

Madison Audition Hub Final Evaluation Project Report

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Executive summary

This was a user test of a prototype build of the Madison Audition Hub. It was conducted on July 26th, 2020, using three testers over the Zoom video conferencing platform. The goal of the test was to evaluate the usability and satisfaction of the major features of the website built for performers searching for local auditions to attend.

The participants included three males (due to timing and scheduling, I was unable to secure testers of other genders. This will be addressed in further testing). Two of our testers have recent experience in theater and auditions, while the third had no experience. For our experienced performers, one strictly only had a background in acting, while the other had additional experience in Producing and Directing.

Each test session was about 30 minutes long and took place entirely virtual. The test included three tasks, each followed by a four-question After-Scenario Questionnaire. The test concluded with a System Usability Scale questionnaire about the entire test.

Overall, the results of the test are positive. All three testers had positive reactions to the software and were able to complete all three tasks with ease. There were a few small design changes that were suggested or came from the very few errors that occurred, but overall, the design is in the right direction.

Identified problems:

- The system of filtering and searching needs more detail and explanation.
- The display of informational dates was too broad. Testers want specific day-by-day listings.
- The forms themselves appeared very busy.
- The button to access pre-saved form when registering needs to be reworded.
- The buttons to submit the forms were not where they were expected to be.

In this document, you will find a description of the product, the goals, and research questions for the testing. You will also find the results, a discussion of those results, and any implications or design changes that will occur because of the results and analysis. Finally, attached, you will find the appendices of the various forms and documents created for this testing.

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Introduction/Background

While participating in the theater community here in Madison, WI, one of the biggest frustrations I have heard from folks is the process to find auditions in the area. Websites seem outdated, you might now be on the right e-mail list, or not use popular social media like Facebook. Actors have summed up the knowledge of auditions as "If you know, you know." This discovery method has been very problematic as it disadvantages newer participants from finding the information they want. A desire has been brought up several times for a new, up to date website to promote auditions.

The Madison Audition Hub is a digital portal for Madison and Madison-area community theater performers who can search and register for auditions in the area. The site gives a single, accessible place to find exactly the info they are looking for in an audition listing. It will allow performers to save their information, relieving the monotony of filling out the same information for each separate audition. Additionally, it gives production companies a digital place to promote auditions, collect audition forms, and see how many people have registered. In this way, it provides a more sustainable approach to run auditions, giving an accurate count of interest, reducing the need for paper, and reducing the human error caused by handwriting.

The main stakeholders of this product would be the various production companies who would use the site to promote their auditions. There are over 40 production companies in Madison, so for the sake of the first release, I have narrowed down to a core set of stakeholders being the Participating Theatre Companies (PTCs) of the Bartell Theatre. This group consists of five PTCs of varying types of shows and audiences that participate in one of the most popular theaters in Madison.

Testing is critical to this product. We need to ensure that the site is easy to use and does not bring more tedium to a process already seen as tedious. Additionally, we need to ensure that the process and terminology are easily understandable to those new to the community and new to auditioning. Finally, and probably most importantly, we need to ensure that this will be a product that would be widely used by all in the community.

Design Goals and Testing Research Questions

The purpose of this test is for the following goals and to answer their related research questions:

1. To ensure users can easily navigate the website to find what they are seeking.
 - a. How easily can the tasks be completed?
 - b. Is all the information present relevant?
 - c. Is all the terminology understandable?
2. To assess the features added, ensuring no features are forgotten or unneeded.
 - a. Are there any features that are missing?
 - b. Are there any features that you do not like?

Method

Participants

The past-performing users were recruited via Facebook. One non-performer was recruited from classmates. The criteria for finding performers were based on the following:

- 1 High-participating performer
 - These users are performers in the area who are heavily involved in the theater community. * Specifically, these performers will participate in multiple auditions a year. These users are essential because they are more likely to experience the "tedium" expressed in my prior research. They would also have experiences with many different types of auditions, which could lend to varied suggestions on what has worked and what has not.
- 1 Low-participating performer
 - These users are performers in the area who are not as heavily involved in the theater community. * Specifically, these performers will participate in one audition a year, if any at all, though they will not have longer than a year and a half gap between auditions. These users are significant because I am curious as to why they have not auditioned much. It could be from lack of interest, difficulty finding an audition, or intimidation of the process. They would also have experiences with the auditions they have participated in, which is valuable.
- 1 non-performer
 - This user has never participated in an audition. Their insight will be valuable as they will be more unfamiliar with common theater terminology or process, and it will be essential to ensure that newcomers to the community will be able to use the website to its fullest.

