

STEAMBASSADORS Usability Evaluation: Heuristic Evaluation and Cognitive Walkthrough

Evaluation Completed By: Jacob Kornfeld

1/29/2024

The objective for these evaluations was to analyze the usability of the STEAMBASSADORS gig board and main pages for possible improvements.

<https://sesp.northwestern.edu/research-impact/community-education-partnerships/steambassadors/>

Introduction:

STEAMBASSADORS is a Chicago based organization aimed at giving college students opportunities to work with the youth in the Chicago land area, to code drones, robots and more as well as make games, and music beats with no experience necessary.

The goal:

Examining the main page of the Steambassadors organization as well as evaluating the gig board and application process. I will evaluate the websites on a scale shown below.

1 = cosmetic problem only: doesn't need to be fixed unless extra time is available

2 = minor usability problem: fixing this should be given low priority

3 = major usability problem: fixing this should be given high priority

4 = usability catastrophe: MUST fix this before product can be released

A cognitive walk through will also be debriefed as going through these sites, a few errors and other road blocks were noticed that would make user struggle.

Methods:

In our team we evaluated the STEAMBASSADORS website using two methods to locate errors and find ways to improve. Heuristic evaluation and cognitive walkthrough, each offering unique perspectives on the site's usability. The heuristic evaluation involved a systematic assessment based on recognized usability principles. A detailed examination was conducted, considering ten heuristics, namely visibility of system status, match between system and the real world, user control and freedom, consistency and standards, error prevention, recognition rather than recall, flexibility and efficiency of use, aesthetic and design, help users recognize and recover from errors.

Next we all completed a cognitive walkthrough, focusing on a specific user scenario—scanning the website, checking requirements, and applying for a position using the online application found on the main page. This task-oriented approach aimed to uncover potential obstacles users might encounter during these actions. The scope of the walkthrough included steps such as reading about the program, checking requirements, finding FAQs, and ultimately applying for a position. Specific questions were posed at each step, assessing the visibility of controls, the user's ability to link controls with actions, and the appropriateness of feedback. The findings of both evaluations are detailed in Appendix A for the

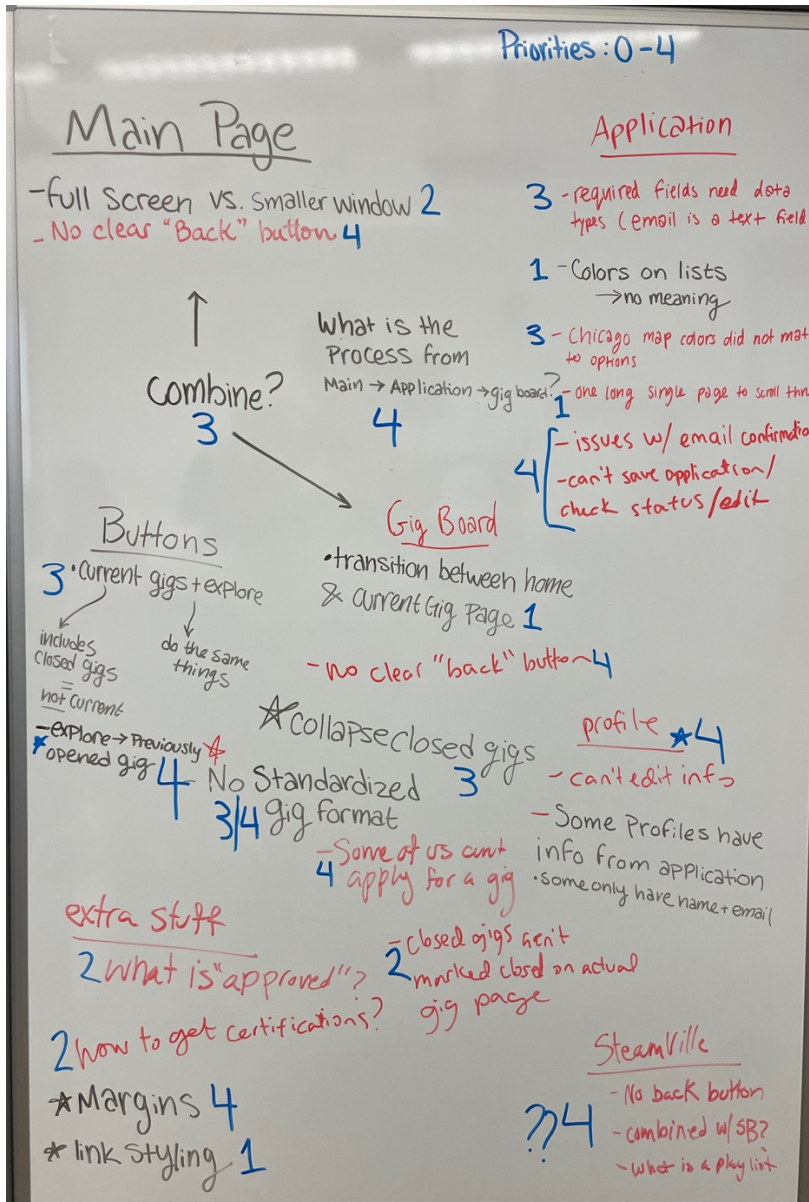
heuristic evaluation and Appendix B for the cognitive walkthrough, providing a comprehensive analysis of the website's strengths and areas for improvement.

