Nielsen's Heuristic Evaluation of DVAC Website

1. Introduction

This report provides a detailed analysis of heuristic evaluation of DVAC (Domestic Violence Action Center) website. The evaluation was performed based on heuristics provided by Jakob Nielsen. Following is a list of the heuristics [1]:

#1 Visibility of system status

#2 Match between system and the real world

#3 User control and freedom

#4 Consistency and standards

#5 Error prevention

#6 Recognition rather than recall

#7 Flexibility and efficiency of use

#8 Aesthetic and minimalist design

#9 Help users recognize, diagnose, and recover from errors

#10 Help and documentation

The goal of the evaluation is to uncover a prioritized list of usability issues. The findings along the suggestions will guide future changes or design decisions of the website.

Researcher utilized Nielsen's ten usability heuristics to evaluate all the web pages. Researcher went through the pages one by one, recorded violations (using a tool called UX Check [2]) and the severity of the issue. The summary of the results are recorded in Table 1.Summary of Findings. In the table, reader can use 'crtl + click' on the row number to jump to the detail of the finding, which includes detailed description, screenshot and suggestions.

2. Summary of Findings:

Following is the table of findings summary. In total, 22 usability issues are found.
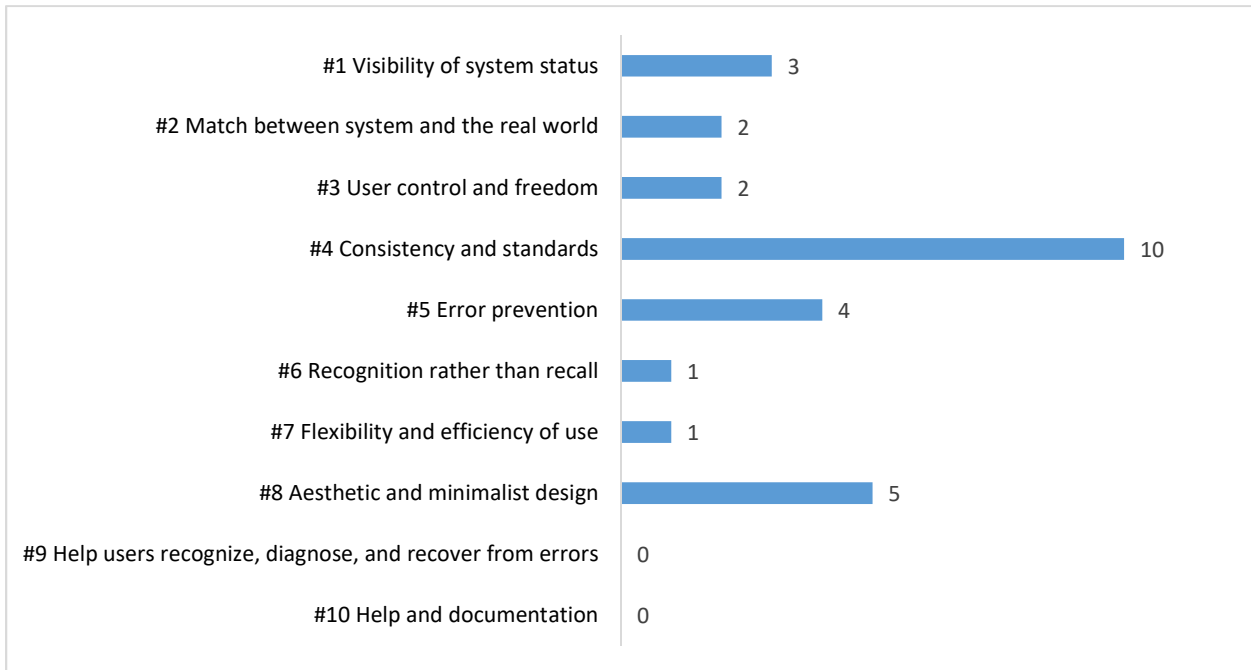
Table 1 Summary of Findings

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic Detail
1	Same style is used for clickable and unclickable graphics.	2	#4	Consistency and standards
2	'Esc' button's meaning is not easy to understand for novice users. Also, the button disappears when user scrolls to the bottom of the page.	4	#2 #3	Match between system and the real world; User control and freedom
3	For the homepage image carousel, users don't know how many images are looping, and they don't have control of the speed. Also, the images look like links, but they are not.	0	#1 #3	Visibility of system status; User control and freedom
4	'Contact us' link shows twice on the homepage.	0	#8	Aesthetic and minimalist design
5	User can change text size on the page, but current text size number is not shown.	2	#1	Visibility of system status
6	On 'Contact us' page, phone number doesn't have area code.	2	#2 #5	Match between system and the real world; Error prevention
7	Facebook 'like' button has several violations: First, users don't get enough feedback after the action.	2	#1 #5 #7	Visibility of system status; Error prevention; Flexibility and efficiency of use