*Note: this criterion will be based on pre-pandemic participation.

Participant demographics:

	Gender Identity	Location	Age	Years of Theater Involvement	Recently audition?
Participant 1	Male	Madison, WI	28	5+ years	Yes
Participant 2	Male	Sauk City, WI	35	5+ years	No
Participant 3	Male	Willoughby, OH	51	0-2 years	No

Research Questions, Scenario, and Tasks

The following five research questions are what I am to answer:

1. How easily can the tasks be completed?
2. Is all the information present relevant?
3. Is all the terminology understandable?

4. Are there any features that are missing?
5. Are there any features that you do not like?

The scenario was given to the user as follows: *You are an actor who lives in Madison, WI, looking for new acting opportunities in local community theater. One of your biggest frustrations is finding relevant auditions in the area. One of your friends mentioned to you the Madison Audition Hub as a good source, so you decide to visit the website and check it out. Please complete the following tasks:*

Task 1: Explore the site and register for an audition of your choice

This task will have the least amount of handholding and allows the user to explore the site at their own pace. The information gathered from this task will allow me to evaluate the usability of the website to be able to complete the task. It will also allow me to evaluate the information presented to the user to ensure that relevant information is displayed.

Task 2: Create an audition form for another show

The feature to be able to create a form ahead of time and use it for an audition registration came out of the user research expressing the tedious nature of re-entering the same information for each separate audition. I want to ensure that I got this feature correct in design, and if any additional improvements need to occur.

Task 3: Use the audition form you created to register for a specific audition

This task is a continuation of the previous one, to show how a user can use the form they created when registration. I want to ensure this process is understandable and usable. Additionally, this task required the user to do some filtering of the audition listings. I want to make sure this process is intuitive to the user.

Procedure

The user and I met via zoom, where I recorded the session to get interactions and emotional response. I gave the user a link to a survey form via Qualtrics for them to fill out between tasks. The user began by filling out the pre-test questionnaire. Once complete, we started the first task. I asked about their general first impressions on the website, any likes, and dislikes, and what may be missing. From there, we continued the task of registering for an audition. For each new page, I asked for the user's first impressions again. We continued until the task was complete. The user then filled out an After-Scenario Questionnaire (ASQ) for that task. Once the questionnaire was finished, we moved on to the next task, creating a pre-saved form. Again, for each new page, I asked for first impressions, and after the task, an ASQ was taken. The final task was to use that pre-saved form to register for a specific show. Since all the pages were previously seen, I let the user complete this task on their own with little to no intervention, having them think out loud. Once the task was complete, they completed one last ASQ and then proceeded to the System Usability Scale to evaluate the entire experience. I asked for any final comments, questions, or suggestions, and ended the test.

Data Collection

Here are the goals and questions with the metrics I was looking to gather:

1. To ensure users can easily navigate the website to find what they are seeking.
 - a. How easily can the tasks be completed?
 - i. I want the user to be able to complete the tasks as easy and quick as possible, as the monotony of the process was the chief complaint by users of the current process. This question will be measured by:
 1. Number of clicks
 2. Number of errors
 3. Time to complete
 - ii. I will also interview the user for their satisfaction and to learn of anything that might be confusing in the process that automatic data might not pick up on.
 1. After-Scenario Questionnaire (ASQ) post-task
 - b. Is all the information present relevant?
 - i. Interviewing the user after the test will be essential to ensure I am presenting all the relevant information to the user and either not missing anything or presenting things that might be unnecessary.
 1. After-Scenario Questionnaire (ASQ) post-task
 2. System Usability Scale (SUS) post-test
 - c. Is all the terminology understandable?
 - i. An interview with the user post-task will be conducted to ensure the verbiage used is understandable by all experiences in theater. This test is so that users new to the theater community would understand the process just as well as someone more experienced.
 1. After-Scenario Questionnaire (ASQ) post-task
 - ii. I will also be using the number of errors the user makes as a sign that things might not be as understandable as I thought.
2. To assess the features added, ensuring no features are forgotten or unneeded.
 - a. Are there any features that are missing? AND Are there any features that you do not like?
 - i. An interview with a user post-test will occur to gain the satisfaction of the features, and if any additional features are missing that are essential to the product.
 1. System Usability Scale (SUS) post-test

