliver foods to your doorstep?

Monthly

6. Will it worth for the customers to look for the food items by selecting a specific category? What is your opinion about that?

Yes, it is an advantage to the users. Because they can quickly type the food, they want an instead of scrolling the page searching them one by one. This increases the effectiveness of the application.

7. How would you rate the quality of the food?

Average

- 8. Do you think that tracking your food delivery through the mobile app is done successfully? **It depends on the connection**
 - 9. Do you think ordered food is fresh?

Sometimes

10. Do you face difficulties when adding food items to cart?

Yes

11. If yes, mention the reason for that.

When an item is added to cart, we must go back to order some other food items. Problems encountered when parallel ordering is placed.

12. How long does it generally take you to place order using the phone?

10-15 mins

13. Do you think that the sub total calculation for your food order is done correctly through the app?

Most often

14. Did you have any doubts when placing a food order by using this app?

Sometimes

15. Do you like to get some notifications or some messages while the food order is being processed?

Yes, it will be helpful to the customer because they can estimate how long it will take to process.

16. What is your opinion about the delivery time and was the delivery service following the health precautions?

Yes, most often they adhere to health guidelines and provide zero contact delivery within 30 minutes.

17. Do the prices of the food items are affordable?

Yes

18. What are the benefits you derived from online food ordering through mobile apps?

Convenient

Provide multiple of payment options

Saves time

Fast and effortless process

Cost-effective and can manage according to the budget.

19. What is more important to you for food delivery?

Dinner

Table Booking -

1. Do you like to book a table by visiting the restaurant premises or contacting the management of the restaurant or using mobile application?

Better to book a table using mobile app.

2. Did you face any difficulties in booking tables through a mobile app?

Yeah, sometimes. But not much.

3. Were the table bookings you placed confirmed?

It depends on how responsible the restaurant management is. But most of the time, I got confirmation.

4. Do you think that booking tables through a mobile app is trustworthy?

Yes. Because when we are doing bookings through calls,

sometimes the receptions make mistakes, and we end up booking tables for the wrong time of the day or booking tables of the wrong sizes. We all know humans do mistakes more than automated systems.

5. Do you want to receive a notification after the confirmation of the table booking?

6. Do you wish to see the history of all tables booked for a particular day?

Yes. It is easy for me for estimate my budget when I have to book more tables according to the number of attendees.

7. What method do you prefer to follow in order to book a table in restaurant during rush time?

Mostly I contact a responsible person in the selected machan restaurant management and book the table.

8. What is your opinion about table booking process time?

It is better if it is quicker.

9. Do you like to book some tables according to the number of invitees or according to the table size?

Mostly according to the number of invitees.

10. As a customer do you think there should be some limit for the number of tables you are allowed to book at a time? What are your suggestions regarding that?

Yes, it is easy for customers as well as restaurant management.

11. What is your opinion about the table decorations? Should it be depending on customer satisfaction, or should it be according to the restaurant theme?

Definitely, it is a strategy to attract customers to the restaurant. In my opinion, decoration should depend on the customer satisfaction because customers can have different purposes.

12. Do you think the table booking and decorating fee are fair? **yes, it is fair.**

13. Do you hope that there was some table decoration list from the restaurant?

yes, it will help to decide a decoration easily as the customer's wish.

14. If restaurant gives 3 hours before scheduled time to cancel the table booking using the application, do you agree with this condition? If not give some suggestions for that?

No, I think that cancelation time should be 2 hours before scheduled time. Because as a busy employee, sometimes I get some urgent works in personal projects or office works. So that's why I want a convenient cancelation procedure.

15. How do you feel about the speed of our service?

Neutral.

16. How do you feel about the quality of our service?

Good.

17. Prior to how many hours do you think that you should be able to book the table? **approximately, 3 hours or 4 hours.**

Event Planning -

1. What kind of factors would you consider when selecting a venue for holding an event?

Location and Accessibility

Capacity

Services and Amenities

Budget

Event Type

Ambiance

Guest count

Food and beverages

Parking facilities

2. Do you wish to plan an event according to the number of invitees or according to the location and purpose for the event?

Usually, I plan an event according to the number of invitees and the purpose of the event.

- 3. Would you like to have the feature to view the locations to book in a specific restaurant? **Yes. of course.**
 - 4. Do you wish to receive a notification once the booking of the place for the event is confirmed?

