## 1. Heuristic Evaluation

This report contains the Heuristic Evaluation of the website of El Gordo's Mexican Grill Restaurant. For evaluation purposes I will be using <u>Jakob Nielsen's Heuristic Evaluation</u> method and use its 10 principles to evaluate the website. Each evaluation has been given a grade on a scale that ranges from 0 to 5.

Jakob Nielsen's Heuristic Evaluation is a method for inspecting usability that is employed to detect and evaluate usability problems in the design of a user interface. The evaluation involves specialists or evaluators conducting a systematic study of a user interface based on a set of heuristics or general principles of usability. The heuristics commonly address factors such as visibility of system status, compatibility between the system and the actual world, user autonomy and flexibility, and error prevention. The 10 principles used for evaluation have been clearly outlined in the worksheet, the link to which is provided later in the paper.

For this Heuristic Evaluation, I have conducted a comprehensive assessment of the website by assuming the role of a user, aiming to navigate through the website and successfully accomplish various activities. Once the features and functions were identified, I employed a 5-point grading system, driven by the specified criteria, to assess the website.

0	Heuristic Passed. I don't see a usability issue.
1	Cosmetic problems only. Resolve issues only if time permits.
2	Minor usability problem : fixing this should be given low priority
3	Major usability problem: important to fix, so should be given high priority
4	Usability catastrophe: imperative to fix this before the product can be released

The assessment data has been recorded in an external spreadsheet, which includes comprehensive ratings and suggestions to improve the heuristic score for each aspect. <u>Singh Heuristic Evaluation</u> (Here is the link to the worksheet containing the evaluation).

Taking into consideration the findings of the assessment, I would suggest that the website be modified in accordance with the information that can be gathered from User Research in order to make the website better. Additionally, the aesthetics of the

website may be improved by establishing a new design system for the buttons, background, and different touch points. This can help enhance the uniformity throughout all of the web pages. In light of the fact that this website is for a restaurant, additional photographs of food, and a better review section might be incorporated in order to make the website more visually appealing. Additionally, in order to make the website more user-friendly, we need to place an emphasis on accessibility elements such as color contrast and enhanced data organization.

## 2. User Research

I have used the convenient sampling approach to carry out this user research. Convenient sampling provides a practical way for UX researchers to quickly collect preliminary thoughts and views on specific topics or issues.

For the purpose of this study, a survey that was created with Google Forms was utilised to carry out user research. This approach allowed participants to provide insights in a systematic and efficient manner. The survey contains both qualitative and quantitative questions for proper analysis.

In order to assure the accuracy of the information obtained through surveys, it is necessary to stick to a thorough approach. Here are the steps that are normally included in this process:

- Clearly state the objectives of the study as well as the precise information that is required to have those objectives accomplished.
- Construct the questionnaire for the survey with precision, taking into consideration the objectives of the study, the targets of the survey, and the results that are desired.
- It is important that the survey questions be clear, concise, and unbiased in order to obtain responses that are accurate from the participants.
- Based on the objectives of the research and the group of people that will be the focus of the study, select an acceptable sampling technique.
- Distribute the questionnaire to the individuals who have been chosen to participate in the survey by means of the mode of distribution that has been decided, which may include online platforms, email invites, or in-person interviews, and provide clear instructions for answering the questionnaire.
- Once the responses to the survey have been gathered, do a thorough analysis of the data by employing methodologies that are suitable for statistical analysis or qualitative analysis approaches.

As part of this study, a survey was carried out with the purpose of gaining insight into the thoughts and preferences of the users in relation to the El Gordo Mexican Grill restaurant. Questions asked in the survey are a mixture of single and multiple choice questions.

### Here is the link to the survey : <a href="https://forms.gle/GE6qUJ9KWeoR1RVb7">https://forms.gle/GE6qUJ9KWeoR1RVb7</a>

After gathering the information from this survey. I have divided the entire survey into 3 parts:

- Purpose of the survey
- Quantitative Questions (e.g. Demographic Questions, Computer Usage)
- Qualitative Questions (e.g. Expectations, Motivations and Opinions)

For the **purpose of the survey**, clear instructions have been provided in the google form with the link to the website.



