# **Heuristic Evaluation – Data Sheet**

Website (URL): mistt.org

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#### Contexts:

- **Users**: Stroke patient, new user, caregiver
- **Tasks**: Find information on the most effective ways to recover from a stroke, Try to get social support from the website, Find information about the nature and the purposes of the medications that I'm helping the stroke survivor to manage, Explore the different links on the homepage
- **Technologies**: Opera web browser, Chrome web browser, Internet Explorer 11, Safari web browser
- **Environments**: Inside a household, Workstation at job

#### **Executive Summary:**

The MISTT.org website has several issues which effect both the design and functionality of the website. The functionality issues include broken links, incorrectly formatted contact information, an error when trying to connect via https, missing hyperlinks and extraneous browser extension requirements for some sections. When identifying more cosmetic issues, issues such as pages missing a "breadcrumb" trail, pages using different icons, and inconsistent use of colors and design layouts have all been identified as places which can be improved upon.

**Scenario**: The interface of the mistt.org website is relatively simple, and designed so any page on the website can be accessed in under 4 clicks. Our evaluation team's objective was to complete a specific task to the fullest extent, and analyze any flaws in the website which may hinder our ability to complete the chosen task.

**Methodology**: Our evaluation team took on different roles of website users, three identifying as a stroke patient and one identifying as a stroke caregiver. Every task chosen by the team involved information collection, however the type of information sought after was different for each group member. These tasks were chosen based on a profiling of the typical stroke patient or caregiver, and determining possible questions they may be seeking help to answer. The individual tasks were:

- 1. Finding information about stroke recovery
- 2. Finding social support for stroke patients
- 3. Finding information about medications for stroke patients
- 4. Exploring the different links on the homepage

The Heuristics used for our evaluation come from Jakob Nielsen's 1995 guidelines of "Usability Heuristics for User Interface Design".

#### Results and Interpretation:

In total, our group found 16 unique cases of usability problems in our heuristic evaluation. Several of the issues found which our group prioritized as most important were broken or missing links. First, when initially using the website, if the user's browser automatically goes to <a href="https://">https://</a> websites, the website will redirect to the MSU career services page. On the Stroke Recovery page page, there is a link to a "stroke rehabilitation" page which is broken. Also, a link which should connect to "My Med Schedule" on the medication apps page is completely missing. Next, we identified that if a user were to bookmark a specific page on the website for easy indexability, there would be no way for the user to recall that exact page from the bookmark. Instead, any page bookmarked will re-direct to the MISTT homepage. Finally, there were a number of design heuristics which can be improved to help usability with the website. These problems included an inconsistent use of design patterns, colors, and icons on the website. Some icons on the homepage are never used again, color bars in the navigation pages are missing on some pages, and icons used to identify external links do not show what the link is opening. Also, the same icon is used for "Stroke Information" and "Stroke Prevention and Recovery" sections on the homepage. In addition to these problems, our group also found that some externally linked websites required certain browser extensions such as microsoft silverlight.

#### Suggested Improvements:

- Fix all broken links on the website. This includes the link to the "stroke rehabilitation" page which is located on the Stroke Recovery screen. Also, the link on the medication apps which should connect to "My Med Schedule" is apparently completely missing. This link should be added to the website.
- 2. Use consistent design patterns across the website. Some icons featured on the homepage are never used again elsewhere on the website. In other pages, background text box colors changed randomly between grey and white. And on most pages, there are different color bars for the page's' title, which are corresponded to the color in the navigation, however these colors are not consistent throughout every page. We recommend streamlining these design choices to make them consistent across the entire website.
- Fix the DNS record for the mistt.org url to correctly re-direct https access. Users on web browsers like Opera may not be able to access the website at all, since any use of https will redirect the user to the MSU career services page.
- 4. Allow the user to bookmark specific pages for easy reference. Currently, if a page is bookmarked, the link will only go the to mist homepage, not the page the user initially linked too. The URL for each page should be unique, to allow users to bookmark a specific section for easy information retrieval.
- 5. Links to external pages should not require the user to download extra software in order to interact with the content. Some users may not want to view a page or resource if they are required to install software such as Adobe Flash Player or Microsoft Silverlight. Links which direct to these websites should contain a small warning, or be changed to link to more user friendly web pages.