Question/Metrics/Data Grid

	RQ	Metrics & Data	Data Analysis
1	How easily can the tasks be completed?	M: Time spent for task completion; Number of errors occurred when performing the task D: Time measured in seconds; Count of errors	Descriptive statistics (including Mean, Median, SD)
2	Is all the information present relevant?	M: Perceived relevancy of the information D: ASQ scores (after the task is complete)	Descriptive statistics (including Mean, Median, SD); Paired t-test or correlation between returning and new performers
3	Is all the terminology understandable?	M: Number of errors occurred when performing the task; Perceived understanding of information D: Count of errors; ASQ scores (after the task is complete)	Descriptive statistics (including Mean, Median, SD); Paired t-test or correlation between returning and new performers
4	Are there any features that are missing?	M: Perceived presence of relevant features D: SUS scores (after the full test is complete)	Descriptive statistics (including Mean, Median, SD)
5	Are there any features that you do not like?	M: Perceived usability of features D: ASQ scores (after the task is complete); SUS scores (after the full test is complete)	Descriptive statistics (including Mean, Median, SD)

Results

Research Questions Analyzed

How easily can the tasks be completed?

Overall, I am satisfied with the ease of completing the tasks in this scenario			
	T1	T2	T3
p1	1.00	1.00	2.00
p2	2.00	1.00	1.00
p3	2.00	1.00	2.00
Mean	1.67	1.00	1.67
Sdev	0.47	0.00	0.47
Median	2.00	1.00	2.00

1 – Strongly Agree -> 7 – Strongly Disagree

The users were asked to answer the above question for each task on a scale of 1 (Strongly Agree) to 7 (Strongly Disagree). Tasks 1 and 3 showed that the users averaged between Strongly Agree and Agree, closer to Agree. Task 2 had all three testers agreed on Strongly Agree. During impression questions, the users expressed that the buttons were clear and informative and made the process much quicker. The experienced users were excited and relieved to see the option of saving information for later. The method of filtering was intuitive, but how they were displayed, while visually pleasing, needed more explanation. Overall, the results show that the users are delighted with the ease of completing the tasks.

Overall, I am satisfied with the amount of time it took to complete the tasks in this scenario			
	T1	T2	T3
p1	1.00	1.00	1.00
p2	1.00	1.00	1.00
p3	2.00	1.00	1.00
Mean	1.33	1.00	1.00
Sdev	0.47	0.00	0.00
Median	1.00	1.00	1.00

1 – Strongly Agree -> 7 – Strongly Disagree

The users were asked to answer the above question for each task on a scale of 1 (Strongly Agree) to 7 (Strongly Disagree). Task 1 showed that the users averaged between Strongly Agree and Agree, closer to Strongly Agree. Tasks 2 and 3 had all three testers agreed on Strongly Agree. During the interview, the inexperienced user did not have anything to share on what is or is not relevant. Still, I feel once the system is live, new participants can give their opinions more of what was missing. As for the experienced users, their chief complaint was the show dates in the show's info tab. To save space, I presented it as a single range of dates (July 3rd

thru July 27th), but since not all of these dates were performance dates, they would like it more specific (July 3rd, 4th, 8th, 9th, 10th, etc.). Overall, the results show that the users are happy with how quickly they can complete these tasks.

Is all the terminology understandable?

Number of errors	
p1	1
p2	0
p3	1

While completing the tasks, two of the three users experienced an error during one of the tasks. This low number of mistakes shows that, as is, the design has a very high amount of accuracy for all types of users.

