

Usability Test Results



Sports

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Executive Summary

This document presents the results of a usability test for the Visit Lubbock sports services website. Visit Lubbock is Lubbock's official Convention & Visitors Bureau, which is charged with increasing the activity of leisure, sports, meetings, and convention travel to Lubbock. Since 2004, Visit Lubbock has booked more than 3,579 events or conventions, resulting in 2.86 million visitors, 943,570 room nights, and \$297 million in direct economic impact to the Lubbock area.

The sports service section of the Visit Lubbock website intends to provide potential visitors to Lubbock with resources for hosting sporting events of all types. As such, this usability test focused on the website's functionality related to the use of the sports services for scheduling sporting events. The usability test involved observing six participants completing three scenarios on the Lubbock Sports website.

The following document details the test goals and research questions, testing methodology, participants, results, analysis, and recommendations from the study.

Test Goals and Research Question

The goals of usability testing include establishing and validating user performance and preference measures by addressing efficiency, error frequency, and user satisfaction. Our usability test focuses specifically on the Lubbock Sports website's functionality as a tourism website and user experience while navigating it.

Research Question

How well can users quickly and accurately locate information related to planning a sports-based event in Lubbock, TX?

Process

We evaluated data for this research question using three major criteria: efficiency, error frequency, and user performance.

- Efficiency:
 - We addressed whether or not participants can complete tasks and measured the time each task takes to complete.

- Error frequency:
 - We recorded both critical and non-critical errors. Critical errors are those that deter participants from completing a task, whereas non-critical errors are those that slow down but do not prevent successful completion of the task.
- User performance:
 - We asked participants to rate their satisfaction and/or impressions of the ease of use of the website in a debriefing interview. Following each task, we also asked participants to describe their impressions and experiences.

Findings

The usability test revealed several key insights:

1. Navigation Challenges:
 - Participants struggled with unclear menu structures and inconsistent labeling, which led to confusion and backtracking during tasks.
 - Scenario Three posed the greatest difficulty, with only 2 out of 6 participants completing the scenario due to fragmented and conflicting transportation information.
2. Content Accessibility Issues:
 - Essential details, such as venue capacities and transportation options, were often buried in PDFs or scattered across multiple pages, making them hard to locate.
 - Participants frequently expressed frustration with incomplete or vague information.
3. Visual Appeal:
 - Despite usability challenges, participants praised the site's polished and professional visual design. Descriptors like "engaging" and "modern" were commonly selected from Product Reaction Cards.
 - However, the attractive design did not translate into intuitive functionality, which reduced overall user satisfaction.
4. Time-on-Task Metrics:
 - Task times were largely within the stated goals for Scenarios One and Two but did not reflect user efficiency due to repeated navigation errors and confusion.
 - The reduced success rate in Scenario Three further demonstrated the impact of usability barriers on user performance.

Recommendations

To address the usability challenges identified, the following key recommendations were developed:

1. Redesign Navigation and Information Architecture:
 - Simplify and clarify the menu structure to ensure users can locate essential information in fewer clicks.
 - Group related content under clearly labeled sections, such as “Venues,” “Event Planning,” and “Travel Information.”
2. Implement a Search Function:
 - Add a search bar with predictive text capabilities to streamline access to specific information, such as venue details and transportation routes.
3. Enhance On-Page Content Completeness:
 - Display critical information, such as venue capacities and availability, directly on the website instead of relying on PDFs or external links.
4. Improve Labeling and Terminology:
 - Replace ambiguous terms like “Learn More” with clear, descriptive labels such as “Venue Details” or “Book a Venue.”
5. Focus on Mobile Optimization:
 - Optimize the site for mobile users to increase accessibility and ensure a seamless experience across devices.
6. Conduct Regular Usability Testing:
 - Implement a continuous improvement process by conducting periodic usability tests to validate changes and uncover new areas for refinement.

By addressing these recommendations, the Visit Lubbock Sports website can better align its functionality with user needs, providing an efficient, intuitive, and satisfying experience.

These improvements will reduce reliance on customer support, empower users to plan sporting events independently, and enhance the site’s overall effectiveness in promoting Lubbock as a premier destination for sports and events.

Methods

This evaluation employs a usability test approach that involves representative users and asks them to complete realistic web tasks. The usability test involved participants who would be potential users of the Visit Lubbock website (www.visitlubbock.org).

Procedures include informed consent, a background questionnaire, tasks based on scenarios, post-task questions, and a debriefing interview with Product Reaction Cards; a “think-aloud” protocol will be used throughout the test. These procedures are described more fully below.

Usability Test Summary

The Visit Lubbock Sports usability evaluation was conducted remotely between October 17th to October 27th, 2024. During the usability evaluation, six participants were asked to spend approximately 45 minutes with the Visit Lubbock Sports website.

During the test period, participants:

- Completed a user background questionnaire and signed consent forms
- Performed real-world tasks on the site while thinking aloud
- Answered questions about their overall experience

Recruiting Strategy

A total of six participants were recruited, all who:

- Do not live in a 60-mile radius of Lubbock
- Between 25 to 65
- Attends or is involved in sporting events

They were recruited through convenience sampling and all had an existing connection to the research team. Users were all highly proficient with the internet and had multiple years of experience using computer web browsers. Participants were informed of the study via e-mail, which detailed testing objectives. The recruitment email is available in [Appendix A: Recruitment Email](#). They were not informed of evaluation tasks in advance.

Participant Profiles

Participants were chosen to reflect an audience with at least moderate web browser experience. This audience helped us isolate key opportunities for further consideration or development within the Lubbock Sports design, as such, we can assume that less savvy users may also experience these issues.

Participants were people who were already familiar with sporting events, either through their attendance or involvement.

Other qualifications were as follows:

- Age: 25-65
- Sex: any
- Number of years using the internet: 5 years and above
- Education level: n/a
- Primary OS: Windows & Apple iOS
- Primary mobile browser: Chrome & Safari
- Expected computer proficiency: 5 years and above
- Location of Residence: Outside a 60-mile radius of Lubbock, TX

The following table offers a breakdown of the study participants.

Table 1: Characteristics of Study Participants

Characteristics	Participant One	Participant Two	Participant Three	Participant Four	Participant Five	Participant Six
Age	25-34	24-34	55-65	35-44	35-44	35-44
Zip Code	85345	79549	85016	49341	49505	21402
Occupation	Dental Student	Stay-at-home mom	Software Engineer	Technical Writer	Librarian	Lawyer
Comfort Sourcing Information on the Internet	Very Comfortable	Very Comfortable	Very Comfortable	Very Comfortable	Somewhat Comfortable	Very Comfortable
Highest Degree of Education	Undergrad Degree	Undergrad Degree	Graduate Degree	Some Undergrad	Graduate Degree	Graduate Degree
Usage of a Computer	At least daily	At least daily	At least daily	At least daily	At least daily	At least daily
Weekly Time Spent Online	10-19 hours	30-39 hours	40-49 hours	50 or more hours	50 or more hours	30-39 hours
Previous Website Visitor	No	No	No	No	No	No

Test Location and Environment

Participants took part in the usability test remotely from their chosen environment, using a computer and browser of their choice. The testing sessions were conducted via video conferencing and screen-sharing tools, allowing the facilitator to guide participants through tasks and ask questions in real time. Participants were encouraged to think aloud while navigating the website or product. The facilitator provided additional instructions or clarification during the session if necessary.

The session was observed and recorded through the screen-sharing platform to capture participant interactions, facial expressions, and verbal feedback. These recordings were used solely to analyze and improve the product.

The participants' testing environments varied, reflecting real-world use cases, as they were encouraged to complete tasks in a comfortable setting. No observers were physically present, but additional team members may view the session via the video conferencing platform in real time to take notes and gather insights. All test data was kept confidential and stored securely in compliance with relevant data protection standards.

Each member of our UX Research team shared the following roles depending on time, circumstance, and participant needs:

1. Facilitator/Moderator
2. Note-taker
3. Observer
4. Technical Support
5. Recruiter
6. Data Analyst

Ethical Guidelines

All persons involved with the usability test were required to adhere to the following ethical guidelines:

- The performance of any test participant must not be individually attributable, and individual participants' names should not be used in reference outside the testing session.
- Personal information and data collected during the test will be kept confidential and stored securely. Participants' identities will not be linked to their responses, and results will be reported anonymously unless explicit permission is given.
- All data collected during the testing process will be protected in accordance with relevant data privacy laws (such as GDPR). Only authorized personnel will have access to the data, and it will only be used for the stated research purposes.

- A description of the participant's performance should not be reported to his or her manager.
- All participants will be fully informed of the purpose of the UX test, the procedures involved, and how their data will be used before the test begins. Participation is voluntary, and participants can withdraw at any time without penalty.
- Participation in the UX test is entirely voluntary, and no form of coercion, pressure, or incentives that could unduly influence a participant's decision to participate will be used.
- Participants will be treated with respect and dignity throughout the process. Their time, opinions, and contributions are valued, and any discomfort or concerns raised will be taken seriously.
- UX tests will minimize potential risks, including emotional discomfort, stress, or frustration. If a participant expresses discomfort, the test can be paused or stopped immediately.
- Clear communication will be maintained throughout the process. Participants will be informed about the tools used for recording or observation and how long the data will be stored.
- After the test, participants will be debriefed, allowing them to ask questions and clarify any concerns. They will also be informed about the study's findings and how their feedback contributes to improving the product.

Usability Scenarios and Tasks

The moderator briefed participants on the Visit Lubbock website and instructed them that they were evaluating the application rather than being evaluated by the moderator. Participants signed an informed consent form acknowledging that participation is voluntary, that participation can cease at any time, and that the session will be videotaped, but their privacy and identification will be safeguarded. See [Appendix B: Informed Consent](#).