# Supporting documentation:

USABILITY PROBLEM #	HEURISTIC BROKEN	DEFECT DESCRIPTION	SEVERITY RATING	EVALUATOR'S COMMENTS REGARDING DEFECT	SCREEN
1	5	The website will not load at all and re-direct to the MSU Career Services Network when the mistt.org address starts with https://	High	Fix DNS record so https:// link redirects to the standard website	None
2	5	The link for the "Stroke Rehabilitation" page located in the paragraph is broken. Returns a "page not found error"	High	Fix the link to the "Stroke Rehabilitation" page	Stroke Recovery
3	3	"Breadcrumb trail" on other site pages is missing when directed to a "Page not found" screen. The only button available is the MISTT logo which goes to the homepage	Low	Include either a "breadcrumb trail" or a "back" button on the page not found screen	Page not found
4	4	Links that open separate documents look the same as links that open separate webpages	Low	Provide different icons next to links depending on if they open a document or a webpage	Stroke recovery
5	4	The design pattern seems not always consistent (The first section is in gray background color, while the other sections are in white background color)	Low	The design for the same level should be the same	Community Resources Page
6	8	The two links at the bottom seems the same but in very different design format	Low	User should be offered clear layout. The system should avoid the redundant content.	Community Resources Page
7	4	The "care pages" seem to belong to "Online support" in the left navigation bar, but appears as the same level as "online support" in	Moderate	The level of tile should be consistent to clearly show user how information is organized.	Stroke Support Groups page

		the "Stroke Support Groups" page			
8	6	The system uses some icons in the home page but never use them again in the specific pages.	Low	It should be better to use the same icons to help them recognize the specific section.	Home page
9	4	There are different color bars for almost all the pages' title which are corresponded to the color in the navigation except the homepage and community resources page	Low	The design should be consistent and have a standard. If using color bars, then every sections should have one.	home page, community resources page
10	6	The icons for "Stroke Information" and "Stroke Prevention and Recovery" are the same in the home page	Low	Icons should be unique for each section in order to represent the specific section better.	Home page
11	9	In the contact us page, the wrong email address format cannot be identified	Moderate	The system should help users recognize the wrong email address format	Contact us
12	7	System required installation of Silverlight in this context of use (IE 11).	Moderate	User should be able to interact with the system without installing extraneous programs. 8.9% of internet users are using IE (http://gs.statcount er.com/). For maximal accessibility, consider using standard technologies of the web (i.e. JavaScript, HTML, and CSS) to provide this feature (embedded welcome video).	Home (external)
13	8	List not displayed in bulleted format	Low	User should be able to read the list of medications that are displayed in bold text	Anti-coagulants (blood thinners)

				and subsequent to a colon in a list format, especially since the items under consideration are arcane pharmaceutical names and their brand name equivalent.	
14	2	Instruction to click on link below is not followed by a hyperlink	Moderate	User should be presented with the resources that are described and said to be provided in the system.	Medication Apps
15	5	Right-clicking and following links that seem to be to external resources under the On this page section instead lead to different views of the page I'm already on.	Moderate	Improve the level of description of these HTML anchor tags' text. A list of resources that are rendered as hyperlinks should, arguably, lead to those resources, rather than descriptions of those resources. If I see a hyperlink that says WebMD, I expect it to lead to www.webmd.com.	Resources That Can Help You Afford Your Prescriptions
16	6	With a resource bookmarked for later and a subsequent logout, the bookmark leads to a login screen.	Moderate	User should be able to rely on supplementary tools like bookmarks so as to avoid recalling precisely how to retrieve a resource retrieved once already, and that the user wants to continue consuming later.	All screens within the portion of the system where authentication is required

# **Heuristic Evaluation – Data Sheet**

Website (URL): http://mistt.org/

Evaluator: Yiqing Ling

#### Context:

- User: Stroke patient, female, new user

Task\*: Try to get social support from the websiteTechnology: the chrome browser on her laptop

- Environment: at home

<sup>\*</sup>The task should be a realistic one that typical users would try to do with the website selected

USABILITY PROBLEM #	HEURISTIC BROKEN	DEFECT DESCRIPTION	SEVERITY RATING	EVALUATOR'S COMMENTS REGARDING DEFECT	SCREEN
1	4	The design pattern seems not always consistent (The first section is in gray background color, while the other sections are in white background color)	Moderate	The design for the same level should be the same	Community Resources Page (See figure 1)
2	8	The two links at the bottom seems the same but in very different design format	Moderate	User should be offered clear layout. The system should avoid the redundant content.	Community Resources Page (See figure 2)
3	4	The "care pages" seems belong to "Online support" in the left navigation bar, but appears as the same level as "online support" in the "Stroke Support Groups" page	Moderate	The level of tile should be consistent to clearly show user how information is organized.	Stroke Support Groups page (See figure 3)
4	4	The design pattern seems not always consistent (Some sections are in gray background	Moderate	The design for the same level should be the same to keep the layout simple.	Stroke Support Groups page (See figure 4)

		color, while the other sections are in white background color)			
5	4	There are different color bars for almost all the pages' title which are corresponded to the color in the navigation except the homepage and community resources page.	Moderate	The design should be consistent and have a standard. If using color bars, then every sections should have one.	home page, community resources page (See figure 5,6,7,8 &9)
6	4	The layout of this page seems not very clear.	Moderate	The user should be offered clear structure.	Online Support Page (See figure 10)
7	6	The system uses some icons in the home page but never use them again in the specific pages.	Moderate	It should be better to use the same icons to help them recognize the specific section.	Home page (See figure 9)
8	6	The icons for "Stroke Information" and "Stroke Prevention and Recovery" are the same in the home page	Moderate	Icons should be unique for each section in order to represent the specific section better.	Home page (See figure 9)

### Michigan 2-1-1

#### Michigan 2-1-1 Website

This section provides links and information for patients and caregivers about where to get help for a wide range of issues such as transportation assistance, respite care, and many others.