Summary of Positive Findings:

Appendix A: Positive findings: The main website for the STEAMBASSADORS program has a very clean and aesthetically pleasing layout that consists of a navigation bar at the top and the site acts as a scroll like web page.

Appendix B: Positive findings: For one of our group members, when they filled out the application, the information inside of the application transferred over to her profile for STEAMBASSADORS automatically. Even though you aren't able to edit this information, the transferring of personal and important information is useful when creating accounts, submitting application etc. to avoid repeating your information. Can be seen getting rid of tedious activities.

Summary of Usability Problems:



- 1 = cosmetic problem only: doesn't need to be fixed unless extra time is available
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Conclusion:

Using heuristic evaluation methods and a cognitive walkthrough, I examined the STEAMBASSADORS website to assess its user-friendliness as well as finding ways to improve the system. The heuristic evaluation highlighted positive aspects, including a clean layout that was aesthetically pleasing, intuitive navigation that allows for quick maneuvering around the page. Issues such as having two apply buttons and the placement of specific sections on the main page, were categorized based on severity. A few major issues with both the main page and the Gig board would be no clear back button for either website along with them being two separate websites in general. Our entire team agreed that it would be much more beneficial to have these two websites merged into one to minimize confusion for someone signing up.

Additionally, the cognitive walkthrough, focusing on a user scenario of exploring the website, checking requirements, and applying for a position, showed a few more problems. The single-page format presented challenges, potentially causing some users to get lost on the page when there isn't a clear format that they are used to. As well as the email fill-out function during the application process exhibited bugs, particularly in recognizing valid email entries. If a user where to fill this out incorrectly there is no error message to help that user.

In conclusion, while the STEAMBASSADORS website has been designed with a user-friendly there is much needed work for improvement multiple areas including user flow and user response. Insights from both heuristic evaluation and cognitive walkthrough provide specific recommendations to enhance the visibility and navigation primarily

Recommendations:

- Gig board: Change either the "current gigs" and "explore gigs" button so they don't do the same thing. Both buttons right now share the same function. The gig board has a total of 4 buttons on the home page and two of them do the same thing.
 - Make the closed gigs on the Gig board collapsible so the user doesn't have to view all 40 closed gigs. The open gigs are available above them however at the moment there are only 4, which is overwhelming by the 3 page list of closed gigs below. Add a carrot icon to keep the closed gigs more organized.
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APPENDIX A: Heuristic Evaluation

Worksheet: Heuristic Evaluation

Heuristic Evaluation Steambassadors website Date: Jan 22th 2024 Evaluator: Jacob Kornfeld