Participants completed a pretest demographic and background information questionnaire. The questionnaire asks about demographic information, internet experience, and familiarity with the site that is being tested. See [Appendix C: Background Questionnaire](#).

The usability tasks were identical for all participants of a given user role in the study. These tasks were designed for this project before the usability test.

At the start of each task, the participants read aloud the task description from the digital copy and begin the task. Time-on-task measurement begins when the participant starts the task. After each task, the participant completed the post-task questionnaire and elaborated on the task session with the facilitator. The facilitator instructed the participants to 'think aloud' so that a verbal record of their interaction with the website exists. They recorded user behavior, user comments, and system actions in the data log. See Usability Tasks.

Scenario One

You are the organizer of a middle school girls' soccer tournament with ten teams, and you're planning to hold the event in Lubbock next year. Your goal is to determine if adequate soccer facilities are available to accommodate all the teams and spectators expected to attend. You need to find detailed information on the rental options, including capacity and availability.

Tasks

1. Begin at the Lubbock Sports homepage and locate the section dedicated to sports facilities.
2. Identify soccer field rental options by navigating through the available facilities.
3. Find relevant details on the soccer field capacity and assess whether they can accommodate ten teams and spectators.
4. Determine how to check the availability of the soccer fields for your desired event date.
5. Locate the contact information or online booking form to inquire further or secure the rental.
6. Say "I'm done" when you've completed these tasks.

Post-task Questions

1. On a scale of 1 to 5 (1 being easy, 5 being hard), how would you rate the scenario you just performed?
 2. What did you find most difficult in completing the scenario?
 3. What did you find easiest in completing the scenario?
-

Scenario Two

In partnership with Lubbock Sports, you want to hold a sports festival at Lubbock Christian University. You would like the festival to support several sporting events simultaneously but don't know what types of facilities they offer. Your goal is to determine what types of facilities they can offer to get a better sense of what this festival can include. You want to use the Lubbock Sports website to see how many and what types of venues they offer.

Tasks

1. Start at the Lubbock Sports homepage.
2. Find information on the facilities available at Lubbock Christian University.
3. Find the number and types of venues available at Lubbock Christian University.
4. Determine how many people you think each venue can accommodate.
5. Determine how you can find more information on their facilities.

6. Say “I’m done” when you feel you’ve completed these tasks.

Post-task Questions

1. On a scale of 1 to 5 (1 being easy, 5 being hard), how would you rate the scenario you just performed?
 2. What did you find most difficult in completing the scenario?
 3. What did you find easiest in completing the scenario?
-

Scenario Three

You plan to attend a sporting event in Lubbock in May 2025 and will be driving from Austin, Texas. You want to use the Visit Lubbock website to get information about the distance, route, and local transportation options. You also want to know who to contact if you have further transportation-related questions.

Tasks

1. Start at the Lubbock Sports homepage.
2. Locate information about the driving distance between Austin and Lubbock.
3. Find details about the number of major highways that intersect in Lubbock.
4. Search for information on local transportation options available after you arrive in Lubbock.
5. Locate where you can find contact details on the website if you have additional questions about transportation options.
6. Say “I’m done” when you feel you’ve completed these tasks.

Post-task Questions

1. On a scale of 1 to 5 (1 being easy, 5 being hard), how would you rate the scenario you just performed?
2. What did you find most difficult in completing the scenario?
3. What did you find easiest in completing the scenario?

Final Debriefing Questions

After all task scenarios were attempted, the moderator asked participants about their impressions of the site and testing experience.

1. When you think about the site as a whole, how would you describe your overall experience? Did anything stand out to you, either positively or negatively?
2. If you could make any change to the website, big or small, what would it be?
3. On the other hand, was there anything you particularly liked or found helpful?
4. Finally, on a scale from 1 to 5, with one being very poor and five being very good, how would you rate the website's overall quality? And why did you choose that rating?

Part of the interview involved asking participants to select words from the “Product Reaction Cards” that describe their experience. See [Appendix D: Debrief Interview and Product Reaction Cards](#).

Evaluation Measures, Metrics, and Benchmarks

Usability metrics refer to user performance measured against specific performance goals necessary to satisfy usability requirements. Scenario completion success rates, time-to-completion, error rates, and subjective evaluations will be used.

Task Completion Rate

The completion rate is the percentage of test participants who complete the task without critical errors. A critical error is defined as an error that results in an incorrect or incomplete outcome. In other words, the completion rate represents the percentage of participants who, when they are finished with the specified task, have an "output" that is correct.

Note: If a participant requires assistance to achieve a correct output then the task will be scored as a critical error and the overall completion rate for the task will be affected.

A completion rate of 100% was the goal for each task in this usability test.

Error-free Rate

Error-free rate is the percentage of test participants who complete the task without any errors (critical or non-critical errors). A non-critical error is an error that would not have an impact on the final output of the task but would result in the task being completed less efficiently.

An error-free rate of 80% is the goal for each task in this usability test.

Time on Task (TOT)

The time to complete a scenario is referred to as “time on task.” It is measured from the time the person begins the scenario to the time he/she signals completion.

Goals for TOT included:

Scenario 1

- Moderator introduction - 2 minutes
- Participant executes the task - 5 minutes
- Post-task questions - 2-3 minutes

Scenario 2

- Moderator introduction - 2 minutes
- Participant executes the task - 5 minutes
- Post-task questions - 2 minutes

Scenario 3

- Moderator introduction - 3 minutes
- Participant executes the task - 6 minutes
- Post-task questions - 2 minutes

Subjective Measures

Subjective opinions about specific tasks, time to perform each task, features, and functionality will be surveyed. At the end of the test, participants will rate satisfaction with the overall system. Combined with the interview/debriefing session, these data are used to assess the participants' attitudes. Goals for subjective measures included:

- Determine if the participants can complete the scenario tasks satisfactorily
- Collect participants' satisfaction levels using the Visit Lubbock website
- Collect verbal/narratives of user experience

Problem Severity

To prioritize recommendations, problem severity classification will be used to analyze the data collected during evaluation activities. The approach treats problem severity as a combination of two factors: the impact of the problem and the frequency of users experiencing it during the evaluation.

Impact

Impact is the ranking of the consequences of the problem by defining the level of impact that the problem has on successful task completion. The impact can be high, moderate, or low.

The following severity scale was used to measure impact:

- Severity 1 – High-impact problems that often prevent a user from correctly completing a task. (critical errors)
- Severity 2 – Moderate/high-frequency problems with moderate/low impact. Typically erroneous actions that participants recognize need to be undone. (non-critical errors)
- Severity 3 – Either moderate problems with low frequency or low problems with moderate frequency; these are minor annoyance problems faced by several participants. (non-critical errors)
- Severity 4 – Low-impact problems faced by few participants; there is a low risk of not resolving these problems. (non-critical errors)

Frequency

Frequency is the percentage of participants who experience the problem when working on a task.

- High: Three or more of the participants experience the problem
- Moderate: Two participants experience the problem
- Low: One (or fewer) of the participants experience the problem

Limitations

Small Sample Size

This usability study included a total of six participants, which, while providing valuable insights, represents a relatively small sample size. The limited number of participants may not capture the full range of possible user experiences, particularly among diverse demographics or users with technical knowledge and abilities.

As a result, findings and recommendations should be interpreted as indicative rather than fully comprehensive. Further testing with a wider participant pool would help validate these results and uncover additional possible usability issues.

Remote Testing Environment

The remote nature of this study allowed participants to complete tasks in their personal spaces, which reflects real-world use cases but also introduces possible limitations. Differences in participants' devices, internet speeds, and distractions in their physical environments could have affected their performance.

Additionally, participants may have changed their behavior due to the knowledge that they were being observed, even remotely, a phenomenon known as the Hawthorne Effect. This effect may have led participants to approach tasks more cautiously or attempt to meet perceived expectations, which could have influenced their interactions with the website.

While the remote setup was necessary for logistical reasons, an in-person testing environment might have allowed for more controlled observations, reduced space variability, and more direct technical troubleshooting during the sessions.

Limited Task Scope

The scenarios designed for this study were specific and focused, reflecting particular use cases of the website, such as finding venue details or transportation information. While these tasks provide valuable insights into usability challenges, they do not encompass the full range of potential user interactions with the site. For instance, tasks related to user account management, event booking workflows, or exploring other types of content were not included in this study. This limited scope may overlook usability issues or successes in other areas of the website.

Lack of Diversity of Participants

The participant pool for this study lacked diversity in terms of demographics, technical expertise, and familiarity with similar websites. As a result, the findings may not fully represent the experiences of all user groups, such as those who are less tech-savvy, have accessibility needs, or come from different geographic or cultural backgrounds. This lack of diversity limits the generalizability of the study's results. Including a more varied participant group in future testing would help identify a wider range of usability challenges and opportunities.

Results

Scenario Summary

Table 2: Overview of each scenario and their related tasks.