# **User Experience Research**

The object of this survey is to collect important feedback about the user experience that occurs while visiting the website of the restaurant. For those of you who are visiting the website for the first time, kindly click on the link provided below and fill out the questionnaire:

#### El Gordo Mexican Grill #5

The gathering of responses is intended for academic study and research as part of coursework. Your honest completion of the survey is kindly requested. Be rest assured, the information collected will remain confidential and will not be disclosed. Thank you for important responses.

Figure 1: Screenshot of purpose of the survey

For the **quantitative questions**, the survey segment contains demographic information, participants' level of expertise with computer and mobile devices, and the frequency of their technology usage in their everyday routines. This survey segment encompasses demographic information, participants' level of expertise with computer and mobile devices, and the frequency of their technology usage in their everyday routines. This section is designed to provide insights into the significance of device compatibility requirements and the user's familiarity with internet norms and habits of use, such as the positioning of navigation buttons or the design of tabs.

**Qualitative questions** provide a holistic comprehension of user experience by collecting users' perspectives, experiences, likes, dislikes, motivations and traits. These questions help us understand why people respond in certain ways, which makes it easier to comprehend quantitative data accurately. Qualitative questions can help us to identify the pain points and areas of likes and frustrations by a user. By having a proper understanding of these issues, designers can successfully handle them, which eventually results in higher levels of customer satisfaction and usability.

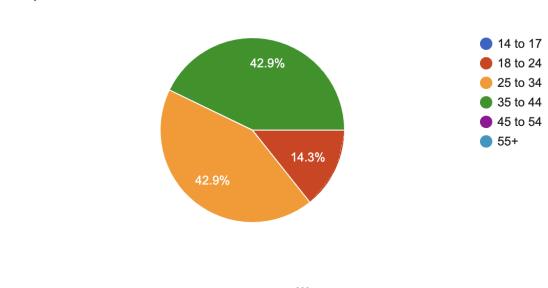
## **Comprehension of the Data collected:**

For this survey a total of 7 responses were recorded for the first phase of user research.

### Quantitative Research:

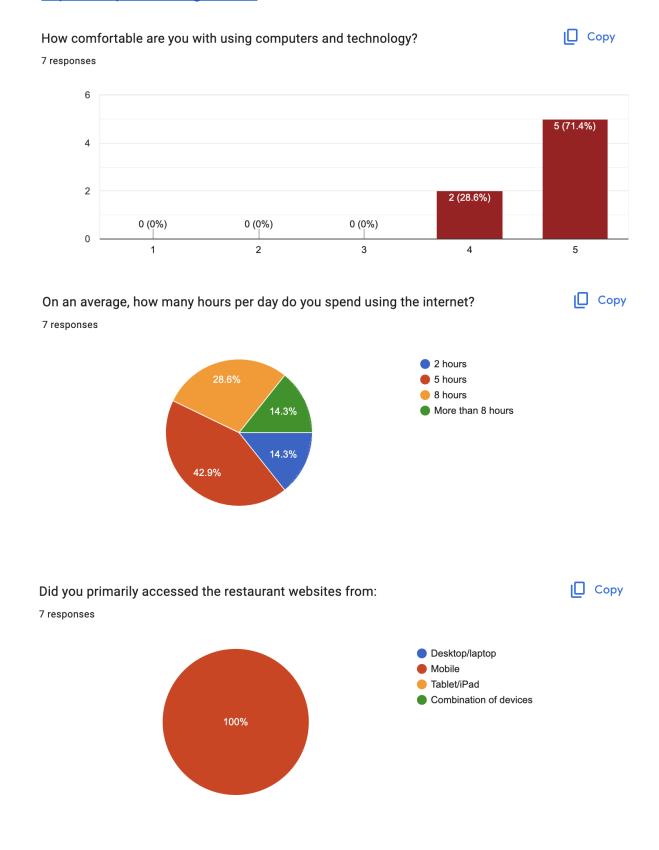
What is your age range?