Overall, the information that was presented to me on the web page was easily understandable			
	T1	T2	T3
p1	1.00	1.00	1.00
p2	2.00	3.00	2.00
p3	1.00	1.00	2.00
Mean	1.33	1.67	1.67
Sdev	0.47	0.94	0.47
Median	1.00	1.00	2.00

1 – Strongly Agree -> 7 – Strongly Disagree

The users were asked to answer the above question for each task on a scale of 1 (Strongly Agree) to 7 (Strongly Disagree). Task 1 showed that the users averaged between Strongly Agree and Agree, closer to Strongly Agree. Task 2 showed that the users averaged between Strongly Agree and Somewhat Agree, closer to Agree. Task 3 showed that the users averaged between Strongly Agree and Agree, closer to Agree. During interviewing, while our experienced users understood things very quickly, I was more interested in our inexperienced user's understanding of the system. They appreciated where I added further explanation and detail into what information was presented. Overall, the inexperienced user completed the test with the same accuracy and speed of those who had more experience in theater. The results show that the users are satisfied with how understandable the terminology is, although there is some room for improvement in Task 2.

Are there any features that are missing? AND Are there any features that you do not like?

SUS												Total Score
Performer -1	Not - 2	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	
p1	1	5.00	1.00	5.00	2.00	4.00	1.00	5.00	1.00	5.00	1.00	85.00
p2	1	5.00	2.00	4.00	1.00	5.00	1.00	5.00	1.00	4.00	1.00	92.50

p3	2	5.00	1.00	4.00	1.00	5.00	1.00	5.00	1.00	5.00	1.00	97.5
Mean												91.67
Sdev												5.14
Median												92.50

Correlation (r) = 0.80

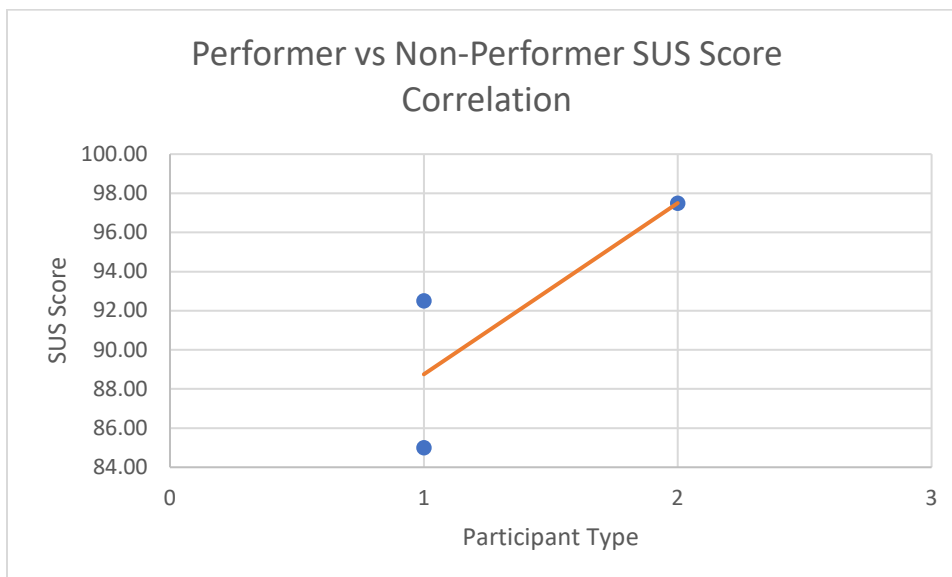
R2 = 0.64

The SUS scores of all three users ranged from 85.0-97.5, with an average score of 92.5. All the scores resulted in an A+ Grade. When compared to the Web category benchmarks, these scores exceed the benchmark of 67, meaning the site has very high satisfaction among users.

When asking for additional comments or recommendations, the only one that came out from our inexperienced user. They said that the form felt busy, so any way to add more whitespace or make it less intimidating would help a lot. Other than that, there were no additional comments made about what was disliked or missing.

Is there a correlation between Current and New Performers' satisfaction with the site?