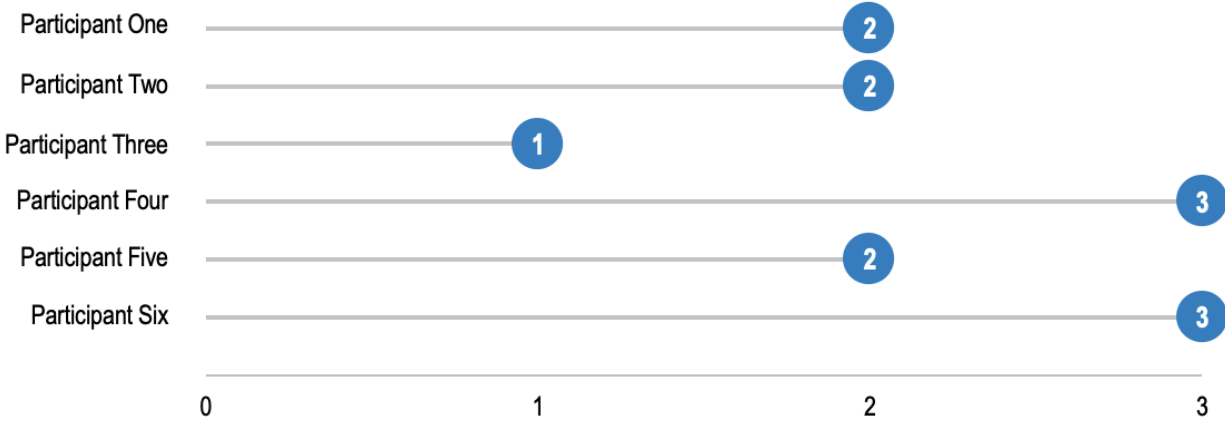
	Scenario One:	Scenario Two:	Scenario Three
	Organizing a middle school soccer tournament.	Host a sports festival at Lubbock Christian University.	Transportation to a Lubbock sporting event.
Task One	Begin at the Lubbock Sports homepage and locate the section dedicated to sports facilities.	Start at the Lubbock Sports homepage.	Start at the Lubbock Sports homepage.
Task Two	Identify soccer field rental options by navigating through the available facilities.	Find information on the facilities available at Lubbock Christian University.	Locate information about the driving distance between Austin and Lubbock.
Task Three	Find relevant details on the soccer field capacity and assess whether they can accommodate 10 teams and spectators.	Find the number and types of venues available at Lubbock Christian University.	Find details about the number of major highways that intersect in Lubbock.
Task Four	Determine how to check the availability of the soccer fields for your desired event date.	Determine how many people you think each venue can accommodate.	Search for information on local transportation options available after you arrive in Lubbock.
Task Five	Locate the contact information or online booking form to inquire further or secure the rental.	Determine how you can find more information on their facilities.	Locate where you can find contact details on the website if you have additional questions about transportation options.
Task Six	Say “I’m done” when you’ve completed these tasks.	Say “I’m done” when you feel you’ve completed these tasks.	Say “I’m done” when you feel you’ve completed these tasks.

Participants Success Rate for Scenarios

Table 3: Participant success rate by scenario.

Method	Scenario One	Scenario Two	Scenario Three
Participant One	Successful	Successful	
Participant Two	Successful	Successful	
Participant Three	Successful		
Participant Four	Successful	Successful	
Participant Five		Successful	Successful
Participant Six	Successful	Successful	Successful

Figure 1: Number of scenarios completed by each participant.



Participants' Time Completion for Scenarios

Each participant was timed by how long it took them to complete each task in the scenarios and the overall times were calculated at the end. If they were not able to complete any part of the scenario, an overall time of DNC (did not complete) is reflected in the table below.

Table 4: Total time to complete each scenario by participant.

Method	Scenario One	Scenario Two	Scenario Three
Participant One	2:46	6:11	DNC
Participant Two	3:54	5:30	DNC
Participant Three	3:05	DNC	DNC
Participant Four	4:38	6:00	DNC
Participant Five	DNC	3:43	2:18
Participant Six	2:47	1:51	3:30

Ease of Use and Difficulties

After completing each scenario, the participants were asked the following two questions:

- What did you find most difficult in completing the scenario?
- What did you find easiest in completing the scenario?

The tables below detail their feedback regarding what they found easiest and most difficult.

Scenario One: Ease of Use and Difficulties

Table 5: Areas of scenario one that were least and most difficult for participants.

Method	Easiest	Most Difficult
Participant One	Finding the “contact us” form.	Finding the PDF. Determining the venue capacity.
Participant Two	Finding the “contact us” form	Running into a separate, non-related sports feature of the "Events" tab from the Visit Lubbock home page.
Participant Three	Finding the “contact us” form	Getting distracted with non-related events information.
Participant Four	Finding the sports facilities	Determining the venue availability.
Participant Five	Finding the PDF with soccer options	Finding the Lubbock Sports webpage.
Participant Six	Finding and assessing soccer venues	Finding the Lubbock Sports webpage.

Scenario Two: Ease of Use and Difficulties

Table 6: Areas of scenario two that were least and most difficult for participants.

Method	Easiest	Most Difficult
Participant One	Finding the “contact us” form	Determining what facilities at LCU could be rented.
Participant Two	Finding the number and types of venues at LCU	Finding information about LCU facilities.
Participant Three	Finding the “contact us” form	Finding information about LCU facilities.
Participant Four	Finding the “contact us” form	Finding information about LCU facilities.
Participant Five	Finding the number of venues and seats in each venue	Finding information about LCU facilities.
Participant Six	Finding the number of venues and seats in each venue	Finding information about LCU facilities.

Scenario Three: Ease of Use and Difficulties

Table 7: Areas of scenario three that were least and most difficult for participants.

Method	Easiest	Most Difficult
Participant One	Finding the "contact us" form	Finding travel logistics.
Participant Two	None	Finding the PDF, transportation options, and travel time.
Participant Three	Identifying the map of Texas and the diagrams of connecting interstates	Finding travel logistics.
Participant Four	Finding the "contact us" form	Finding travel logistics.
Participant Five	Finding the number of highways	Finding travel logistics.
Participant Six	Locating driving distance and highway information	Finding travel logistics and travel time.

Test Facilitator Observations

All six of the tests were recorded and after the session, each of the tests was reviewed by the testing team. Below are observations made by the facilitators regarding the tests along with selected quotes from the participants during the test.

Scenario One Observations and Quotes

Table 8: Scenario one observations and quotes

Observations	
Participant One	<p>The participant relied heavily on the contact us page as a catch-all for not locating the contact information on any online booking options.</p> <p>He did not feel it was worth the time to sift through the PDF's and defaulted to sorting those details out later with a live rep after submitting a request through the "Contact Us" forum.</p> <p>He noted that he wasn't a huge fan of the options provided on the hamburger menu option because he felt the options were limiting and not entirely useful to the tasks. He later pivoted on this position when he realized the drop down options for this menu were scrollable, a feature he wished was more transparent.</p>
Participant Two	<p>When the participant clicked on soccer he didn't immediately find the PDF with soccer fields listed and thought he found everything he needed for task two. It wasn't until going through task three that he found the PDF with information.</p> <p>It took him some time to find the PDF with additional information. He couldn't find capacity for all the venues. No way to figure out how to book anything.</p> <p>"I have count the number of fields and kind of read through and make a decision whether or not there was enough in some of them. The information is incomplete."</p>
Participant Three	<p>The participant was confused in the beginning because the "Visit Lubbock" homepage has an "Events" tab in the hamburger menu, and a filter that allows users to to specify "sports" as the desired event. She eventually recognized that this wasn't exactly what she was looking for and found the desired page, but she did seem confused as to why there were two possible sports related pages she was looking at.</p> <p>She expressed her expectation that there would be an option to interact with the booking and rental place itself, being able to accomplish the task on the page rather than via contact through the sports representatives. She also pointed out typos she noticed in the Soccer PDF's.</p>
Participant Four	<p>The participant was able to quickly find the section for sports facilities. It took her a little bit of time to determine that the sports facilities were all on a PDF. Most of her time spent in this scenario were looking for the capacity of the facilities and determining how you would check the availability.</p> <p>"Wait, this PDF has all the information?"</p> <p>"But how do I actually find if they're available? My best guess is to email them."</p>
Participant Five	<p>The participant discussed their lack of certainty about the sizes of the soccer fields and was unsure of whether they had completed the task of assessing whether they would be appropriate for the event.</p> <p>In task 5, the participant spent a lot of the time on an outside website attempting to book through one of the soccer facilities separately. In task 6, the user also attempted to use an outside link (lubbocksoccer.org) to solve the task, quickly moving away from the Lubbock Sports page.</p> <p>"Confusing site layout, text running together, not clearly separated, not intuitive."</p> <p>"I liked how the fields had the dimensions listed and the size available, which is not always straightforward in the real world."</p>
Participant Six	<p>The participant struggled to understand how to check the availability of the soccer fields.</p> <p>"The first step to finding the sports page from the Lubbock main page. There is a drop-down that exists, but it's not in an obvious location. There are events and a section called "plan your visit," but I needed to scroll down further. It was not evident that there is further information, and it's somewhat hidden."</p>