7 responses

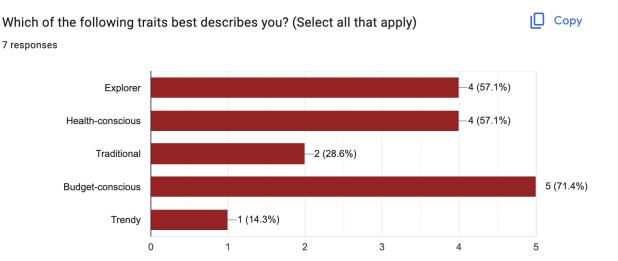


How comfortable are you with using computers and technology? \*

URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>

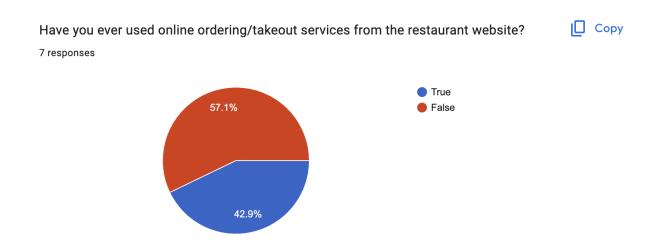


URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>



Based on the quantitative research the conclusion can be drawn that the majority of people accessing the website are above 25 years of age. Most of them spend around 5-8 hours a day on the internet and are familiar with computers and technology. Almost 100% of the respondents were budget-conscious, health conscious and explorers. This set of questions will be useful in developing a user-centered design strategy that prioritizes the preferences, behaviors, and requirements of the target audience at the forefront of the design process. By ensuring that the features and functionality of a website are aligned with the characteristics and expectations of consumers this user experience research will help in improving user satisfaction, engagement, and overall usability experience.

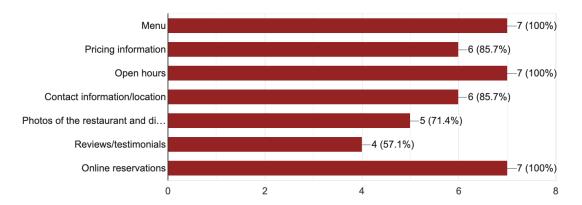
#### Qualitative Research:



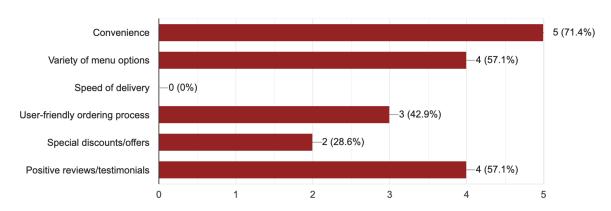
URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>

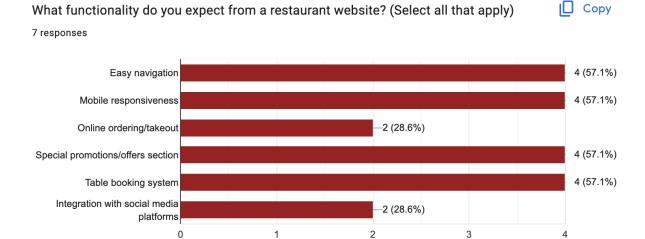
What content do you expect to find on a restaurant website? (Select all that apply)

7 responses



7 responses



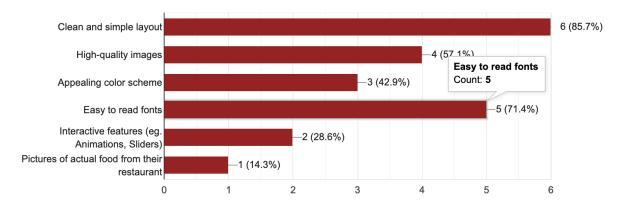


URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>

What design elements are important to you when visiting a restaurant website? (Select all that apply)