Yes. I think so

5. Prior to how many days do you think that you should be able to book the place? I think it's very helpful if I can book the place 5 days before the event is held.

6. If the restaurant gets the full amount of the venue booking before the function is held, as an event planner, do you agree with that?

No. I think it's not fair to get the full payment before the function is held.

7. Did you have any issues while booking a place for the event?

Yes. There is no functionality to book a place for an event.

8. If you have some issues, how should it be fixed to get a better experience?

Include a feature that helps to book a place for an event through the app.

9. What do you think about our event venue and service which we provide?

I think they provide very good services

- 10. Are there any suggestions we could have done to make your event experience easier? It is better if we can view all the venue details and the services that they provide before we create a new event.
 - 11. What proportion of the total cost would you be comfortable paying, if the restaurant charges in advance for the booking?

Around 20 %

12. Do you think the booking place fee is fair?

Yes. I think it's a fair price

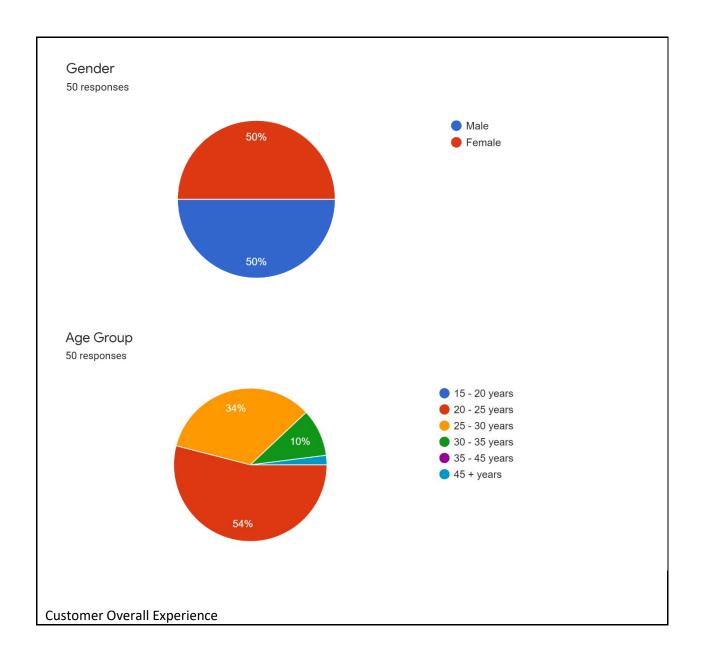
13. Do you want to be able to view all the details regarding the past events?

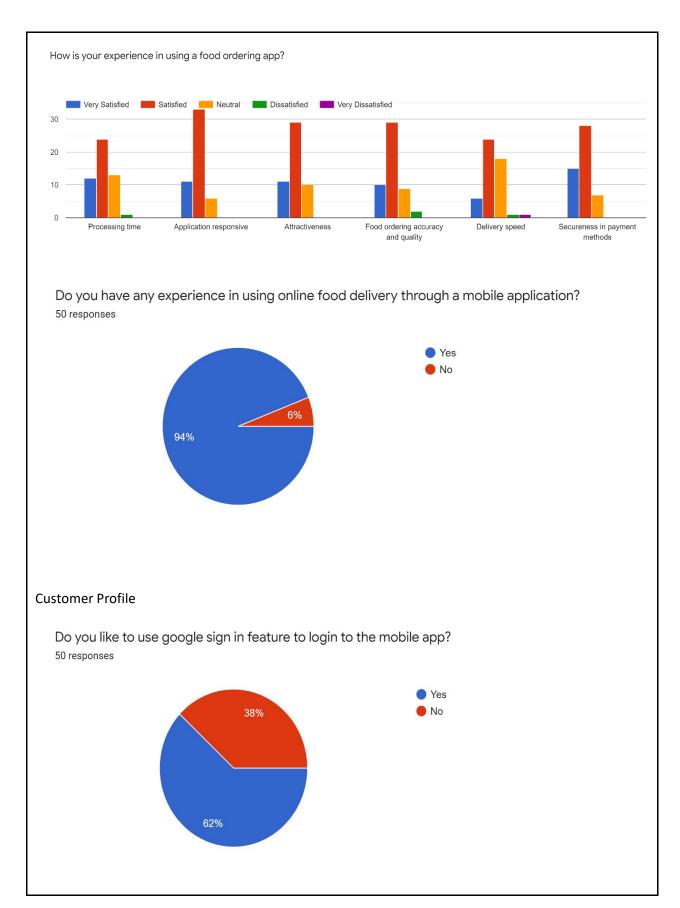
Yes. I think it's very helpful for me to get an idea about my past events.