Scenario Two Observations and Quotes

Table 9: Scenario two observations and quotes

Observations	
Participant One	<p>Upon locating basketball facilities at LCU, the participant expressed strong disinterest in surveying each sports category to see which of them happened to have associated facilities at LCU, defaulting that to the "Contact Forum" instead and assuming the "Lubbock Sports" representatives could fill him in instead.</p> <p>He didn't determine which specific facilities at LCU he could rent as doing so would, he expressed, be too time consuming.</p> <p>He said this task would be easier to complete if there were a "venues" or "facilities" menu or list that designated options by location/place and not necessarily by sport-type. He also mentioned it might be simpler for him to search through LCU's website instead of the Lubbock Sports Page.</p>
Participant Two	<p>It took him time to find information about Lubbock Christian University. He tried searching for that on the website using his browsers search function, but wasn't successful. Once he found it he tried going to LCU's website for more information, but the PDF had an incorrect link on it. He ended up searching LCU's sports website address on his own and searched there for much of his information.</p> <p>"I'm going to try to search for the word Christian. No. I didn't find that" "Let me see if I can go to this website. So I had to copy and paste because there wasn't a link. It was a 404. Lost. Let me try something else. No, that page doesn't exist."</p> <p>"I had to leave the Lubbock sports, visit Lubbock site to go to the LCU site, to navigate that, to go to their facilities and look at each of the facilities."</p> <p>"There was nothing on the website that made it easy to get to this."</p>
Participant Three	<p>She expressed her desire to simply reach out via the "Contact Us" forum after spending over 4 minutes navigating both the Sports and Visit Lubbock Pages alike.</p> <p>She expressed frustration over the fact that there wasn't a search bar featured.</p> <p>Patricia never found or noticed any facility listing explicitly related to LCU.</p>
Participant Four	<p>She struggled to find any information on LCU and searched through much of the website before downloading and looking through the PDF with the information. During that time she was getting increasingly frustrated.</p> <p>"I've looked through all these pages and still can't find anything."</p> <p>"Why was it hidden here? I'd never find this without really trying to search."</p>
Participant Five	<p>Once the participant was able to find the specific pdf with information about LCU, they were able to easily find the needed information.</p> <p>The participant started looking at the Texas map and attempted to click it. Then, they went for a "search" option on the site but could not find it. Stated, "I'm kind of clicking randomly," and then saw the "Learn More" pdf option.</p>
Participant Six	<p>The participant wanted to try to click on the map to find the information where LCU is and suggested that it would be very helpful if the map itself were interactive.</p> <p>This participant struggled to find the location with the information related to Lubbock Christian University and resorted to more or less random clicking around the site before coming across the "Learn More" button to lead them to the needed pdf.</p>

Scenario Three Observations and Quotes

Table 10: Scenario three observations and quotes

Observations	
Participant One	<p>The participant grew fatigued with the site and his frustrations with it. He seemed to feel as if he had explored every function of both pages adequately already.</p> <p>He provided his honest feedback that if he were using the site in real life, he would simply use Google Maps to find distances and travel logistics and then the contact forum to ask further questions if needed.</p>
Participant Two	<p>He had a very difficult time finding travel information on the PDF. He started trying to search for driving directions on google maps and never found the travel time listed anywhere.</p> <p>He also struggled to find any information on transportation options.</p> <p>"So I can take the address and go to a maps website and look at the directions. I suppose."</p>
Participant Three	<p>She struggled the most with this scenario. Nothing seemed apparently straightforward to her, and while she did correctly navigate to the proper sites, she never nailed down the exact goals.</p> <p>At a few points, she expressed uncertainty about her own capabilities, expressing thoughts such as "Maybe this is just me," or "I think I'm overthinking this."</p>
Participant Four	<p>The only way she was able to get through this was because she struggled to find the PDF in the previous scenario and has looked over it then. After looking around the website, she decided that the information must be there.</p>
Participant Five	<p>Like in the second task, the participant was immediately drawn to the map in the center of the home page and attempted to "map out" a possible route based on it. From there, they visited the main "Visit Lubbock" page but quickly went back to the Lubbock Sports page. From there, they returned to the pdf, found under the "Learn More" button, to find information about driving distance and highways.</p> <p>The participant was able to easily then locate the transportation and the contact information. They called the contact person by their name "Eric" after seeing their picture. They were curious if they were the only person to contact about ALL of these matters related to the pdf.</p> <p>"Getting to the the transportation information was not intuitive. I had to brute force and randomly click around and I had a vague memory when clicking previously."</p>
Participant Six	<p>For this task, the participant spent a lot of time on the "Visit Lubbock" website attempting to use the "Plan Your Visit" tool to find the specific driving directions before redirecting back to the Lubbock Sports page.</p> <p>They commented on the person "Eric", whose information and picture is at the bottom of the "Learn More" pdf saying that she would "never call him" and didn't find that a useful means to get more information.</p>

Participants' Response to Final Debriefing Questions

After all task scenarios were attempted, the moderator asked participants about their impressions of the site and testing experience.

1. When you think about the site as a whole, how would you describe your overall experience? Did anything stand out to you, either positively or negatively?
2. If you could make any change to the website, big or small, what would it be?
3. On the other hand, was there anything you particularly liked or found helpful?
4. Finally, on a scale from 1 to 5, with one being very poor and five being very good, how would you rate the website's overall quality? And why did you choose that rating?

The information below details their answers to the final debriefing questions.

Overall Experience

Table 11: Participant feedback on the overall website experience.

Overall Experience	
Participant One	"It felt more negative because I had tasks in mind, but I don't feel like I was able to accomplish what I wanted to with them. I feel like what was most frustrating or negative was that there is a lot of information that just felt like fluff. I would click on a link, and there just wasn't anything at that link. It would just bring up a page that didn't have anything on it. It just felt like a lot of clicking that went nowhere."
Participant Two	"There's nothing positive. The URL is difficult to remember. There's very little navigation between the pages. There's no easy way to find information. There was no search. Most websites I expect to search. I couldn't find a search anywhere."
Participant Three	"The positive is its a really pretty site. The slideshow is really pretty. The "Visit Lubbock" page itself seems a bit easier to navigate. [As far as] cons, the acrobat links have some typos, and that's not user friendly especially if someone has to use a type of transcriber or something. Overall, the sports page was hard to navigate."
Participant Four	"Not good. I had a hard time finding almost everything i was looking for and the only thing that was easy to find was the contact us page! Things just seem to be buried and almost all the good information was in a PDF that was only on one page."
Participant Five	"It looks pretty polished, but the organization is likely not intuitively laid out. It is most of the way to being a modern, flashy site, but it needs some work."
Participant Six	"I found the information needed. It was not difficult. If I was looking for a specific sport, it would be much easier to get to it. The 'Learn More' feels like a misnamed component; it has lots of information about transportation and facilities but it weirdly categorized and would work in the the corner instead of the link back to the 'Visit Lubbock.' The experience on the site could be very circular. Overall, the color scheme is fine and easy to read. The site is not terrible."

Proposed Changes

Table 12: Changes recommended by participants.

Recommended Changes	
Participant One	"... connections from the website to what they're advertising on the website. For example, when I looked at the basketball page, they had four or five venues they offered, but they didn't have specific information about the venue. If they embedded information into that page like a more precise booking link or phone number to call to get information directly from Lubbock Christian University,"
Participant Two	"I'd get rid of it, and I'd start fresh. I would do an information architecture to understand what information they want to share with their audience. Understand who their audience is. Because I don't know who the audience is like. It feels like everyone's expected to know where to go, what to do. And this website feels like an afterthought. So it doesn't really serve an audience."
Participant Three	"The sports page should have more details on the site, maybe available venues on the site too, because from my perspective it just looks like you have to call since you can't really see anything anyway."
Participant Four	"Provide more information the actual website instead of linking to everything. It's just so hard to find anything you're looking for on it!"
Participant Five	"Focus on the layout and navigation and implement a standard navigation tree to have the same links at the top and streamline the organization."
Participant Six	"Rename the 'Learn More' button to another name to be more descriptive and move to the top menu."

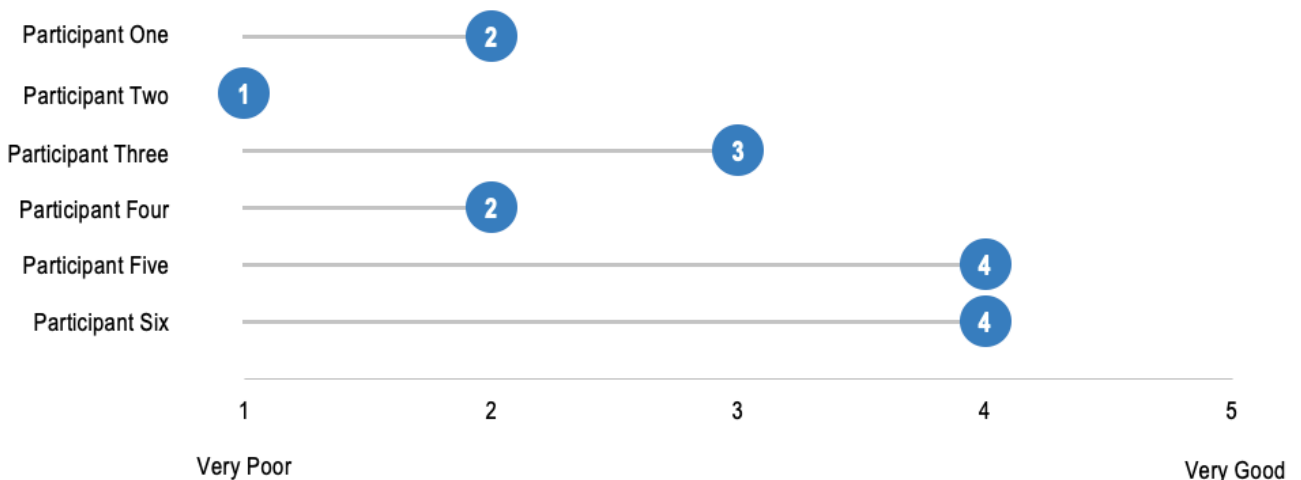
Useful Aspects of the Website

Table 13: Aspects of the website participants found useful or helpful.

Useful Aspects of the Website	
Participant One	"It is straight forward to contact them. I don't know how quickly they respond, so maybe it's not that helpful, but I do think its a helpful feature. Aesthetically, it's also a nice website. It looks good."
Participant Two	"It's helpful to know people are still using adobe to publish websites. I thought that died with the dinosaurs."
Participant Three	"The visuals are really nice and I like how there are itineraries and things to do because I didn't know that Lubbock had a lot of the things that were featured."
Participant Four	"The different facilities on the drop down was easy to find and look through."
Participant Five	"I really liked the stats, seating and stadium capacity and would be useful if I was trying to book and was easily accessible."
Participant Six	"There was lots of good information, which could help for those wanting to organize sports events. The site feels welcoming to both organizers and spectators of sports, which feels nice."