Сору

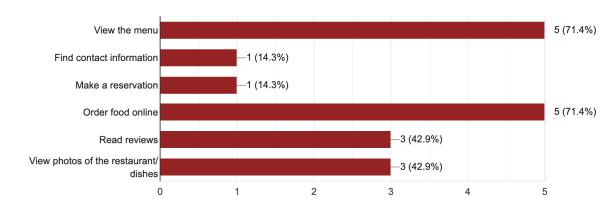
7 responses



When visiting the Tempe Mexican Grill website, what actions do you usually aim to complete? (Select all that apply)

Сору

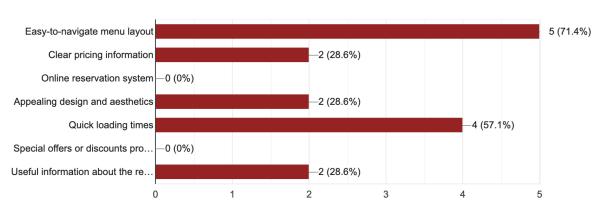
7 responses



What do you like about Tempe Mexican Grill restaurant website? (Select all that apply)

□ Copy

#### 7 responses

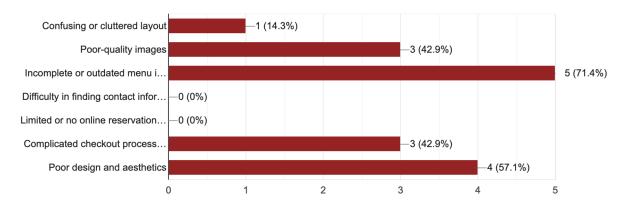


URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>

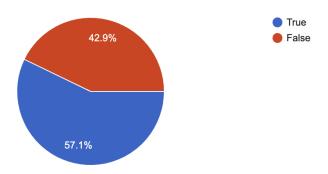
What do you dislike about Tempe Mexican Grill restaurant website? (Select all that apply)

Сору

7 responses

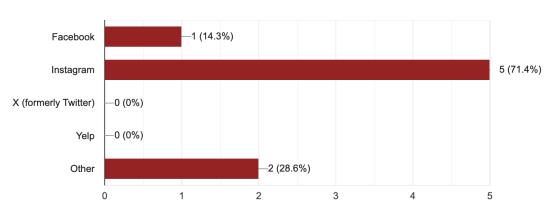


Do you follow restaurants or food-related accounts/pages on social media platforms? 
Copy
7 responses

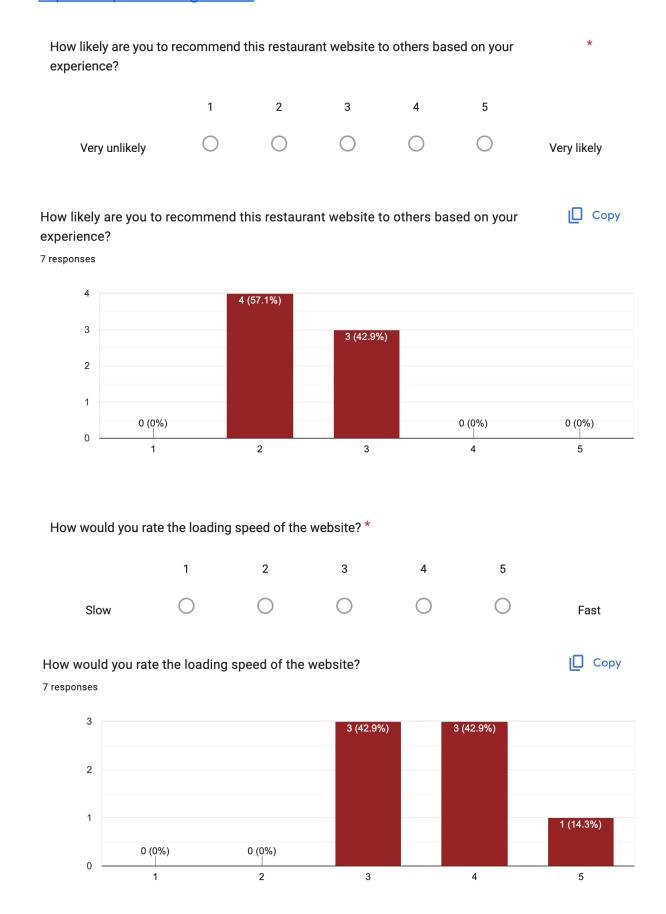


If yes, which social media platforms do you use to engage with restaurants? (Select all that apply)