One of the main goals of my testing is to ensure there is equal satisfaction between users who are current performers and newcomers to the community. I want to ensure that they both have equivalent experience, honoring the knowledge of frequent performers while balancing the lack of knowledge of newer performers. By comparing their SUS scores, I will be able to see the correlation between the two groups' satisfaction.



Performer (1) vs. Non-Performer (2)

For the data I have, the relationship showed the correlation between the two groups implies that non-performers will give higher SUS scores than performers. However, due to the low amount of data I have, the correlation may not be as accurate as I need. I then performed an

independent t-test on the two groups to see if that would help give some indication to the differences between the two groups.

<i>SUS Scores</i>	<i>Performer</i>	<i>Non-performer</i>
Mean	88.75	97.5
Variance	28.125	-
Observations	2	1
Pooled Variance	28.125	
Hypothesized Mean Difference	0	
df	1	
t Stat	-1.34715063	
P(T<=t) one-tail	0.203259864	
t Critical one-tail	6.313751515	
P(T<=t) two-tail	0.406519728	
t Critical two-tail	12.70620474	

With a $p > 0.05$, the data analysis does not prove a significant difference between the users based on whether they are currently involved in theater. This data shows that our design is working for both user types, not just those with pre-existing experience with theater.

Discussion

I am honestly surprised there were not more issues that were found. The reception to the website was very positive and exceeded my expectations. I hope to get more testing data in the future to confirm this, but it seems as if I am very much on the right track. The biggest surprise was from my non-performer, who seemed to understand the terminology and process a lot better than I expected. My concern was the potential for massive confusion and related frustration, but this user got it down a lot quicker.

While my data and scores show there were high levels of satisfaction with the website, that does not mean I did not notice a few problems and opportunities to improve. If there were a point of confusion in the site as-is, it would be in the filtering and searching feature. The visual of "exact" and "partial" matches to terms was well received, but there was a desire for more detail, specifically with the "partial" match results.

Additionally, while it did not impede progress, there were a few button locations that the users felt were unexpected that I could improve upon the placement. Other small issues were specific information being more detailed or present, though not having this information did not lessen their experience. These are simple points that, if improved, will only raise the experience even more.

Overall, I am impressed with the results and relieved to know things are headed in the right direction. I am looking forward to continuing to test with users to gain more data, but I feel the product is in a great place to at least begin production.

Implication/Recommendations

Here are what I am looking to change in my system's design based on the feedback:

1. Reduce sizes of the form fields to add more whitespace.
2. Reorder the filters to be so "location" is the left-most.
3. Rename the button to choose pre-made form to something more descriptive
4. Move the Save as Draft and Submit buttons to the bottom of the forms
5. Add icons or descriptive text to search results that are "partial" match as to show what pieces of criteria they do match.
6. Add show location to the show info page in addition to the audition location.
7. Remove the "Save as Draft" button for pre-saved forms
8. Ensure there is validation that everything needs to be filled out except for the "additional information" section
 - a. Add a "No conflicts" button to the conflicts section for the user to consciously indicate they have no date conflicts to report.

Appendices

1. Task Testing Scenario
2. Consent Form
3. Pre-Test Interview
4. After Scenario Questionnaires (ASQs) (one for each task, for a total of 3)
5. System Usability Scale (one at the end of the entire test)

Task Testing Scenario

You are an actor who lives in Madison, WI, looking for new acting opportunities in local community theater. One of your biggest frustrations is finding relevant auditions in the area. One of your friends mentioned to you the Madison Audition Hub as a good source, so you decide to visit the website and check it out. Please complete the following tasks:

Task 1: First Impressions

You arrive at the home page of the website. Please describe your first impressions of the site in the following ways:

- What do you like/dislike about the site on a first look? How does the site make you feel?
- What is the first thing you notice when you get to this page?
- Without interacting, what else do you think you can do with the site?

Task 2: Create your profile

To take full advantage of the website, you need to create your profile and log in. Complete this process.

Task 3: Identify Auditions

Now, browse the website as if you were looking for auditions to attend. **List 5 auditions that interest you and write down the most important details from each listing.**

Task 4: Register for any audition

Out of the five auditions you listed in the previous task, choose the one that is the most interesting to you and register for it.