Overall Ratings

Figure 2: Participant ratings of the website's overall quality.



Below are selected quotes with participant feedback on the overall quality of the website.

“ There are a few things that were okay, but honestly, it doesn't seem very useful.”

“ ...wasn't completely useless, but for the scenarios and tasks I was given, I just didn't feel like I was getting enough information.”

“ The majority of the information is there, and the graphics are nice but the organization really shoots in the foot.”

Participants' Reactions to the Website

Participants were asked to select words from the “Product Reaction Cards” that describe their experience. Below is a summary of the words chosen and the number of users who chose each word.

Figure 3: Product reaction cards chosen by visitors.

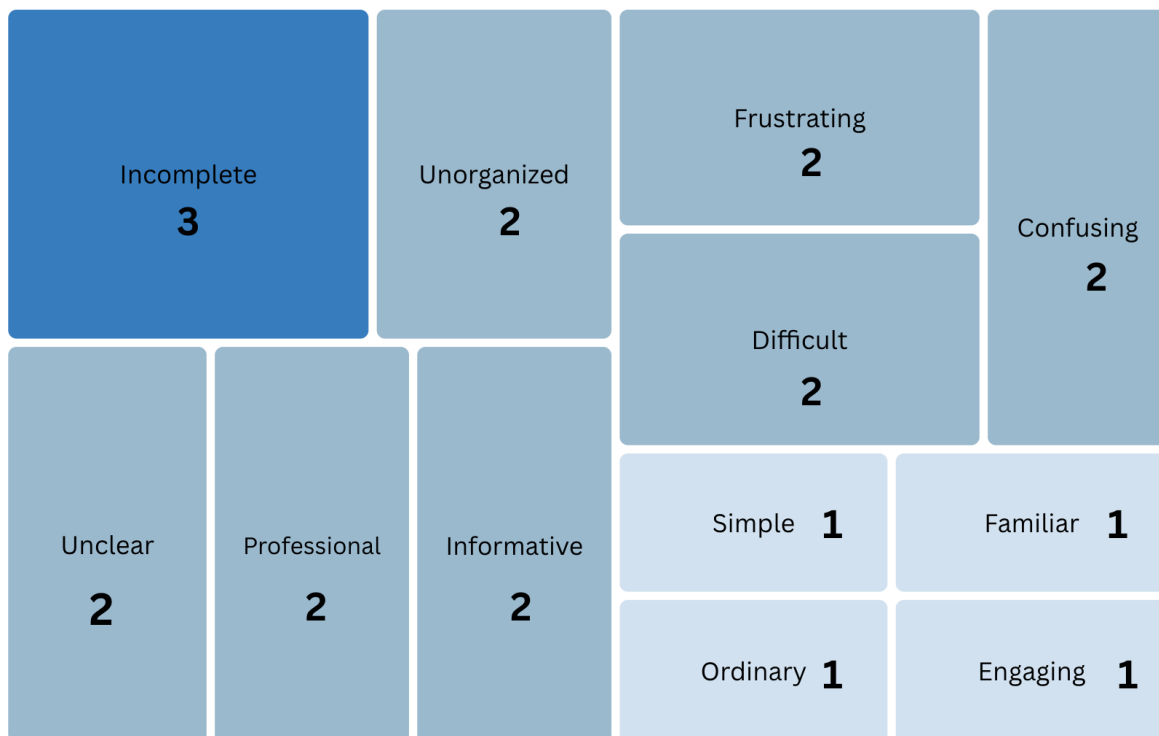


Table 14: Product reaction cards chosen by participants.

Words Chosen	
Participant One	Difficult Incomplete Ordinary
Participant Two	Confusing Frustrating Unclear Unorganized
Participant Three	Informative Incomplete Simple
Participant Four	Frustrating Difficult Unclear Incomplete
Participant Five	Professional Engaging Unorganized
Participant Six	Informative Professional Confusing Familiar

Analysis

Introduction to the Analysis

The purpose of this analysis is to identify patterns in user performance, highlight areas of success, and uncover usability challenges that impact task completion and user satisfaction. By examining the results, we hope to provide actionable insights to improve the website's overall user experience.

This analysis section covers several critical areas of the usability test, including:

- **Success Rates:** A breakdown of task completion rates across three scenarios, identifying trends and obstacles that affected user performance.
- **Time-on-Task:** An evaluation of how long participants took to complete each scenario compared to the stated goals, highlighting efficiency and potential delays.
- **Qualitative Feedback:** Insights from participant comments and Product Reaction Cards, reveal emotional responses and recurring themes such as frustration, satisfaction, and confusion.
- **Recurring Themes:** A summary of patterns and user behaviors observed during the test, including navigation challenges, content accessibility, and the impact of visual design.

Success Rates and Completion Patterns

The success rates of task completion across the three scenarios reveal a notable decline as the usability test progressed. While Scenarios One and Two demonstrated relatively high success rates, with 5 out of 6 participants completing each, Scenario Three saw a significant drop, with only 2 out of 6 participants successfully completing the tasks. This decline demonstrates critical usability challenges and provides insights into user engagement with the website.

Scenario One: Initial Success with Challenges

In Scenario One, most participants (5/6) successfully located soccer field rental options and gathered relevant details. However, observations indicated that this initial task was not entirely seamless, as some participants experienced confusion navigating to the correct section of the website. Despite these challenges, most users could complete the scenario, suggesting that the website provided enough guidance or flexibility for users to eventually locate the required information.

Scenario Two: Consistent Completion with Persistent Difficulties

Similarly, 5 out of 6 participants successfully completed Scenario Two, which involved finding venue details at Lubbock Christian University. However, users reported ongoing difficulties accessing detailed information, such as capacity and facility types, which increased task completion times. Observations showed that participants relied heavily on trial-and-error navigation rather than building confidence in the site's structure from their prior experience in Scenario One.

Scenario Three: Steep Decline in Success Rates

Scenario Three, which required users to find transportation information, saw only 2 out of 6 participants successfully complete the tasks. This significant decline suggests that the tasks in this scenario were either too complex or poorly supported by the website's structure. Observations indicated that participants did not gain much intuitive understanding of the website's navigation or content organization despite having completed two prior tasks. For example, users often expressed frustration, with one participant commenting, "I don't even know where to look anymore."

Time on Task Analysis

Participants' time on task was largely within the stated goals across all scenarios, indicating that the website's design allowed users to perform tasks within reasonable time limits. However, discrepancies in completion rates, particularly in Scenario Three, suggest that task complexity and usability challenges may have influenced these results.

Scenario One: Efficient Performance with Minor Challenges

In Scenario One, the average time to complete the task was 3:26, comfortably under the stated goal of 5:00 minutes. This suggests that participants were generally able to navigate the website and locate the necessary information efficiently. However, one participant was unable to complete the task, highlighting potential navigation or content access issues. This outlier suggests that while the website's overall design supported task completion, certain elements may still create barriers for some users.

Scenario Two: Close to the Threshold but Manageable

In Scenario Two, participants averaged 4:39 to complete the task, remaining just under the 5:00-minute goal. This indicates that while users were able to locate venue-related information, the task required more time and effort than Scenario One. As in the first scenario, one participant did not complete the task, pointing to persistent challenges in accessing detailed or clearly organized content. These challenges may reflect inefficiencies in how information is presented, increasing task completion time even for those who succeeded.

Scenario Three: Shortest Time but Lowest Success Rate

Scenario Three presented a unique case where the average time on task was 2:54, well below the stated goal of 5:00 minutes. However, only 2 out of 6 participants were able to complete the task. This suggests that while the task was completed quickly by two individuals, the remaining four participants encountered significant barriers that prevented task success. The low completion rate for Scenario Three indicates it was an outlier in terms of difficulty, potentially due to fragmented or unclear information about transportation options. Feedback from participants revealed frustration and confusion, with one stating, “I couldn’t find the information I needed no matter where I looked.”

Overall Usability Issues and Challenges

The primary usability challenges identified relate to the website’s navigation, content accessibility, and clarity. Participants encountered significant difficulties in finding detailed venue information, understanding the purpose of certain site elements, and navigating a non-intuitive layout.

These issues led to critical errors in task completion, particularly in scenarios requiring specific event planning details or travel information. Overall, the participants appreciated the visual design but found it insufficient to overcome the underlying usability issues.

The issues can be summarized as follows:

- **Navigation and Information Architecture:** A lack of intuitive navigation paths caused users to struggle when locating essential information.
- **Content Completeness and Clarity:** Missing or buried information reduced participants’ ability to complete tasks efficiently.
- **Labeling and Terminology:** Ambiguous labels and inconsistent terminology contributed to confusion.
- **Visual Appeal vs. Functionality:** While the site’s design was visually appealing, it did not adequately support usability.

Navigation and Information Architecture Challenges

Participants consistently faced difficulties locating specific information on the website, especially with identifying sections like sports facilities, venue details, and transportation options.

- Specific Issues:
 - Scenario One: Locating the section on sports facilities required multiple clicks and backtracking. Participants often expressed confusion when navigating dropdown menus or deciding which section to explore first.

- Scenario Two: Users struggled to find venue information for Lubbock Christian University, with some unsure if the facilities listed were relevant to their task.
- Scenario Three: Searching for transportation details was particularly frustrating, as the information was scattered across multiple pages, and participants felt there was no clear starting point.
- Observed Behaviors: Participants frequently verbalized uncertainty, using phrases like “I’m not sure if this is right” or “do I go here next?” This indicates that the navigation flow did not align with user expectations.
- Impact on Performance: Tasks involving navigation challenges often resulted in increased time-on-task and lower task completion rates. For example, in Scenario One, two participants required moderator assistance to find soccer field rental options.

