Usability Testing Report

Team Wumbo

Daniel Rapuano, Harry Sanders, Emma Jamieson

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Planning

1. Scope:

For the scope of the project, we chose to redesign the restaurant application Jalapeno Heaven, which is a Mexican restaurant located in Branford CT. For features, we decided to redesign the entire website as we felt that a total redesign was necessary. Our testing sessions aimed to present the full website (in prototype), along with all or most of its functionality to the participant.

2. Purpose:

The purpose of conducting this usability testing for our prototype was to test just about every feature of our website, including the fluidity of our navigation, the location of important information such as the hours and address, external and internal links such as the social media, as well as the overall design and structure of our website, as we deemed necessary.

3. Setup:

Our research was conducted within our CSC-334 classroom at Southern Connecticut State University on April 25th and April 27th, both days from 1:50 to 3:05 pm, by way of recording notes for various tasks and their respective metrics. For tools, we utilized our laptops to demo our application to those who were tested, we used our phones to time individuals on tasks, and we used notebooks and paper to take notes, record statistics, and gather comments about the testing. Participants were selected through our instructor. Each participant was presented with the site from the homepage, and subsequently asked to proceed through our sequence of tasks by three facilitators. Notes were taken systematically by each facilitator, with focus on completion time, click quantity, and comments.

4. Participants:

We tested 10 participants. They were exclusively chosen through our instructor based on type of project and/or availability. Our participants, while consisting of exclusively computer science students taking the same course, did vary in gender, including a fair split between men and women. Age was not recorded for our research purposes, but given the course level can be assumed between ages 20-30. Based off of our user profiles, matches were coincidental. Many of our profiles represented computer-savvy individuals within this age-range, however given the participant selection method, was not a conscious choice as far as who we tested.

Results

5. Results Summary:

After analyzing our usability testing interviews, we determined that there were 4 major issues that needed to be addressed. Ostensibly, the most pertinent issue was users being unable to find the hours of operation on the Contact page, and this was something that was consistent in almost every interview and by far the largest issue we had with our design. All facilitators recorded problems for this task, which is quantified by our results in way of click quantity and time to completion. In order to remedy this issue, we implemented a fix in correspondence to our participants' comments, and moved hours to the homepage, which is where we found they were most likely to look for this information. Our second major issue was the sub-navigation that we designed in our menus was not clearly interactable. We had a lot of people completely overlook the sub-nav when looking through our menus, so we determined that it was pretty essential to make this more clear by using buttons and different colors to signify their interactability. Our third major issue included the location and presentability of the Reviews that are featured on the website, which we solved by clearly positioning them on the homepage. Finally, the last major issue we came across was a couple of our pages being somewhat boring. Specifically, on the 'About Us' page, we had a few notes that mentioned the unnecessary whitespace or lack of content on this page, so we felt that redesigning it would be beneficial by adding additional content to both make the page more engaging, and to mitigate its whitespace.

6. Detailed Results:

Task 1

The first task presented to our participants was to find the price of the Mexican Crab Cakes from within our Dine-in Menu. The average completion time for this task was about 13 seconds, and the average number of clicks to find the item was 1.7 clicks. Our participants generally described this task favorably, commenting on the simplistic design of our menu page. However, many found the sub-nav menu to not be clearly interactable. Table 1 shows our results for this.

Task 1 Statistics					
Participant	**Completion Time (sec.)**	**Number of Clicks**	**Critical Errors**	**Non-Critical Errors (only mis-clicks, compared to optimal number of clicks)**	**Comments**
Sahar	22	2	0	1	Trouble finding food item due to unfamiliarity with food categories
Miles	20	2	0	1	Add more info to card if pricing is short enough
Ryan	10	1	0	0	Likes hover-over for prices. Use stock images for food items
Amanda	20	3	0	2	Didn't know certain elements were clickable. Good colors, easy, simple.
Richard	12	1	0	0	Clear. Fonts are good
Febian	12.7	2	0	1	Maybe have search bar. Didn't see nav-bar.
Ray	9.1	2	0	1	N/A
Natalie	5.6	1	0	0	No issue, easy to find
Katya	8.9	2	0	1	Hard to find stuff, menu page bulky
Gavin	11.5	1	0	0	Straight-forward

Table 1: Quantitative and qualitative results from Task 1

Task 2

The second task presented to our participants was to find the hours of the restaurant. The average completion time for this task was 20 seconds, and the average number of clicks to find the hours was 3.1 clicks. We did have an outlier that skews this result, however, with a completion time of 44 seconds and 6 total clicks. Our participants generally described this task unfavorably, citing poor placement of the hours on the contact page. All participants recommended putting them on either the Home or About page. Table 2 highlights our results from this.