	Second, it is a one-click button with no confirmation. It has a poor error prevention capability. Third, more social media platforms need to be supported than Facebook.			
8	Different fonts are used on the same web page.	3	#4	Consistency and standards
9	On homepage, three different fonts are used for three different pieces of content, but the three paragraphs look like part of one article.	2	#4	Consistency and standards
10	Clicking on several links, e.g. DVAC blog, job posting, and teen site (Tap808), users are redirected to a new website. User would be surprised and doesn't remember how to go back.	3	#6	Recognition rather than recall
11	'Just for teens' and 'Save the Date' graphics on the right column are in the same row. User might think they are one link, instead of two separate links.	3	#4	Consistency and standards
12	On 'Upcoming Events' page, underlined text looks like clickable link.	2	#4	Consistency and standards
13	On PayPal donation page, the purpose of donation is 'DVAC	3	#8	Aesthetic and minimalist design

	Generic Donation Button', which doesn't sound professional.			
14	Under section title 'Real Stories', the contents are more like Q&A; there is no real story.	1	#8	Aesthetic and minimalist design
15	On donation page, '…' doesn't have any value, which can be removed.	0	#8	Aesthetic and minimalist design
16	On 'Staff' page, title 'Program & Service' and 'Executive Officers' should be in the same format.	2	#4	Consistency and standards
17	Menu name 'Special Events' and page title 'Upcoming Events' should be consistent.	1	#4	Consistency and standards
18	On 'Special Programs' page, the link names don't match the names under menu.	1	#4	Consistency and standards
19	On special program pages, clicking on 'contact us' link opens outlook mailbox. If users don't set up outlook mailbox, they are not able to send email or see DVAC's email address.	3	#4 #5	Consistency and standards; Error prevention
20	On 'News' page, the link names don't match the names under menu.	1	#4	Consistency and standards
21	Duplicate menu items: special events, legal helpline	2	#8	Aesthetic and minimalist design

22	Newsletter signup text field is too small for email address	3	#5	Error prevention

Following chart shows the frequency of each heuristic violated based on above table. #4 Consistency and standards and #8 Aesthetic and minimalist design are the two heuristics that get violated most and need most improvement.

Heuristic	Frequency
#1 Visibility of system status	3
#2 Match between system and the real world	2
#3 User control and freedom	2
#4 Consistency and standards	10
#5 Error prevention	4
#6 Recognition rather than recall	1
#7 Flexibility and efficiency of use	1
#8 Aesthetic and minimalist design	5
#9 Help users recognize, diagnose, and recover from errors	0
#10 Help and documentation	0

3. Specific Problem Areas:

1. Same style is used for clickable and unclickable graphics.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
1	Same style is used for clickable and unclickable graphics.	2	#4	Consistency and standards

Problem/Details:

'FREE LEGAL HELPLINE' and 'KNOWLEDGE IS A KEY' look like a clickable button, because they share the same style of donation button.

Evidence:

On the right column of the webpage, on top of the clickable graphics, you will find the two unclickable graphics.
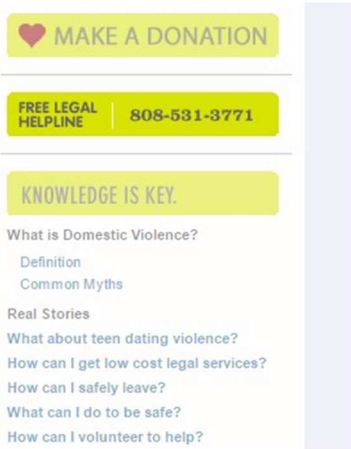
Recommendation/Proposed Solution:

Change the style if it behaves differently.

2. 'Esc' button's meaning is not easy to understand for novice users. Also, the button disappears when user scrolls to the bottom of the page.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
2	'Esc' button's meaning is not easy to understand for novice users. Also, the button disappears when user scrolls to the bottom of the page.	4	#2 #3	Match between system and the real world; User control and freedom

Problem/Details:

For novice users, the meaning of 'Esc' button is confusing. The values of being an emergency exit is not obvious that users don't want to be caught.