Impact: High — Navigation issues frequently led to critical errors, particularly when participants were required to find venue or travel information quickly.

Frequency: High — Most participants encountered navigation-related issues across multiple tasks.

Content Completeness and Clarity

A recurring issue was difficulty accessing detailed, actionable information necessary for task completion. Participants frequently described the content as “too vague” or “not helpful enough.”

- Specific Issues:
 - Scenario One: Users found it hard to determine whether the soccer facilities could accommodate their event, as details about field capacity and availability were either missing or buried under multiple layers of navigation.
 - Scenario Two: Venue details for Lubbock Christian University were incomplete or hard to interpret. For example, participants struggled to find clear information on venue capacity, leading to frustration and task abandonment for some.
 - Scenario Three: The website lacked a consolidated page for transportation options, forcing users to piece together information from various sections.
- User Feedback: Participants frequently expressed dissatisfaction with the level of detail, stating things like, “I didn’t feel like I got enough information to make a decision.”
- Severity: These issues not only increased task completion times but also eroded user trust, as participants doubted the site’s reliability in providing accurate, comprehensive information.

Impact: Moderate to High — Participants were often unable to complete tasks due to incomplete on-page information, increasing reliance on the “Contact Us” form.

Frequency: High — This issue affected most participants, particularly in scenarios requiring specific venue information.

Labeling and Terminology

Participants identified inconsistencies in how information was labeled, presented, and organized across different website sections.

- Specific Examples:
 - Scenario One: participants encountered confusion due to mismatched headings and dropdown options that did not clearly indicate the content beneath them.
 - Scenario Three: some transportation information conflicted between pages, leading participants to question its accuracy and reliability.
- Observed Behaviors: Users often hesitated before clicking links or retraced their steps, suggesting a lack of confidence in the site’s structure. Quotes such as “It doesn’t feel consistent” and “I expected this to be under a different section” illustrate the problem.
- Impact: These inconsistencies not only slowed task completion but also diminished user trust in the site’s credibility, with participants selecting words like “unreliable” and “inconsistent” from the Product Reaction Cards.

Impact: Moderate — While this issue did not prevent task completion, it slowed down users and added to their cognitive load.

Frequency: Moderate to High — Multiple participants noted the need for clearer, more descriptive labels.

Positive Aspects of the Website

Despite the challenges, some elements of the website were perceived as intuitive or user-friendly:

- Consistent Use of Graphics: Participants appreciated the use of visuals, such as maps and venue photos, which provided clarity when present. For example, venue pages featuring images of facilities helped users confirm they were in the right section.
- Clean Layout: The website’s uncluttered design made scanning for information easier in less complex tasks. In Scenario One, several participants noted that the landing page for sports facilities was “*clear and well-organized.*”

These positive design elements contributed to relatively high success rates in Scenarios One and Two, with most participants completing the tasks within the time limits.

Consistent Elements Supporting Task Success

Participants found the following aspects of the website consistently supported their ability to complete tasks:

- Search Functionality (if applicable): Users who utilized the search bar found it helpful for narrowing down results, even when navigation was confusing.
- Direct Links: When direct links to specific pages were available, participants described the experience as “*straightforward*” and “*easy to follow*.”

Positive Perception of Visual Design

While usability challenges were prevalent, participants generally responded positively to the website’s visual design, describing it as professional, polished, and modern. Many participants highlighted the engaging color scheme, appealing graphics, and overall clean layout, which contributed to a sense of trustworthiness and professionalism.

- Strengths Identified:
 - The website’s visual appeal stood out as a major strength, with participants using words like “*organized*,” “*modern*,” and “*professional*” in their Product Reaction Cards.
 - One participant commented, “The site looks like it was designed for big events—it feels trustworthy.”

However, participants also noted a disconnect between the site’s visual appeal and its usability. While the design created a positive first impression, it did not consistently support intuitive navigation or task success. One participant remarked, “*It looks good, but I didn’t always know where to go.*”

Informing Future Improvements

These positive findings suggest several opportunities to leverage the site’s strengths while addressing its challenges:

- Align Visual Design with Functionality: Build on the site’s professional and engaging design by ensuring navigation pathways and content layout match the aesthetic quality. Clear labels and intuitive workflows can complement the polished appearance.
- Expand the Use of Visual Cues: Incorporate more graphics, icons, or maps to guide users through complex tasks. For example, venue pages could include detailed floor plans or interactive maps to improve user confidence.
- Emphasize Clean Design Across All Pages: Maintain the clean and modern layout throughout the website, even on pages where information is dense, to reduce cognitive load and enhance clarity.

By building on these strengths, the Visit Lubbock Sports website can create a user experience that is not only visually appealing but also intuitive and supportive of task success.

Themes from Qualitative Feedback

Participants' qualitative feedback, gathered through Product Reaction Cards and post-task debriefing, revealed critical insights into their emotional responses and overall impressions of the Visit Lubbock Sports website. This feedback not only underscored specific usability issues but also highlighted aspects of the site that users found helpful or engaging.

Frustration and Confusion

A dominant theme across participant feedback was frustration stemming from navigation challenges and difficulty locating critical information. Many participants selected negative descriptors such as "confusing," "frustrating," and "unorganized" from the Product Reaction Cards, reflecting their dissatisfaction with the site's structure and usability.

- Examples from Feedback:
 - One participant noted, "I just didn't know where to start looking—it wasn't clear at all."
 - Another expressed frustration after several failed attempts to find transportation details, stating, "It feels like everything is scattered, and nothing connects."

These comments align with observed task failures, particularly in Scenario Three, where only four participants were able to complete the task. The feedback underscores how disjointed navigation and unclear labeling led to cognitive overload and task abandonment.

Incompleteness and Overwhelm

Participants frequently described the site as "incomplete," citing missing details or fragmented content as a source of frustration. This theme was particularly pronounced in Scenarios One and Two, where users struggled to find venue-specific information or event planning resources.

- Examples from Feedback:
 - "I felt like I was guessing—I never really found what I needed."
 - "The information was either not there or buried so deep I gave up."

Words like "overwhelming" and "unclear" were also selected, suggesting that users found the volume of information and its presentation overwhelming rather than helpful.

Recurring Emotional Responses

The emotional responses captured through Product Reaction Cards and debriefing interviews consistently pointed to frustration and dissatisfaction. However, these negative reactions were occasionally tempered by moments of appreciation for the website's visual appeal and effort to provide event-planning tools.

- Summary of Emotional Reactions:
 - Negative: Frustration, confusion, and dissatisfaction due to poor navigation and content accessibility.
 - Positive: Appreciation for visual design and professionalism.

Implications of Qualitative Feedback

The qualitative feedback highlights a critical gap between the website's design intentions and its actual user experience. While the professional appearance creates positive first impressions, underlying usability issues quickly erode user satisfaction. Addressing these emotional pain points—particularly around navigation and content clarity—will be essential to improving the overall user experience.

Team Heuristic Ratings

To prioritize issues for potential redesign efforts, the research team assigned heuristic ratings based on severity and frequency of occurrence, following the Nielsen Norman Group's usability heuristics. Each issue theme was rated as follows:

Navigation and Information Architecture

- Heuristic Violations: Visibility of system status, Match between system and real-world conventions, flexibility, and efficiency of use.
- Severity Rating: 4 (High) — Critical issue due to frequent impact on task completion and high participant frustration.

Content Completeness and Accessibility

- Heuristic Violations: Recognition rather than recall, user control, and freedom, help users recognize, diagnose, and recover from errors.
- Severity Rating: 4 (High) — High severity, as missing information significantly affected task efficiency and satisfaction.

Ambiguous Labeling and Terminology

- Heuristic Violations: Consistency and standards, Recognition rather than recall, Help and documentation.
- Severity Rating: 3 (Moderate) – While this issue added cognitive load, it did not fully prevent task completion. However, it remains a priority for user-centered improvements.

In summary, our heuristic evaluation confirms that the most critical areas for improvement are the site's navigation and information accessibility. Addressing these issues will significantly enhance the user experience, supporting more efficient and satisfying task completion.

Recommendations

To improve the usability and user satisfaction of the Visit Lubbock Sports website, we recommend a set of targeted changes focused on navigation, information accessibility, labeling, and balancing aesthetics with functionality. These recommendations aim to address the key issues identified during testing, facilitating a smoother and more efficient user experience.

Redesign Navigation and Information Architecture

- **Action:** Conduct an information architecture overhaul to create a more intuitive navigation structure. This includes:
 - Adding clear, task-oriented sections for "Venues," "Event Planning," and "Travel Information."
 - Ensuring primary information is accessible within 1-2 clicks, without relying on external PDFs.
- **Implementation:** Use a card-sorting method or tree testing to validate the new structure with users, ensuring that it aligns with common user expectations.
- **Expected Outcome:** Users will be able to locate essential information more efficiently, reducing reliance on the "Contact Us" form and allowing smoother task completion.

Implement a Search Function

- **Action:** Add a prominently displayed search bar to the website, enabling users to quickly locate specific information, such as venues, contact details, or travel routes.
- **Implementation:** Position the search bar at the top of the main pages and ensure it has a predictive text feature to aid users in finding relevant results.
- **Expected Outcome:** A search function will streamline information retrieval, especially for users with specific queries, significantly enhancing overall efficiency and user satisfaction.

Enhance On-Page Content Completeness

- **Action:** Display detailed venue information directly on the main website pages rather than relying on downloadable PDFs. Content should include essential details such as venue capacity, rental options, and booking availability.
- **Implementation:** Develop dedicated venue pages with expandable sections for detailed descriptions, images, and booking links to ensure comprehensive and accessible information.