7 responses



URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>



URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>

Do you have any additional comments or suggestions regarding the website? (Please respond with "N/A" if you choose not to provide feedback.)

7 responses

#### N/A

Make the El Gordo Mexican Grill website look better with actual pictures of food for each item and easy navigation. Let people order food online so give huge discounts on initial orders and read what others say about the restaurant.

The survey's qualitative study findings reveal that the vast majority of users expect restaurant websites to include extensive information, including menus, prices, and up-to-date photographs of the cuisine. Around 60% of consumers' decisions to purchase meals online are heavily influenced by convenience, excellent ratings, and a wide range of menu alternatives. Approximately 57% of consumers believe that restaurant websites should include user-friendly navigation, mobile device compatibility, and visually appealing designs. Users have expressed their appreciation for the user-friendly layout of the offerings on the Tempe Mexican Grill website. Some users have also expressed their appreciation for the appealing design. However, the majority of users have expressed their dissatisfaction with the incomplete menu content, the aesthetics, and the difficult checkout process. Addressing all the issues and concerns mentioned above could lead to a more user-friendly and satisfying user experience.

The detailed response of individuals are provided in the excel sheet attached here:

Singh UX Research (Responses)

In conclusion, the use of convenient sampling has provided multiple benefits for the user research experience of the El Gordo Tempe Mexican restaurant website. At first, it enabled the efficient gathering of information from a wide variety of participants, offering valuable insights into the traits and preferences of the intended audience. By engaging with users who were easily reachable and approachable, the study gathered a diverse range of individuals who visited the website. Through this approach, we were able to uncover important demographic patterns. For instance, we discovered that a majority of users are over 25 years old, spend a significant amount of time online, and are quite familiar with technology. The insights obtained through convenient sampling have provided a strong basis for developing a user-focused design approach for the website. Designers have the opportunity to ensure that the capabilities and usability of the website closely align with users' expectations by emphasizing the interests, behaviors and demands of the target audience discovered through research.

## 3. Persona Creation

A user persona is a fictional portrayal of a certain consumer demographic for a product, service, people, or website. The creation process involves researching and analyzing real user data to gain a comprehensive understanding of the target audience's traits, behaviors, wants, and goals. User personas commonly consist of demographic data like age, gender, occupation, and education, together with psychographic information such as desires, preferences, motivations, frustrations and pain points.

Through the creation of user personas, product designers, marketers, and developers are able to better empathize with their target users, have a better understanding of their requirements, and make more educated judgments regarding product design, features, communication, and marketing tactics. Teams are able to better adapt their efforts to fit the individual wants and preferences of their target demographic when they personify the users. This ultimately results in goods and services that are more successful and user-centric.

I have created 3 user personas and here is the link to all the three user personas:

Singh\_User Persona.pdf

## 4. User Stories

Using the goals defined in each personas above, I have created the following user stories.

A user story is a brief statement or summary that specifies the user and their requirement/objective. It identifies the user's identity, requirements, and motivations. They help the development team in estimating the necessary roadmap to produce the final product.

## Persona 1: Fanny Price

## User Story 1: For clear and easily accessible menu on the website

As a budget-conscious user, I want the website's menu to be clearly displayed and easily accessible so that I can easily navigate various parts of the website.

## **Acceptance Criteria:**

- The website's menu button should be fixed at the top of the page or placed in a sidebar to ensure it is always visible without the need to scroll.
- The menu should feature clear and unambiguous labels that match each section of the website.