14. Do you want to be able to delete the details of past events that are not important to you? Yes. So I can keep only relevant event details with me.

- <<Questionnaires>>
- << Qualitative or quantitative collected data>>
- <<Detail analysis plan>>

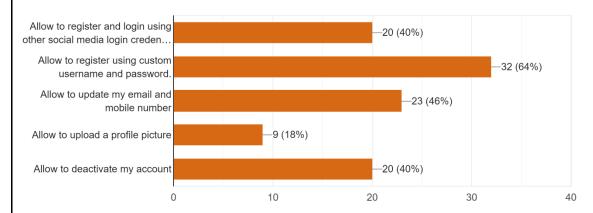
The summary of the responses received for the Google form is displayed in the charts given below.





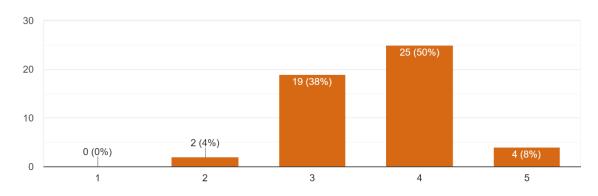


50 responses



How satisfied are you with the responsiveness of the login and registration interfaces of the current existing apps?

50 responses



Food Ordering

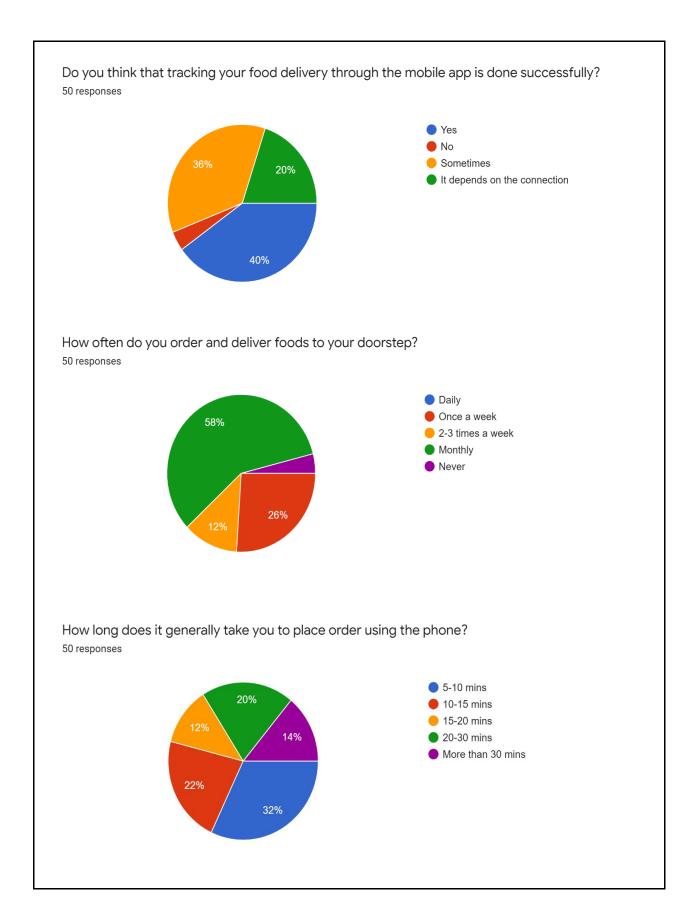
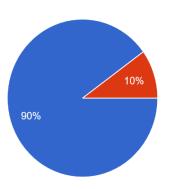


Table Booking

Do you like to book some tables according to the number of invitees or according to the table size?

50 responses

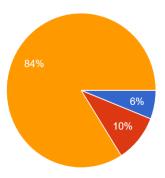


According to the number of invitees.

According to the the table size.

Do you like to book a table by visiting the restaurant premises or contacting the management of the restaurant or using mobile application?

50 responses



By visiting the restaurant premises.

 By contacting the management of the restaurant.

By using mobile application.