Heuristics	Notes
<p>Visibility of system status. The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.</p>	<ul style="list-style-type: none"> Information about the program is easily accessible from the first page with an apply button at the top Users are able to navigate around the cite from the nav bar one the first page
<p>Match between system and the real world. The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.</p>	<ul style="list-style-type: none"> A small excerpt is shown to the user where to apply and a button located under the excerpt. When you scroll down the information is laid out from most important to least important with the companies who are funding the product at the bottom, and information and the ability to apply are towards the top.
<p>User control and freedom. Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.</p>	<ul style="list-style-type: none"> Since the buttons in the nav don't necessarily take you to a separate page, they only bring you farther down the first page it is pretty east to make your way around by just simply scrolling
<p>Consistency and standards. Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.</p>	<ul style="list-style-type: none"> No two buttons are repeated and every "button" or phrased will take you exactly where you are expecting to go
<p>Error prevention. Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.</p>	<ul style="list-style-type: none"> When applying and you don't fill something out that is necessary it wont tell you until you have tried to fill everything else out. The application process could benefit from giving the user an error code before hitting submit as to not have to redo the entire application

Heuristics	Notes
Recognition rather than recall. Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.	<ul style="list-style-type: none"> • Since the entire page is basically one scroll down, It is quite difficult to get lost on this website. • The navigation bar is easily accessible at the top
Flexibility and efficiency of use. Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.	<ul style="list-style-type: none"> • The entire website being one page makes it very easy too navigate the page
Aesthetic and minimalist design. Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.	<ul style="list-style-type: none"> • Simple and minimal • Each page is similar in format and the website keeps its aesthetic throughout
Help users recognize, diagnose, and recover from errors. Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.	<ul style="list-style-type: none"> • Small * icon to show what needs to be filled out in the application
Help and documentation. Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.	<ul style="list-style-type: none"> • To apply for a position, make your way to the “apply” button and fill out the form • Look around the website to find the coordinators for this form

Issue/problem	Heuristic violated	Severity of problem	Recommendation
Apply button	Recognize, diagnose	1	<ul style="list-style-type: none"> • Once you hover over the apply button it disappears, a very small issue but a different color tone or gradient might be a better signifier

Navigation	Freedom and control	2	<ul style="list-style-type: none"> Move the FAQ and about to a separate page rather than being on the main page
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Severity ratings:

- 0 = not a problem at all
- 1 = cosmetic problem only: doesn't need to be fixed unless extra time is available
- 2 = minor usability problem: fixing this should be given low priority
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APPENDIX B: Cognitive walkthrough

UXD 260 User-Centered Evaluation **Activity: Cognitive Walkthrough**

Name: Jacob Kornfeld

Use this worksheet to keep track of your evaluation as you do the cognitive walkthrough. At each step, ask the questions indicated in the columns (or use one of the other variations of these questions.)

Evaluation of: Steambassador website

Scenario: Scanning the steambassador website and checking requirements and then applying for a position

	Steps	Will the user realistically be trying to do this action?	Is the control for the action visible?	Is there a strong link between the control and the action?	Is feedback appropriate?	Comments/issues
1	Read about the program	Yes, first they will want to understand the program and have prior knowledge as to what they will be doing .	A few scrolls down, could be placed higher towards the top.	Depending on if you scroll down or click the button navigation menu.	Yes	The entire website being on one page makes it a bit easy for someone to get lost. The navigation menu only automatically scrolls you don't so it isn't very helpful.

	Steps	Will the user realistically be trying to do this action?	Is the control for the action visible?	Is there a strong link between the control and the action?	Is feedback appropriate?	Comments/issues
2	Scroll down and check to see if you fit the requirements	Yes, the user will need to know whether or not they are fit for this job before applying.	Right above the "Apply" button so This is a good spot for it, very visible.	^^^	Yes	^^
3	Find the FAQ	Sometimes it is nice to check the FAQ for questions you might have yourself that might already have answers.	Yes	^^^	Yes	^^
4	Find the apply and fill out the form	Yes	Yes, there are two locations for it.	Yes, it takes you to another page to fill out the form.	Yes	Some users in our group did not get the gid board email. Email fill out function has bugs and won't sense if you have put in a Real email or not