- **Expected Outcome:** Providing complete information on-page will reduce the time users spend searching for details, supporting a more cohesive and satisfying browsing experience. Users will no longer need to download separate files, which were cited as confusing and time-consuming.

Improve Terminology and Labeling

- **Action:** Revise ambiguous or unclear labels, such as “Learn More,” to be more specific and task-oriented. Replace vague links with descriptive alternatives that clarify their purpose, such as “Venue Details,” “Book a Venue,” or “Event Information.”
- **Implementation:** Conduct user testing on proposed labels to ensure they resonate with users and clearly indicate the content or actions behind each link.
- **Expected Outcome:** Clear, consistent terminology will enhance navigation by reducing cognitive load, allowing users to confidently understand where each link leads and decreasing the likelihood of errors during task completion.

Streamline Contact Information Access

- **Action:** Consolidate contact information into a dedicated “Contact” section, accessible from each main page. Include relevant contacts for different aspects, such as venue bookings, travel inquiries, and general information.
- **Implementation:** Place a clearly marked "Contact" link in the website’s header and footer, linking to a well-organized contact page with departmental breakdowns and a FAQ section.
- **Expected Outcome:** Users will be able to find contact information immediately without navigating through multiple sections, reducing frustration and supporting a more positive overall experience.

Maintain and Refine Visual Design

- **Action:** Retain the site’s current visual style while refining layout and visual cues to support usability. For instance:
 - Add consistent button styles for key links to improve visual recognition.
 - Emphasize sections related to common tasks, such as venue booking and event planning.
- **Implementation:** Use user testing feedback to confirm that design changes aid navigation and do not detract from the aesthetic appeal.

- **Expected Outcome:** A balance of visual appeal and usability will provide users with an attractive and functional site, allowing them to engage with the content easily without sacrificing design quality.

Conduct Ongoing Usability Testing and User Feedback Collection

- **Action:** Implement a regular usability testing schedule and establish a user feedback mechanism on the website, such as a “Feedback” button that allows users to share insights or report issues.
- **Implementation:** Schedule semi-annual usability tests focusing on newly added features or redesigned areas of the site to ensure continued alignment with user needs.
- **Expected Outcome:** Continuous feedback and iterative improvements will help maintain high usability standards, ensuring that the site remains responsive to evolving user expectations and functional requirements.

Summary of Recommendations

By implementing these recommendations, the Visit Lubbock Sports website can address the major usability challenges identified in this study. These changes will enhance navigation, improve information accessibility, and clarify site elements, supporting a more efficient and enjoyable user experience. Ultimately, these adjustments will better serve the needs of users planning sports events in Lubbock, facilitating more successful engagements with the website and contributing to increased bookings and user satisfaction.

Conclusion

The usability test of the Visit Lubbock Sports website was developed and conducted to evaluate how effectively users could achieve their goals related to sports event planning in Lubbock, Texas. While the website was designed to assist users with these specific tasks, the findings from this study revealed several areas requiring improvement to better meet user needs and expectations.

Participants generally appreciated the website's professional and polished visual design, describing it as engaging and modern. However, the usability challenges overshadowed these strengths. Key issues included navigation difficulties, insufficient content clarity, and inconsistent information architecture. These barriers significantly impacted user success rates, particularly in Scenario Three, where only a fraction of participants completed the task successfully. The study also highlighted a reliance on the "Contact Us" form, staffed by only two individuals, which may indicate inefficiencies in empowering users to independently locate information and complete tasks.

Feedback from participants emphasized the importance of improving the navigation architecture to better support task completion. Recommendations such as implementing a useful search function, reorganizing the website's information architecture, and creating detailed venue pages directly on the site emerged as priorities. These suggested changes would enhance users' ability to efficiently complete tasks and reduce the dependency on customer support.

Moving forward, it is recommended that Lubbock Sports implement these changes and continue monitoring and testing the website. A focus on mobile optimization, in particular, would expand accessibility and further enhance the website's usability for a wider audience. By addressing these critical usability issues, Lubbock Sports can create a more effective and user-friendly platform, ultimately developing better engagement and satisfaction among its users and building their brand effectively.

Appendices

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Appendix A: Recruitment Email

SUBJECT LINE: User Experience Testing Invitation

As part of a graduate class in user experience, I am carrying out usability tests on the Visit Lubbock website, which is the official website of Lubbock's official Convention & Visitors Bureau. These usability tests are designed to collect feedback and perspectives from you!

We are looking for participants who do not reside within 60 miles of Lubbock, are between the ages of 25 and 65, and are involved in sporting events in some way. If this is you, I would appreciate you taking the time to participate in a usability test to help inform the future of this website.

The usability tests are being carried out by myself and two additional graduate students of Texas Tech University studying user experience. They will be recorded but your feedback will be confidential and your name will not be associated with any of your responses. Each session will take approximately 45 minutes.

We will be conducting usability testing from October 15th to November 1st. If you can assist, please email me at (insert email here).

If you have any questions, please reach out, and I look forward to talking with you. Your help is very much appreciated as we work to find ways to help improve the website.

Appendix B: Informed Consent

Digital Informed Consent Form: <https://forms.gle/WHm2gQAL4brXpmpm7>

Title of Study: Visit Lubbock

You are invited to participate in a research study in which you are asked to test the ease of use of a particular product: either a website or a software program. You have been identified as a possible participant because you do not live within a 60-mile radius of Lubbock, are between the ages of 25 and 65, and attend or are involved in sporting events. We ask that you consider this research opportunity and ask any questions you may have before agreeing to be in the study.

This study is being conducted by students in User Experience at Texas Tech University under the instruction of Dr. Jason Tham in the Department of English at Texas Tech University.

Background Information

The purpose of this study is to observe people interacting with a product to gain information about its ease of use.

Procedures

If you agree to be in this study, your participation will consist of a questionnaire about your experience with the software product, the completion of specified internet tasks using a specific website or software program, and a short debriefing interview about your experience completing the specified tasks. Your participation will not exceed one hour of your time.

Risks and Benefits

There are no foreseeable risks associated with your participation in this study. Participation in this study may benefit you by encouraging you to think about how websites and software products could be improved to suit user needs and preferences. Your participation will also help students, program developers, and instructors learn more about product design improvements.

Voluntary Nature of Study

Your participation is strictly voluntary, and you are not required to participate in this study. You can withdraw from the study at any time. Your decision to withdraw will not affect your relationship with the university.

Confidentiality

The records of this study will be kept private. In any sort of report that may be published, no information will be included that will make it possible to identify a subject. Pseudonyms or numbers will be used in place of your real name to protect your identity. If you agree to participate in interviews, the video and audio of your interviews will be recorded. Only student researchers will have access to these data.

Contact and Questions

The researchers conducting this study are Jaden Cowley, Samantha Dine, and DeDee Ludwig-Palit. You may ask any questions you have about the study now. If you have questions later, you may contact any of us through e-mail at [list all emails here].

Dr. Jason Tham is the instructor of this class. You can contact Dr. Tham with any further questions at jason.tham@ttu.edu.

Statement of Consent

I have read the above information. I have asked questions and have received answers to my questions. I consent to participate in the study.

Signature _____

Date _____

Signature of Investigator _____

Date _____

Appendix C: Background Questionnaire

Digital questionnaire: <https://forms.gle/iXiocfr5uFpmU5DPA>.

1. What is your age?
 - 25-34
 - 35-44
 - 45-54
 - 55-65

2. What is your zip code?

3. What is your occupation?

4. What is the highest level of education you've completed?
 - Some high school
 - High school
 - Vocational program(s)
 - Some undergraduate
 - Undergraduate degree
 - Graduate/professional degree

5. How often do you use a computer?
 - Less than once a month
 - At least once a month
 - At least once a week
 - At least daily

6. How much time do you spend online weekly?
 - Less than 10 hours
 - 10-19 hours
 - 20-29 hours
 - 30-39 hours
 - 40-49 hours
 - 50 hours or more

7. Have you previously visited the Visit Lubbock Sports website?
 - Yes
 - No

Appendix D: Debrief Interview and Product Reaction Cards

In this usability study, we will ask debriefing questions to obtain qualitative insights into participants' overall experience with the Visit Lubbock website after completing the three scenarios.

These questions are designed to have users reflect on their experiences with and provide feedback they may not have expressed in the “think aloud” portion of the tasks. Below is a debrief interview script for the moderator and a list of the questions to be asked.

Debrief Interview Script

Thank you so much for completing the tasks and providing your feedback. Now, I'd like to ask you a few follow-up questions to better understand your overall experience with the Visit Lubbock website."

This part of the session will be more open conversation, so feel free to be as detailed or as brief as you'd like. There are no right or wrong answers, and your honest thoughts and reactions will be really helpful to us.

Final Debrief Questions

- When you think about the site as a whole, how would you describe your overall experience? Did anything stand out to you, either positively or negatively?
- If you could make any change to the website, big or small, what would it be?
- On the other hand, was there anything you particularly liked or found helpful?
- Finally, on a scale from 1 to 5, with one being very poor and five being very good, how would you rate the website's overall quality? And why did you choose that rating?

Closing the Debrief Interview

That's all for the debrief questions! Thanks again for sharing your thoughts; they're incredibly helpful as we look for ways to improve the website. Before we wrap up, is there anything else you'd like to add or any final thoughts about your experience?

Product Reaction Cards

In this usability test, we will use Product Reaction Cards to gain qualitative feedback on participants' emotional reactions after using the Visit Lubbock website, specifically related to ease of use, design, and overall functionality.