Second issue with the button is that if the user scroll down on the page, the 'Esc' button is gone. In this case, users cannot hide the page quickly. The button should be floating on the page and always be there, no matter which page users are at.

Finally, the location of 'ESC' button needs to be fixed. It is a very important button, but it is at the top right margin, where usually users would not pay attention.

Evidence:

On the top right of the webpage, user will see the 'ESC' button.

Recommendation/Proposed Solution:

Redesign the button to make it bigger, floating on the page, and with more clear meaning [3].

3. For the homepage image carousel, users don't know how many images are looping, and they don't have control of the speed. Also, the images look like links, but they are not.
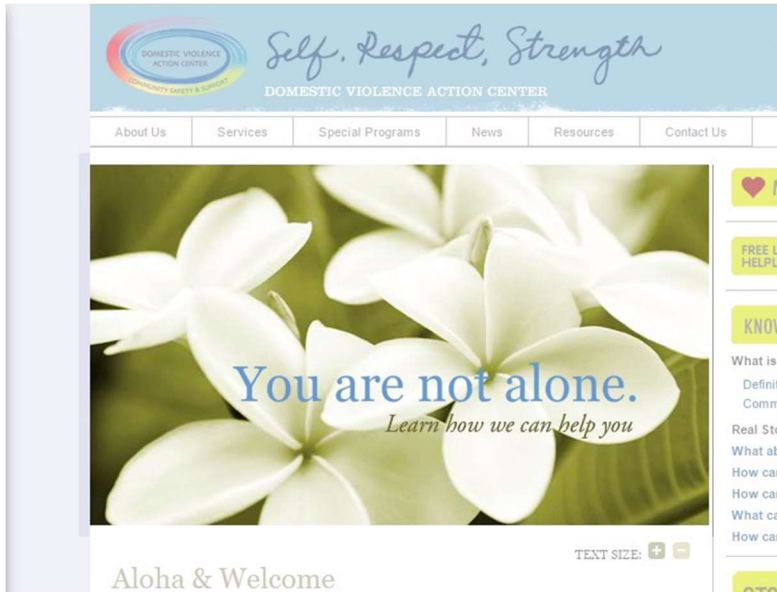
#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
3	For the homepage image carousel, users don't know how many images are looping, and they don't have control of the speed. Also, the images look like links, but they are not.	0	#1 #3	Visibility of system status; User control and freedom

Problem/Details:

For the image carousel on homepage, users don't know how many images are looping, and they don't have control of the speed. Also, the images look like links, but they are not clickable.

Evidence:

The image carousel is in the center of homepage.