Participant	Completion Time (sec.)	Number of Clicks	Critical Errors	Non-Critical Errors (only mis-clicks, compared to optimal number of clicks)	Comments
Sahar	40	4	0	3	Hours should be in home or about page
Miles	25	3	0	2	Hours on about page. Clickable email
Ryan	10	2	0	1	Hours on home or about page. Maybe footer too
Amanda	20	4	0	3	Wouldn't think to go to Contact page
Richard	18	3	0	2	Put in About, maybe then contact
Febian	22.4	3	0	2	Put in homepage
Ray	22.7	3	0	2	Hours page in About, accordion menu
Natalie	44.2	6	0	5	Hard to find, put on Homepage
Katya	3.2	1	0	0	Easy to find
Gavin	13.5	2	0	1	Thinks to look in About first, not Contact

Table 2: Quantitative and qualitative results from Task 2

Task 3

The third task presented to our participants was to find and access the Facebook page of the restaurant. The average completion time for this task was 4.5 seconds, and the average number of clicks to finish this task was 1.1 clicks. Our participants intuitively looked for the link in the footer (following a pre-established conceptual model), and all agreed the link was easy to find. The results for this task can be found in Table 3.

Participant	Completion Time (sec.)	Number of Clicks	Critical Errors	Non-Critical Errors (only mis-clicks, compared to optimal number of clicks)	Comments
Sahar	5	2	0	1	Where you'd think they'd be
Miles	10	1	0	0	N/A
Ryan	2	1	0	0	Good placement for icons
Amanda	3	2	0	1	Good
Richard	5	1	0	0	Went to contact, looked in footer
Febian	6.7	1	0	0	Makes sense in footer
Ray	5.1	1	0	0	N/A
Natalie	2.2	1	0	0	No issue, easy to find
Katya	2.9	1	0	0	Simple
Gavin	3.2	1	0	0	Easy to find

Table 3: Quantitative and qualitative results from Task 3

Task 4

The fourth task presented to our participants was to find and access the location of the restaurant using the Google Maps link. The average completion time for this task was 5 seconds, and the average number of clicks was 1.1 clicks. Our participants generally did not agree with the placement of the address on the Contact page, however they did agree it was easily findable in the footer. Table 4 highlights the results we gathered from this task.

Participant	Completion Time (sec.)	Number of Clicks	Critical Errors	Non-Critical Errors (only mis-clicks, compared to optimal number of clicks)	Comments
Sahar	9	2	0	1	Address fine in contact page, maybe other places too
Miles	5	1	0	0	N/A
Ryan	2	1	0	0	N/A
Amanda	3	2	0	1	Color change for link/ google pin
Richard	4	1	0	0	Put on about page, signify with map
Febian	5	1	0	0	Footer makes sense
Ray	3.8	1	0	0	Footer makes sense
Natalie	3.5	1	0	0	Easy to find
Katya	9	1	0	0	Inconvenient but helpful for user
Gavin	5	1	0	0	Easy to find

Table 4: Quantitative and qualitative results from Task 4

Task 5

The fifth task presented to our participants was to access the Yelp review page of the restaurant. The average completion time for this task was 13.5 seconds, and the average number of clicks was 2.2 clicks. There were a couple outliers that did skew these results, however. One participant took 23.3 seconds to complete this task, and another took 25 seconds. Our feedback on this task was mixed. Some thought it was easy to find, while others found it difficult. Those finding it difficult suggested to place this link on the Home or Contact page. Table 5 represents these results.

Participant	Completion Time (sec.)	Number of Clicks	Critical Errors	Non-Critical Errors (only mis-clicks, compared to optimal number of clicks)	Comments
Sahar	6	1	0	0	N/A
Miles	2	3	0	2	Reviews could be in home or about page
Ryan	2	1	0	0	N/A
Amanda	15	4	0	3	Didn't see it in homepage
Richard	17.2	3	0	2	Didn't see it on homepage
Febian	20	2	0	1	Put in about page, or maybe icon next to social media
Ray	10.1	2	0	1	Straight forward, liked it
Natalie	17	2	0	1	Fairly easy to find
Katya	25	4	0	3	Multiple sites for reviews? Hard to find on homepage
Gavin	23.3	3	0	2	Put in contact page, signify better

Table 5: Quantitative and qualitative results from Task 5

Task 6

The sixth task presented to our participants was to find the About Us section within the website. The average completion time for this task was 2 seconds, and the average number of clicks was 1 click. The consensus surrounding this task was that it was easy to find, however, some found that our design for the page contained too much whitespace and/or not enough content. Table 6 showcases the results gathered for this task.