Task 5: Create a pre-saved audition form

During the previous task, you were asked if you would like to save your information for later use. You decide you want to save a version of the information for a Drama-specific play too. Go to your audition forms and create a new one for Dramas.

Task 6: Register for a Drama audition in Sun Prairie using the form you created

Your friend has messaged you and said he was going to audition for a drama in Sun Prairie, WI and that you should join them. Find an audition that fits that criteria and use the form you just created to register for it.

Task 7: Final Impressions

Now that you have had time to explore the website, please give us your overall impressions of the Madison Audition Hub:

- What do you like/dislike about the website?
- Did you understand everything that was presented to you? If not, what could be explained better?
- What other improvements and/or features would you recommend?

Do you have any additional comments about the website?

Informed Consent for Usability Participants

Web site:

<https://www.madauditions.com/>

Purpose of this study:

The purpose of this study is to test features of a new website we are building for the Madison theater community. Your participation in this study will help us to develop this web site to the needs and desires of its users.

Information we will collect:

We will ask you to try a prototype for a new website we are building for the Madison theater community. We will observe how you interact with it and will also interview you briefly. The information from your visit will be used, along with that from other similar visits, to improve the site. Summary data may be used in publication for educational/research purposes.

Video permission:

We will take handwritten notes and video tape the session. By signing this consent form, you are giving us consent to use your verbal statements and images, but not your name, for the purposes of demonstration and evaluation. Summary data may be used in publication for educational/research purposes.

Non-disclosure:

We may discuss ideas with you or show you web designs which are not yet announced. We are doing this so we can get your feedback only. By signing this form, you agree not to tell anyone, including family members, detailed information about this visit and about any new interface designs you observe during this interview. What you can say is that you participated in a study to help improve the web site.

Freedom to withdraw:

You are free to refuse to participate, take a break, or withdraw from this study at any time. Please let us know when you need a break.

Participant signature:

Participant name (printed):

User Test Pre-Interview

Greetings! We are excited to show you what we have been working on. Before we begin, we just have a few questions to ask you. Please keep in mind the answers you give will be kept anonymous and only be used for data collection to assist with the improvement of the app, as well as to get to know our audience better.

What is your gender Identity?

Where do you currently live? (Please state city and state)

How old are you?

How many years have you been involved in community theater?

0-2 years

3-5 years

5+ years

Have you auditioned for a show in the past 12 months?

Yes | No --- **If yes, how many shows, whether you were cast or not?** _____

**What type of shows are you interested in auditioning for?
(Select all that apply)**

Plays

Musicals

One-acts

Readings

Other

How far are you willing to travel for an audition? (Please indicate the number of miles)

Please rate how important the following pieces of information are when deciding on what to audition for

	Extremely Important	Very Important	Moderately Important	Slightly Important	Not at all Important
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Audition Dates					
Show Dates					
Location					
Show description					
Roles available					
Director Name					
Theater Company					

Please rate the following mediums of finding auditions

	Very Effective	Somewhat effective	Neutral	Somewhat Ineffective	Very Ineffective
Facebook					
E-mail list					
Word of mouth					
Theater company's website					
General theater website					

How confident are you with finding auditions currently?

- Very confident
- Somewhat confident
- Neither confident nor unconfident
- Somewhat unconfident
- Very unconfident

After Scenario Questionnaires (ASQs)

	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
Overall, I am satisfied with the ease of completing the tasks in this scenario							
Overall, I am satisfied with the amount of time it took to complete the tasks in this scenario							
Overall, I am satisfied with the support information (online-line help, messages, documentation) when completing the tasks							
Overall, the information that was presented to me on the web page was easily understandable							

If you have any additional comments for this scenario, please enter them below.

System Usability Scale

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I think that I would like to use this system frequently.					
I found the system unnecessarily complex					
I found the system was easy to use.					
I think that I would need the support of a technical person to be able to use this system.					
I found the various functions in the system were well integrated.					
I thought there was too much inconsistency in this system					
I would imagine that most people would learn to use this website very quickly.					
I found the website very intuitive.					
I felt very confident using the website.					
I could use the website without having to learn anything new.					