Services can be accessed either by telephone by dialing 2-1-1 from anywhere in Michigan, or by using the links provided. You will be asked to say what county you need services for, and the resulting information will be relevant for that county.

Visit Website 2

#### On this page:

- · Michigan 2-1-1
  - Michigan 2-1-1 Website
- · Additional Community Resources
- How to use Michigan 2-1-1
- · Sample 2-1-1 Search Results

## **Additional Community Resources**

Michigan 2-1-1 is a free confidential resource, available 24 hours a day, seven days a week, to provide information about local services to help with transportation, medical supplies, respite care, etc. You can access this information online at the Michigan 2-1-1 web site, or simply by calling 2-1-1 on your phone....no area code needed.

On the following pages, you will find some examples of the types of information on some topics of interest available from 2-1-1 using the web site search tool. You will also find a link to a video that illustrates how to use the 2-1-1 web site search feature. However, if you have any difficulties or get results showing no services available, call the 2-1-1 telephone number and talk to one of their information specialists.

## How to use Michigan 2-1-1

Here is a video demonstration of an online 2-1-1 search.

Figure 1

## Sample 2-1-1 Search Results

When you left click on the "Adult In-Home Respite Care" link you will see examples of the information you will find on the 2-1-1 web site. Here we have included the details from the three most relevant programs listed if you look for Adult In-Home Respite Care for a 65 year old female living in Lansing. When you left click on the "Click for more info" button at the end of each of the three programs you will see all of the details about each program, just as you would see them on the 2-1-1 web site.

"Adult In Home Respite Care"

Next

Michigan 2-1-1 - "Adult In Home Respite Care" >

Figure 2

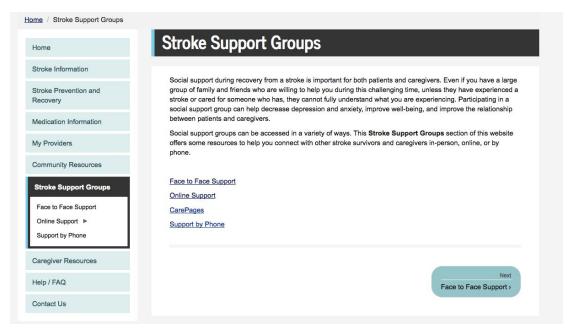


Figure 3

#### The Stroke Network

#### The Stroke Network Inc.

The Stroke Network, Inc. is a non-profit online stroke support organization that provides a variety of resources for stroke survivors and caregivers, including discussion forums and chat rooms.

Visit Website

### Video Instructions on How to Use The Stroke Network

Watch this series of videos for step by step instructions for registering, accessing Discussion Forums (including reading and posting comments on message boards and blogs), and accessing the Chat Rooms.

Figure 4



Figure 5

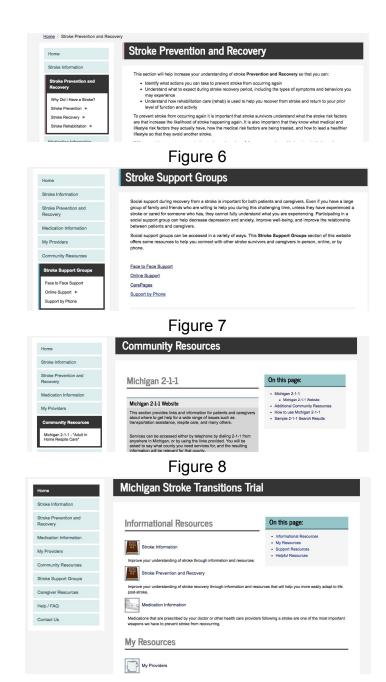


Figure 9

# On this page:

1

- The Stroke Network
  - The Stroke Network Inc.
- Video Instructions on How to Use The Stroke Network
  - Registration
  - Discussion Forums
  - Chat Rooms
- · The Support Network
  - The Support Network
- Online Support Groups for Young Stroke Survivors
  - YoungStroke
  - Different Strokes
- Stories from Stroke Survivors and Cargivers
  - Faces of Stroke
  - Power to End Stroke

Figure 10