- The menu must be easily reachable from any page on the website, whether by a fixed navigation bar, menu, or another consistently placed element.
- Utilize dropdown menus or subcategories to arrange and categorize menu items for simpler content navigation.
- The menu needs to be flexible to various screen sizes so that it remains accessible on all devices.

### User Story 2: For transparent pricing and discount offers

As a spendthrift individual, I want to see transparent pricing details and discounts so that I can make well-informed and cost-effective buying choices.

## **Acceptance Criteria:**

- Price details, such as the original price, reductions, promotions, and final discounted price, should be clearly visible on product pages.
- After correctly applying the discount, calculate the difference and show the discounted amount at the top of the price information with the original price crossed out.
- Users should receive notifications or alerts about new discounts and offers to keep them informed about affordable choices.
- The checkout page should clearly show any discounts or promotions applied, showing the total discounted price before order confirmation.

## Persona 2: Emily Rose

#### User Story 1: For providing healthy food choice and its nutritional information

As a health-conscious individual, I want the restaurants to clearly provide healthy food choices and nutritional information so that I can make well-informed decisions regarding my dining experiences.

### **Acceptance Criteria:**

- Users are able to refine restaurant search results by selecting healthy meal choices.
- Restaurants that provide healthy options clearly display their menu items in search results.
- Every healthy meal option offered provides specific nutritional information such as calorie count and macronutrient composition right next to the menu item.

## **User Story 2: For convenient and simple ordering system**

As a user who values ease and simplicity in online ordering, I want to have an efficient checkout procedure so that I can easily and effortlessly finalise my purchase.

#### **Acceptance Criteria:**

- The checkout process should include minimal user input, specifically for shipping and payment details.
- Guest checkout options should be provided to eliminate the necessity of creating an account.
- Provide clear and straightforward instructions at every stage of the checkout process.
- Users should have the ability to see their order before completing it, with the choice to modify it if needed.

## Persona 3- Leo Briggs

### **User Story 1: For Online restaurant reservation booking system**

As a person with a strong desire to travel, I want to quickly reserve a table for a group of friends so that I can have an enjoyable dining experience together with her friends.

### **Acceptance Criteria:**

- Users are able to specify the quantity of people in their group while booking accommodations.
- The system precisely shows the feasible table sizes to fit the group size.
- The system should allow users to choose a time slot for table booking.
- The confirmation provides information regarding the reserved table(s) with all the specific arrangements made.

### User Story 2: For sharing the dining experience on Social Media

As a Wanderlust Foodie, I want to effortlessly post her dining experiences on social media networks directly from the restaurant's reservation booking app so that I can encourage others to try the restaurant and share her culinary experience.

## **Acceptance Criteria:**

- Users are able to link their social media profiles (such as Facebook and Instagram) through the reservation booking tool.
- Users are prompted to share their eating experience on social media after they have finished their meal through the platform.
- The sharing feature allows users to add photographs, captions, and tags associated with the restaurant.
- Users are awarded with reward points for posting their dining experiences on social media using the reservation booking tool.

## 5. Usability Testing Materials

Consistency and adherence to the plan are essential during user testing in order to value participants' time and optimize the productivity of the sessions. This test will specifically address repeated concerns found in the heuristic evaluation, especially focusing on improving accessibility for users. Tasks have been chosen from user stories to correlate with identified concerns and user goals, ensuring a thorough evaluation of the website's usability.

For this testing material I'll be focussing on features that were identified during Heuristic Evaluation, User Survey and User Personas.

- To find a menu option for online ordering: This scenario is used for the user to find an easily accessible menu option to order online from the El Gordo's Tempe Mexican Grill Restaurant. The problem was discovered through heuristic evaluation, which highlighted possible difficulties in browsing the menu. It is crucial for all users, irrespective of age, that the menu is clearly accessible and simple to browse. An intuitive menu design improves user experience and allows for easy navigation on the website.
- To find clear pricing information and discounts: This scenario is used to find clear pricing information and discounts while accessing the website. Clear pricing information is essential for users to make well-informed buying decisions and establish assurance with the website. Effective communication of pricing information helps consumers in understanding the worth of products/services and improves their buying experience. While doing the user survey around 57% users' decisions are based on pricing information while ordering.
- To find information about open hours for online reservation booking system: This scenario is for the user to check the restaurant's open hours for

online reservation booking system so that they don't have to wait while visiting the restaurants during peak hours. From the user persona, customers who have a strong desire for traveling often look for easy and intuitive online reservation systems. Addressing this usability issue in the online reservation system would make sure that users can effortlessly reserve tables and have a pleasant dining experience.

#### **Test Plan Dashboard**

To improve the product's usability, users will be given some tasks related to identified issues, based on data from a previous survey and heuristic analysis. The tasks are designed to evaluate users' ability to carry out particular actions associated with the highlighted problems. The test plan will consist of a concise overview of the tasks, along with a script for further elaboration. Each task will need users to submit remarks that will improve our understanding of their experience.

Here is the link to the test plan dashboard:

Singh Usability Dashboard.pdf

#### **Consent Form**

Seeking consent is crucial since it allows individuals to have a voice in decisions regarding confidential information. It is a method to support and safeguard their rights from possible harm or violation.

Getting consent from participants in research is crucial to ensure they understand the study's objectives, potential risks and benefits, and their rights as participants. The form provides participants with information on the utilization of their data and outlines which sections may be disclosed or made public.

Below is the link of consent form that is used for this testing:

■ Singh\_Usability\_Consent Form.docx

#### **Pre-Test Questionnaire**

The objective of the pre-test questionnaire is to collect data regarding the participants' demographics, expertise, and abilities. This information assists researchers in assessing the potential perception of the product or user interface among its target audience.

URL: https://tempemexicangrill.com/

The questionnaire employed in this User Research Assignment serves as a replica, enabling researchers to systematically compare the data obtained from the usability test with pre-existing personas. This increases uniformity and enables a more thorough comprehension of user behaviors and interests.

Here is the link to the pre-test questionnaire:

https://forms.gle/6XZmd6QCfbjYsX4s7

### Scenarios / Tasks

The scenarios and tasks are designed in accordance with the issues emphasized in the Executive summary of this section. These tasks have been specifically developed to effectively tackle these issues and offer useful perspectives on enhancing the usability of the interface.

### Issue 1: To ensure a menu is clear and accessible easily

**Scenario 1**: As a frequent customer of Tempe Mexican Grill, you frequently browse their website to view their menu options before ordering. Today, you intend to place an online meal order for you and your friends using the website. You intend to carefully review the menu in order to check the availability of appropriate food choices for everyone.

- **Task 1**: Start by browsing the website of El Gordo's Tempe Mexican Grill.
- **Task 2**: Upon accessing the homepage, proceed to locate the order online option to view the menu.
- **Task 3**: Under the menu option, choose your desired meals.
- Task 4: Add the selected meals in the cart for placing the order.

#### Issue 2: Transparent pricing and discount offers

**Scenario 2**: With the intention of hosting a small gathering at your residence, you are thinking about placing an order for takeout from Tempe Mexican Grill. You want to make sure that you are familiar with all the pricing details and you are aware of any offers or discounts that are currently being offered before you place the order.

- **Task 1**: Please proceed to the part where the menu items are displayed and check the pricing associated with your budget.
- **Task 2**: Observe menu items for any indications that may pertain to discounts, promotions, or special offers.

URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>

**Task 3**: Please identify at least one item from the menu that is available at a discounted price or as an element of a promotional deal.

**Task 4**: Add to cart to place the order.

## Issue 3: Open hours and online reservation system

**Scenario 3**: You have arranged a celebratory supper with your friends at Tempe Mexican Grill in order to celebrate a birthday. As the host, you want to look for the open hours and book a table to accommodate your friends for your party to ensure they have an amazing evening.