After each test session, participants will be presented with 25 descriptive words from an adapted version of the Microsoft Desirability Toolkit. Users will be asked to select 3 to 5 words that best

describe their experience with the website. Once participants have chosen their words, we will conduct a brief debrief interview to understand the reasoning behind their selections.

The Microsoft Desirability Toolkit was chosen because of its previous use in UX research and because it allows users to choose from comprehensive and balanced vocabulary options to describe their reactions.

We adapted the original set of 118 words to 25 to ensure our users are not overwhelmed. The 25 words were chosen to create a mix of positive, negative, and neutral words and words that align with our overall research question.

Analyzing the chosen Product Reaction Cards will allow us to see possible patterns of emotional and experiential themes, which can help us understand further ways to improve the website.

List of Words for Product Reaction Cards:

Positive Words

- Helpful – The site provided useful information that guided you effectively.
- Clear – The information and navigation were easy to understand.
- Easy to Use – The site was simple and intuitive to navigate.
- Organized – The layout and structure made sense and were easy to follow.
- Informative – The content provided valuable and detailed information.
- Professional – The site had a polished and reliable feel.
- Engaging – The website captured your attention and kept you interested.
- Fast – The site loaded quickly and responded well.
- Convenient – It was easy to find what you needed without hassle.
- Reliable – The site worked consistently without any issues.

Negative Words

- Confusing – It was hard to understand where to go or what to do.
- Frustrating – The experience made you feel annoyed or stuck.
- Difficult – Completing tasks or finding information was challenging.
- Unclear – The site lacked clarity in its instructions or layout.
- Slow – The site took too long to load or respond.
- Overwhelming – The information or layout felt too busy or complex.
- Incomplete – Key information or details were missing.
- Unorganized – The site felt chaotic or poorly structured.
- Inconsistent – The experience was not uniform throughout the site.
- Unreliable – Certain features didn't work as expected or frequently broke down.

Neutral Words

- Simple – The site’s design or experience was basic but functional.
- Familiar – The site felt like something you’ve used before.
- Predictable – The experience was as expected, without surprises.
- Ordinary – The site didn’t stand out, but it worked adequately.
- Straightforward – The tasks were clear, but nothing exceptional.

Below is a script for the moderator to use when administering the Product Reaction Cards:

Moderator Script

Thank you so much for completing the tasks today. Before we wrap up, I’d like to gather more feedback about your overall experience with the website using Product Reaction Cards. These cards contain words that describe various feelings and impressions people might have when using a product, in this case, the Visit Lubbock website.

On these cards, you will see a set of positive and negative words, and I’d like you to choose a few that best represent your feelings about the website. You can choose anywhere from 3 to 5 cards total that you think describe your experience the most accurately. After you’ve chosen the words, we’ll talk briefly about why you picked each one.

Take your time reading through the words. Once you’ve made your choices, I’ll ask you to share why you selected them. There are no right or wrong answers here; these are just to help us understand how the website felt to you and how it could be improved.

Also, if none of these words match what you’re thinking, feel free to describe your experience in your own words afterward.

Appendix E: Moderator Script

Introduction

Thank you so much for agreeing to be part of this usability test. I'm _____, a graduate student at Texas Tech University. I am doing an in-depth usability study and as part of my study, I will be guiding you through a usability test over the next 45 minutes. Your help is very much appreciated as we work to find ways to help improve the website.

Videotaping Permission

Today we will be videotaping this usability session. This will allow other participants who are collaborating on this project the opportunity to review the session if they have any questions. In addition, we may potentially use video clips in academic and professional presentations.

Here is a permission form stating you allow us to videotape the session. Are you comfortable signing this form? (*provide consent form*)

Introduction of the Evaluation Environment

The testing sessions will be conducted via video conferencing and screen-sharing tools, allowing me to guide you through tasks and ask questions in real time. No observers will be physically present, but additional team members may view the session via the video conferencing platform in real time to take notes and gather insights.

Introduction to the Test

The test we will be going through is designed to allow you to explore a website to determine if it works as intended for the target audience. The website we will be testing is the Visit Lubbock website. This is the official website of Lubbock's official Convention & Visitors Bureau.

Over the course of the test, I will give you some tasks to do on the site and then ask you some questions to get your feedback. I really appreciate getting all of your feedback about your experience, so we would like you to tell us what you are doing and why you are doing it. For example, during the test, you may say something like "I am clicking on _____ because", "I chose this answer because _____", "this doesn't make sense because _____" and so on.

Also, I did not create this website, so you can say whatever you think without offending me. During the session, I am just going to sit here with you, and I may ask you some questions from time to time. Before we start, do you have any questions?

Pre-test Questionnaire

Before we start I would like you to fill out this questionnaire to help us understand your experience using other websites. You can use the link I put in the chat to complete the form. Please let me know when you've completed the form.

[When the questionnaire is completed:] Thank you so much for providing your feedback.

During Testing

We have several scenarios for you to work through. Remember, this is not a test of you. This is not an assessment of you or your capabilities and you cannot do anything wrong. This is a test of the website and its functionality and we are very interested in your reactions about it.

After finishing the introduction, I will have you open the internet browser and navigate to <https://visitlubbock.org/>. I will then provide you with 3 scenarios and related tasks and observe you as you carry them out.

Please remember to think out loud. After each scenario, when you tell me you are done, I will provide you with a few questions and then we will move on to the next scenario.

Do you have any questions or concerns before we begin?

[After each scenario:] That was excellent feedback. Now, please complete these few questions and tell us what you are writing down as you fill out the questionnaire.

Post-test Interview

Thank you so much for completing the tasks and providing your feedback. Now, I'd like to ask you a few follow-up questions better to understand your overall experience with the Visit Lubbock website."

This part of the session will be more open conversation, so feel free to be as detailed or as brief as you'd like. There are no right or wrong answers, and your honest thoughts and reactions will be really helpful to us.

- When you think about the site as a whole, how would you describe your overall experience? Did anything stand out to you, either positively or negatively?
- If you could make any change to the website, big or small, what would it be?
- On the other hand, was there anything you particularly liked or found helpful?
- Finally, on a scale from 1 to 5, with one being very poor and five being very good, how would you rate the website's overall quality? And why did you choose that rating?

Before we wrap up, I'd like to gather more feedback about your overall experience with the website using Product Reaction Cards. These cards contain words that describe various feelings and impressions people might have when using a product, in this case, the Visit Lubbock website.

On these cards, you will see a set of positive and negative words, and I'd like you to choose a few that best represent your feelings about the website. You can choose anywhere from 3 to 5 cards

total that you think describe your experience the most accurately. After you've chosen the words, we'll talk briefly about why you picked each one.

Take your time reading through the words. Once you've made your choices, I'll ask you to share why you selected them. There are no right or wrong answers here; these are just to help us understand how the website felt to you and how it could be improved.

Also, if none of these words match what you're thinking, feel free to describe your experience in your own words afterward.

Closing the Debrief Interview

That's all for the debrief questions! Thank you again for sharing your thoughts; they're incredibly helpful as we look for ways to improve the website. Before we wrap up, is there anything else you'd like to add or any final thoughts about your experience?

After Testing

Thank you again for your participation and for taking the time out of your busy schedule to complete this usability test. Your feedback has been incredibly insightful and we're appreciative of you taking the time out of your day to participate.

Appendix F: Participant Bill of Rights

1. **You are not being evaluated**

The term “usability evaluation” refers to evaluating a software product (an application or Web service), not a person. The usability team considers you a partner in the design of the product. Any difficulties you encounter during this session help us identify which parts of the product need to be improved.

2. **You may leave at any time**

You are taking part in the evaluation as a volunteer. You have the right to interrupt the evaluation or withdraw from it at any time, for any reason. You do not need to give a reason.

3. **You will be informed that you are being observed**

You will be observed via the Zoom screen share. Usability team members may observe both the live and recorded sessions. If you are a University employee, you will not be observed by your supervisor without your knowledge and written consent. You have the right to have any relevant questions answered.

4. **You will be informed if and how you are being recorded**

During this session, the usability team will observe and may record your actions, your voice, your computer screen, and/or where you look on the computer screen. These may be video or audio recordings. You have the right to ask and receive answers to any relevant questions about the process, equipment, and recordings.

5. **Your identity will be kept confidential**

Usability team members have signed Code of Conduct agreements that contain their promise to keep your identity confidential. Any reports resulting from this session will protect your anonymity. Any records from this session which might identify you will be kept confidential by the usability team. These include forms, notes, and recordings which could identify you. You may be recognizable on video or audio recordings, but this session will not be recorded without your written consent. You have the right to be informed what the session records will be used for. The records may not be used for purposes other than those you have agreed to unless your additional written consent is obtained.

6. **Video and Audio Recordings will be destroyed upon request**

When no longer needed for design purposes, any video or audio recordings containing your picture or voice from this session will be destroyed. You have the right to request that the recordings from the session be destroyed, whether or not you complete the session.

7. **You will be treated with respect**

You have the right to be treated politely and with respect during the evaluation. Humor is allowed, but you are invited to set the tone that you feel most comfortable with.

Appendix G: Observation Sheet

This will be used to record all of the observations from the user tests. Digital observation sheet:
<https://forms.gle/CmMNRq4z9boRJdw99>

Test Date:

Test Administrator:

Scenario Number:

Task Time:

Task One:

Task Two:

Task Three:

Task Four:

Task Five:

Task Six:

Observations:

Think Out Loud Comments and Questions:

Was the goal of the scenario completed successfully (mark “check” if so):

Yes

No

If no, please specify which specific task was NOT completed successfully:

What errors or difficulties did the user encounter regardless of whether the scenario was ultimately completed?

What specific tasks seemed to be easiest for the user to accomplish?

Additional Notes: