Evan Chou

Professor Watson

Computer Engineering 163L

25 January 2021
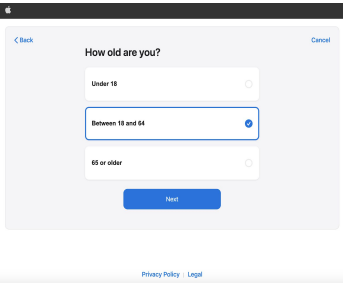
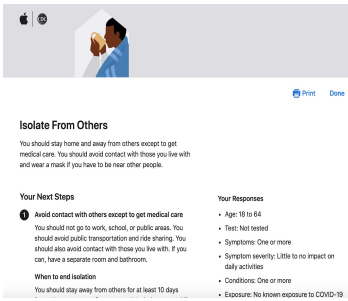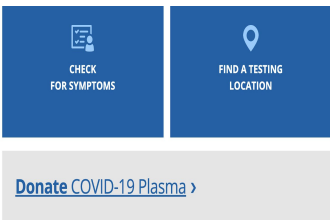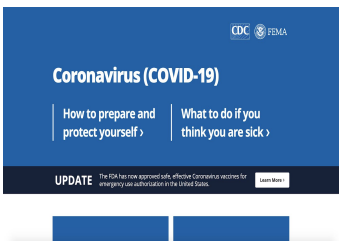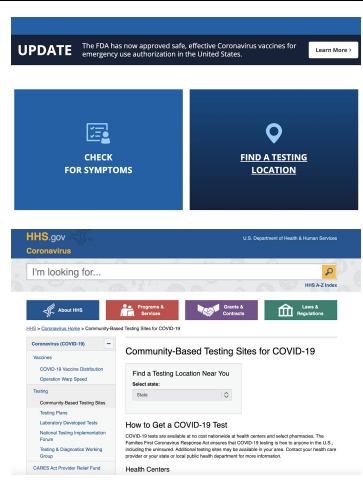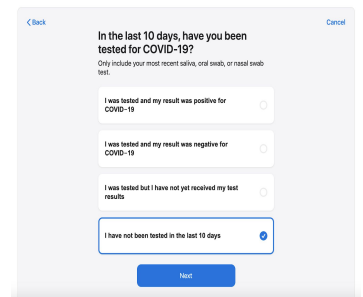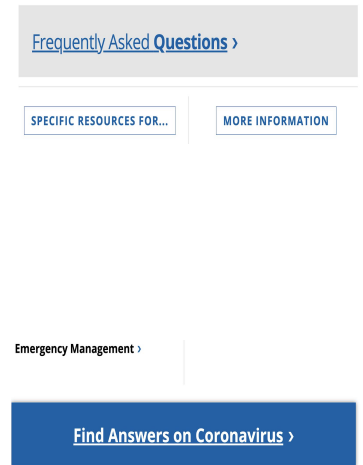<div align="center">Heuristic Evaluation</div>

Intro

      Heuristic Evaluation is a usability inspection method where experts review the website/app interface and compare it against accepted usability principles. I will specifically be using Jakob Nielson's 10 Usability Heuristics for my analysis of the website https://www.coronavirus.gov/.
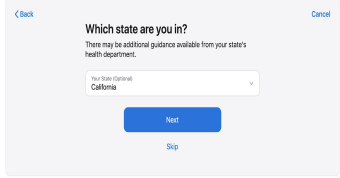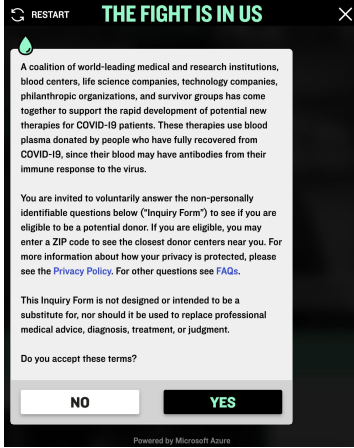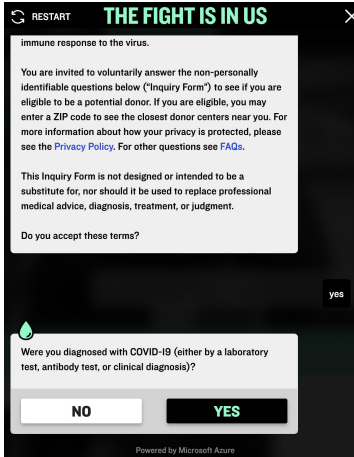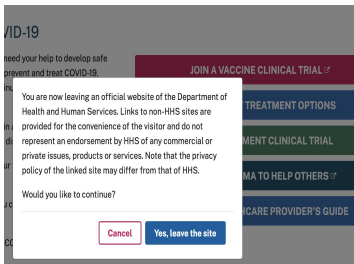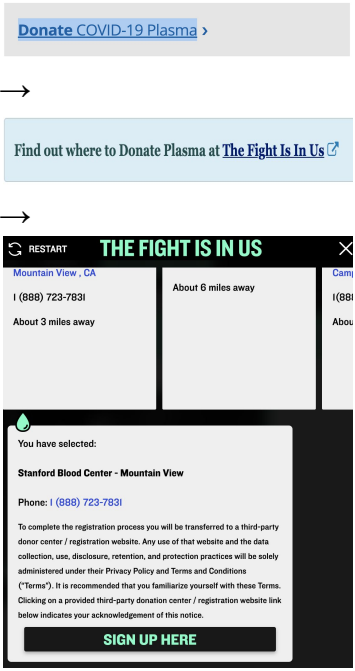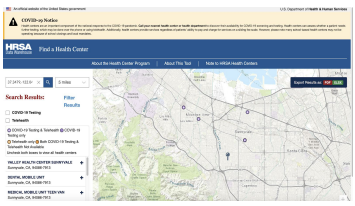
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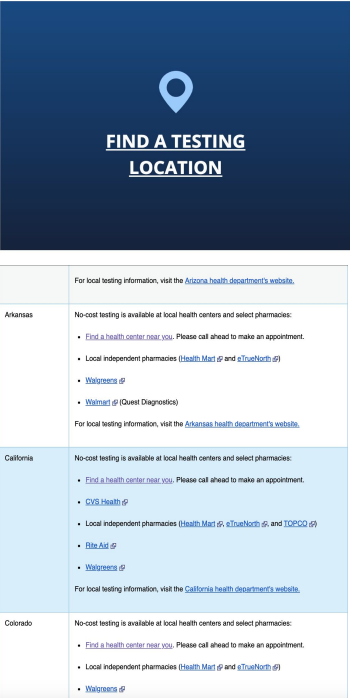
Violation	Severity	Description	Suggestion	Screenshots
Visibility of system status	Medium	When doing the "Check For Symptoms" Questionnaire, the questionnaire doesn't tell users how many more answers or questions they have left, so it is unknown how long it will take and where they are.	Add a status bar on the top so users know where they are in terms of questions left.	
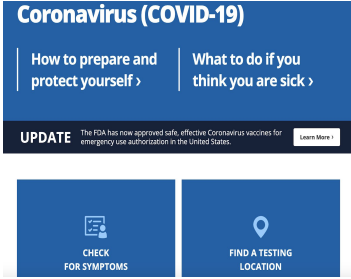
Visibility of system status	Minor	The "Check For Symptoms" Questionnaire's final page doesn't imply that it's the final page. After answering all the questions, the page jumps to a final page with "Isolate From Others".	Add "Results" above the "Isolate From Others" and a "Completed" icon on the top of the page or maybe instead of the "done" to let users know that the page is talking about the results from their screening and that they've completed the screening.	
Match between system and the real world	Minor	On the main page, the terminology Plasma is shown. Some viewers don't know what "Covid-19 Plasma" means and the term is not explained, which causes confusion.	One suggestion would be implementing floating controls, so when the user hovers over the term "Covid-19 Plasma", there is an actual description and they know what they're donating.	
Match between system and the real world	Medium	The main page has no navigation bar or familiar icons that follow real-world conventions, which make it hard to navigate with an unknown order.	Add a navigation bar on top so users can navigate through the site easier.	
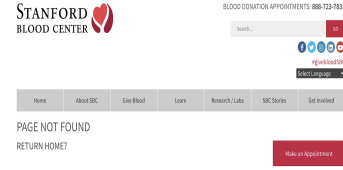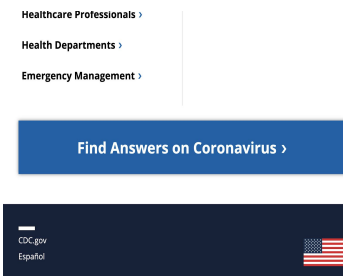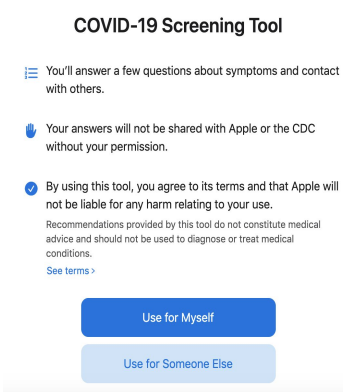
User control and freedom	Medium	After clicking on "Find A Testing Location", there is nothing to click on to get back to the main page. Users who want to exit and return to the main page are unable to from the site.	Add a home icon on the upper left that directs the site back to the home page.	
User control and freedom	Minor	The Screening Questionnaire actually does a great job of giving the user the option to cancel or go back if they desire to, but users that want to take a break from filling out the screening questions may want to save the work they did so far.	Add a save option so users can save their progress and continue later.	
Consistency and standards	Minor	On the main page, there are sections "Frequently Asked Questions" and "Find Answers on Coronavirus" which seems very similar. It is confusing if they imply and mean the same thing or not.	Change "Find Answers on Coronavirus" to "Search About Coronavirus" to make the difference between the two bigger.	

Consistency and standards	Medium	The "next" and "skip" button on the COVID-19 screening might look similar and confuse the elderly who want to continue to the next page.	The question needs to be stated as optional or the word skip needs to be taken out.	
Error prevention	Medium	When asked "do you accept these terms" on donating plasma, there is no error prevention, so users who accidently clicked accept will be troubled.	Present users with a confirmation option before they commit to the option to double check if they made the right decision.	
Error prevention	None	When specifically clicking on "Join A Vaccine Clinical Trial" on the volunteering page, a long message with cancel and	The message further helps users understand where they are going and if they really want to continue. Giving users a 2nd confirmation option allows	

		continue to site are shown.	them to prevent errors from happening.	
Recognition rather than recall	Medium	The process to get to donating is really long. Users who mess up or end up at the Stanford page need to restart all over again, which is a problem if they can't retain all the information and what they did to get to where they currently are.	Update the donation centers to ones where the page can actually be found so users won't have to retain the information when restarting.	
Recognition rather than recall	Medium	Finding a testing location builds off new mental models and takes numerous steps to get to a nearby location. The final searching site also feels really cluttered and	Simplify the search results left bar on the final page and take out the extra notice on the top of the site.	

		busy.	
Flexibility and efficiency of use	Medium	There are no shortcuts to get to specific testing sites faster. The "Find A Testing Location" on the main page brings us to multiple pages where we need to navigate through countless choices.	Have pop-ups or a navigation bar when we hover over "Find A Testing Location" so users who know which specific area they want can pinpoint that faster in one click.	
Flexibility and efficiency of use	Medium	There is no navigation bar or shortcut to donate COVID-19 plasma for those that already know what plasmas are. Rather, they are forcely guided to an information page first.	A shortcut button to guide us directly to donating plasmas would help rather than going through the website explaining about what plasmas are.	
Aesthetic and minimalist design	Minor	Both "Frequently Asked Questions" and "Find Answers on Coronavirus" are exactly the same thing and they lead to the same exact	There is no need for repetition, so we can remove "Find Answers on Coronavirus". Another suggestion can be combining the two into one	Both lead to:

		search bar. In other words, they repeat each other.	phrase. This simplifies the extra design on the page.	
Aesthetic and minimalist design	None	The main page is simple and does not have a lot of text. Coronavirus is bolded and the first thing on top, followed by preparation to prepare for the disease and what to do if you think you are sick.	Keeping the site and design simple makes things easy to read and navigate through. The important ideas and information are very apparent and portrayed. For instance, finding a test location and screening are the first two things boxed largely on the site near the top.	
Help users recognize, diagnose, and recover from errors	Minor	When you don't input anything in the location search bar to search for nearby testing sites, there is no error feedback and solution. Instead, there is a small loading bar moving along (which I've star'd and circled in the image). Users don't know what's the problem and can't recognize, diagnose, and	Print out the words "please enter location" if the user does not enter a location to let the user know what is going on and what they missed.	

		recover from it.		
Help users recognize, diagnose, and recover from errors	None	After clicking donate plasma to Stanford Blood Center, the href leads us to "Page Not Found" and "Return Home?" error messages on the Stanford Blood Center site.	The error message is expressed in plain language so everyone can understand and it offers the suggestion to return home to help users recognise what's happening.	
Help and documentation	Minor	There is no documentation or help tab/button anywhere on the main page. The bottom bar only has language options and a link to the CDC, which has unclear purpose itself.	Have help content or a href link to a page that can help the user navigate through the site.	
Help and documentation	Minor	The first screening page does give the user a rundown on what they can expect from using the tool, but doesn't really have documentation to help those who don't understand easily how to fill out an online questionnaire.	Having an online user manual or help documentation listing out the concrete steps to be carried out to be available for users at all times would improve problems with unavailable help.	

Summary

After analyzing the website using the ten usability heuristics, the main/home site itself was found to provide a more friendly user experience. In terms of severity, there were a total of 3 none, 8 minor, 9 medium, and no major. The website didn't have any major problems with usability and the content was easy to read and understand. Overall, simplicity really helped keep the main page away from major severity issues, though some recommendations and suggestions may help. Recommendations include:

- Creating a navigation bar on the top of the page to make the site easy to navigate and provide further context. It is most likely a standard now to have a navigation bar.

- Adding floating controls, so when the mouse hovers over specific terms, the definition for that specific terminology is provided.

- Have help content or a href link to a page that can help the user navigate through the site (this will be beneficial for the elderly who are not familiar with technology).

- There is no need for repetition, so we can remove either "Find Answers on Coronavirus" or "Frequently Asked Questions" or combine the two into one.

With these suggestions, the website will be even more user friendly and the website user experience will improve significantly.