**Task 1**: Look for the restaurant's working schedule.

Task 2: Check the homepage for the online reservation system to book a table.

**Task 3**: If the reservation system is not present, look for the restaurant's phone number for booking a table.

**Task 4**: Choose the date and dining time according to your convenience.

**Task 5**: After booking, make sure the system confirms the table.

### **Post-Test Questionnaire**

The purpose of the post-test questionnaire is to collect feedback from participants regarding their experience and identify potential areas of improvement for the website.

Below is the link to post test questionnaire:

https://forms.gle/sd58jYb5rxApSKK77

## Script

Singh\_Script

#### **Observation Sheet**

■ Singh\_Observation Sheet

## 6. Usability Testing Data

The following Google Sheet comprises every detail pertaining to the conducted usability test. There were a total of 5 users that participated in this usability testing.

Singh\_GIT542\_Usability\_Spreadsheet

## 7. Prototype Drafts

The prototype draft consists of a low-fidelity prototype highlighting 4 Blocker/Major issues found during the heuristic evaluation, user research survey and usability testing.

https://www.figma.com/file/XApCbGmXKTDgMNRWkpFxlj/Singh\_Prototype?type=design&node-id=0%3A1&mode=design&t=xlhqeLL0idZSIKo9-1

## 8. Prototypes

Based on the feedback obtained from user testing, I have developed prototypes designed specifically to resolve the issues that prevent users from getting important details. The prototypes were carefully created with Figma, an effective design tool and here is the link to hi-fidelity prototype.

https://www.figma.com/file/35HnNMZp4H1AJBzGQA3Gaf/Singh\_Final\_Prototype?type=design&node-id=0-1&mode=design&t=XTSAwDeE30I3dD5k-0

## Link to clickable prototype:

https://www.figma.com/proto/35HnNMZp4H1AJBzGQA3Gaf/Singh\_Final\_Prototype? type=design&node-id=2-2&t=7N3TXibelucu5396-0&scaling=min-zoom&page-id=0% 3A1&starting-point-node-id=2%3A2

■ Assignment 10 - Prototypes and Write-Up

# 9. Usability Recommendations

Singh\_Usability Recommendation

# 10. Extra Credit: Accessibility Audit

An accessibility audit is a thorough assessment of a website, application, or digital product to determine its adherence to accessibility regulations and standards. The objective of this accessibility audit is to discover any obstacles or challenges that would prevent users with disabilities from properly accessing and utilizing the digital content present on this website.

For doing the accessibility audit I have followed the WCAG 2.1 Principles to identify the issue and I have categorized these issues using the POUR principles:

URL: <a href="https://tempemexicangrill.com/">https://tempemexicangrill.com/</a>

P - Perceivable

O - Operable

U - Understandable

R - Robust

Based on the principles a severity score has been allotted to each issue on a scale of 1-4.

1	Cosmetic Problem
2	Minor Issue
3	Major Issue
4	Catastrophic Issue

The evaluation is done in the spreadsheet attached here: Singh\_Accessibility\_Audit

Now the evaluation of the website is done to ensure it is WCAG 2.1 compliant. The WCAG 2.1 compliance is divided into three categories of conformity: A, AA, and AAA. The levels of accessibility are hierarchical, starting with Level A as the baseline level, followed by Level AA which offers a higher degree of accessibility, and finally Level AAA which represents the most advanced level of accessibility.

The website for El Gordo Mexican Grill #5 has been evaluated to see if it follows the Web Content Accessibility Guidelines (WCAG) 2.1. This was done to make sure that the site is accessible, but it may not fully follow all of the WCAG guidelines. 2.1 Criteria for success. The website has a contrast error on the home page which does not pass the WCAG AA and WCAG AAA according to the WAVE Report for accessibility. Rest all the other pages of the website have passed the WCAG AA and WCAG AAA. Apart from that, the website also contains dead links and an empty button which have been mentioned in the spreadsheet. The website is simple to use and clear enough for even a layman to comprehend. Overall, the website is 85% accessible.