Participant	Completion Time (sec.)	Number of Clicks	Critical Errors	Non-Critical Errors (only mis-clicks, compared to optimal number of clicks)	Comments
Sahar	2	1	0	0	Easy to find, simple
Miles	N/A	N/A	N/A	N/A	N/A
Ryan	2	1	0	0	Artwork on page, hours?
Amanda	1	1	0	0	Love pepper man picture. Staff/owner picture?
Richard	2	1	0	0	Good amount of text
Febian	2.7	1	0	0	Maybe add green border to text
Ray	2.8	1	0	0	Love pepper guy
Natalie	1.9	1	0	0	No issue, easy to find
Katya	3.2	1	0	0	Easy to find, but boring
Gavin	2	1	0	0	Easy to find

Table 6: Quantitative and qualitative results from Task 6

Task 7

The seventh task presented to our participants was to find information regarding the Bonus Points Club. The average completion time for this task was 2.5 seconds, and the average number of clicks was 1 click. Our participants, overall, dtermined that finding this information was simple and that the page was well-designed. Some, however, did not like the repetitiveness of having both text and a poster providing the same information. Table 7 shows our results for this task.

Participant	Completion Time (sec.)	Number of Clicks	Critical Errors	Non-Critical Errors (only mis-clicks, compared to optimal number of clicks)	Comments
Sahar	2	1	0	0	Navigation easy to remember
Miles	5	1	0	0	Perfect
Ryan	2	1	0	0	Designed well and clear
Amanda	1	1	0	0	Redundant with poster image
Richard	6	1	0	0	Photoshop poster to be just mascot (no text)
Febian	4.2	1	0	0	Good location, maybe put on homepage too
Ray	3.5	1	0	0	Simple, liked it
Natalie	2.3	1	0	0	Easy to find
Katya	1	1	0	0	Not obvious how to sign up
Gavin	2.9	1	0	0	Easy to find

Table 7: Quantitative and qualitative results from Task 7

Task 8

The eighth task presented to our participants was to provide the facilitator with the address and phone number of the restaurant. The average completion time for this task was 4 seconds, and the average number of clicks was 0.8 clicks. Most of our participants liked the placement of the address and phone number in the footer. However, some recommended adding hours to the footer as well, although we did not find this change to be practical. Table 8 highlights out results for this task.

Participant	Completion Time (sec.)	Number of Clicks	Critical Errors	Non-Critical Errors (only mis-clicks, compared to optimal number of clicks)	Comments
Sahar	5	1	0	1	Placement makes sense, also good in footer
Miles	N/A	N/A	N/A	N/A	N/A
Ryan	2	0	0	0	Like footer location, maybe include hours there
Amanda	5	0	0	0	Change link color
Richard	3	1	0	1	N/A
Febian	7.4	1	0	1	Good
Ray	1	1	0	1	Good footer
Natalie	4.8	2	0	2	Easy to find
Katya	2.9	1	0	1	Easy to find
Gavin	5.5	0	0	0	Easy to find

Table 8: Quantitative and qualitative results from Task 8

7. Identified Problems:

As discussed above, we found four main issues with our prototype design. The most pertinent issue we found was the findability of the restaurant hours. We determined its frequency to be high, as well as the severity, as almost every individual we interviewed experienced this issue, and it often took much longer than expected to find this information. Therefore, we made this a high-priority modification, and the first one we changed. For the second main issue, we found that the sub-navigation in menus was not clearly interactable. We set this problem's frequency to medium as well as the severity. Our justification for this is based on the fact that some people did notice its presence, but most recommended that this be modified. It was still completely functional, hence a severity level of medium. The third main issue we found was that participants struggled to find the reviews section of the website. We set the frequency for this to low, as we had a lot of mixed reviews on this, but we set the severity to medium as being able to see reviews is something that we found to be important for our website. Finally, the fourth and final issue we found was that the About Us page was seen as unappealing by our participants. We set the frequency surrounding this issue to low as well as the severity, as we didn't have too many people commenting on this, but we generally agreed that more content could be added. This was also not a major issue, hence the low severity level.

8. Recommendations:

In regard to ensuring hours are more findable, most recommended placing this information on either the Home page or the About page. We did agree with this, and so we modified our website to contain the hours on both the home page and the contact page so that this information was prioritized and easy to find. For the sub-nav, most recommended that we modify the design of it, or change the colors so that it was more noticeable. We decided to modify the links themselves into red buttons. Buttons are a commonly used element for items that users can interact with, so we thought this would help make the sub-nav more noticeable. We also changed the colors of the button to red, which contrasts very well against the yellow background of the website. In regard to the reviews not being easily findable, many recommended that we either try to make this section more noticeable on the home page or move it to another page such as the About Us page. We decided on the former and modified the structure of the home page to make the reviews a lot more noticeable. For the final issue, which is the About Us page requiring a re-design, we were recommended that we modify the structure of the page to mitigate some whitespace or add additional content to the page for the same effect. This time, we went with the latter, and decided to add some additional images that we thought were representative of the restaurant. This added more personality to the page, mitigated the whitespace that was causing this issue, and made this page more engaging to users.