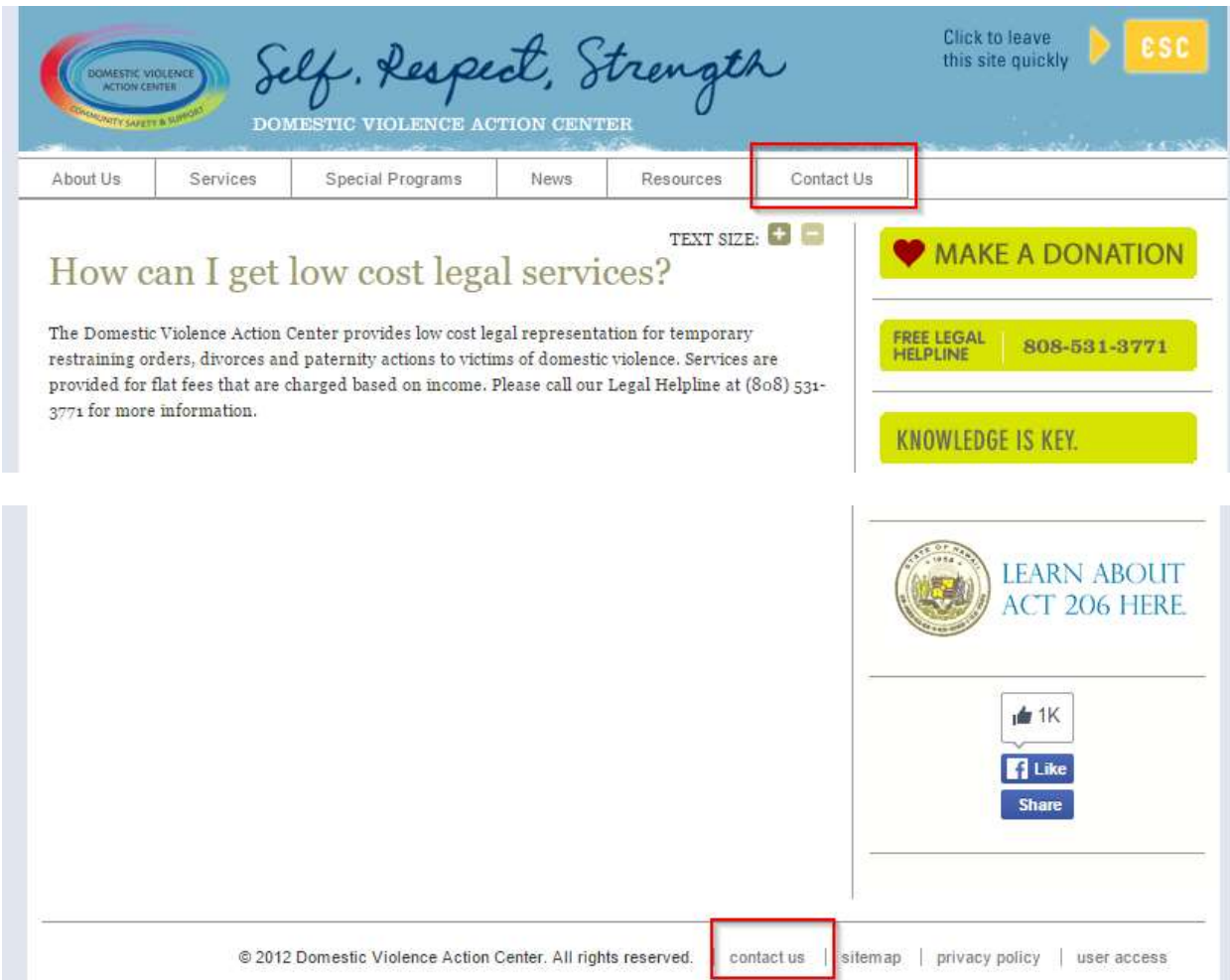**Recommendation/Proposed Solution:**

Redesign and build a new image carousel.

4. 'Contact us' link shows twice on the homepage.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
4	'Contact us' link shows twice on the homepage.	0	#8	Aesthetic and minimalist design

Problem/Details:

'Contact us' shows twice on home page. One is in the navigation toolbar; second time is at the bottom of the page next to sitemap.

Evidence:

Recommendation/Proposed Solution:

Remove 'Contact us' in the navigation menu bar, or combine it under 'About us'.

5. User can change text size on the page, but current text size number is not shown.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
5	User can change text size on the page, but current text size number is not shown.	2	#1	Visibility of system status

Problem/Details:

There is no indicator of current text size.

Evidence:

On every page with text, you can find the plus sign and minus sign to adjust the text size, but there is no indicator showing what current text size is.

Recommendation/Proposed Solution:

Add a number indicator, or percentage to show current text size.

6. On 'Contact us' page, phone number doesn't have area code.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
6	On 'Contact us' page, phone number doesn't have area code.	2	#2 #5	Match between system and the real world; Error prevention

Problem/Details:

Phone number doesn't have area code.

Evidence:

Some telephone numbers are missing area codes on the website.

Recommendation/Proposed Solution:

Provide full format of telephone number.

7. Facebook 'like' button violations.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
7	Facebook 'like' button has several violations: First, users don't get enough feedback after the action.	2	#1 #5 #7	Visibility of system status; Error prevention; Flexibility and efficiency of use

	Second, it is a one-click button with no confirmation. It has a poor error prevention capability. Third, more social media platforms need to be supported than Facebook.			

Problem/Details:

There are multiple issues with the Facebook like button:

1. User doesn't get enough response after clicking on it: what page did they like? Where did they like the site? What is the number increase of likes after they like?
2. The like action is completed too soon, which is easier to cause errors. What if the user doesn't want people know he/she is browsing the site, but click it by mistake? There is no confirmation before committing.
3. For users with other social media accounts who wants to support, how can they support if there is only one Facebook like button?

Evidence:

Recommendation/Proposed Solution:

Create standard set of social buttons like other website.

8. Different fonts are used on the same web page.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
8	Different fonts are used on the same web page.	3	#4	Consistency and standards

Problem/Details:

Fonts are different page 'Consortium for Health Safety & Support'.

Evidence:

Go to Special Programs-> CHSS, there are three different fonts on the same page.
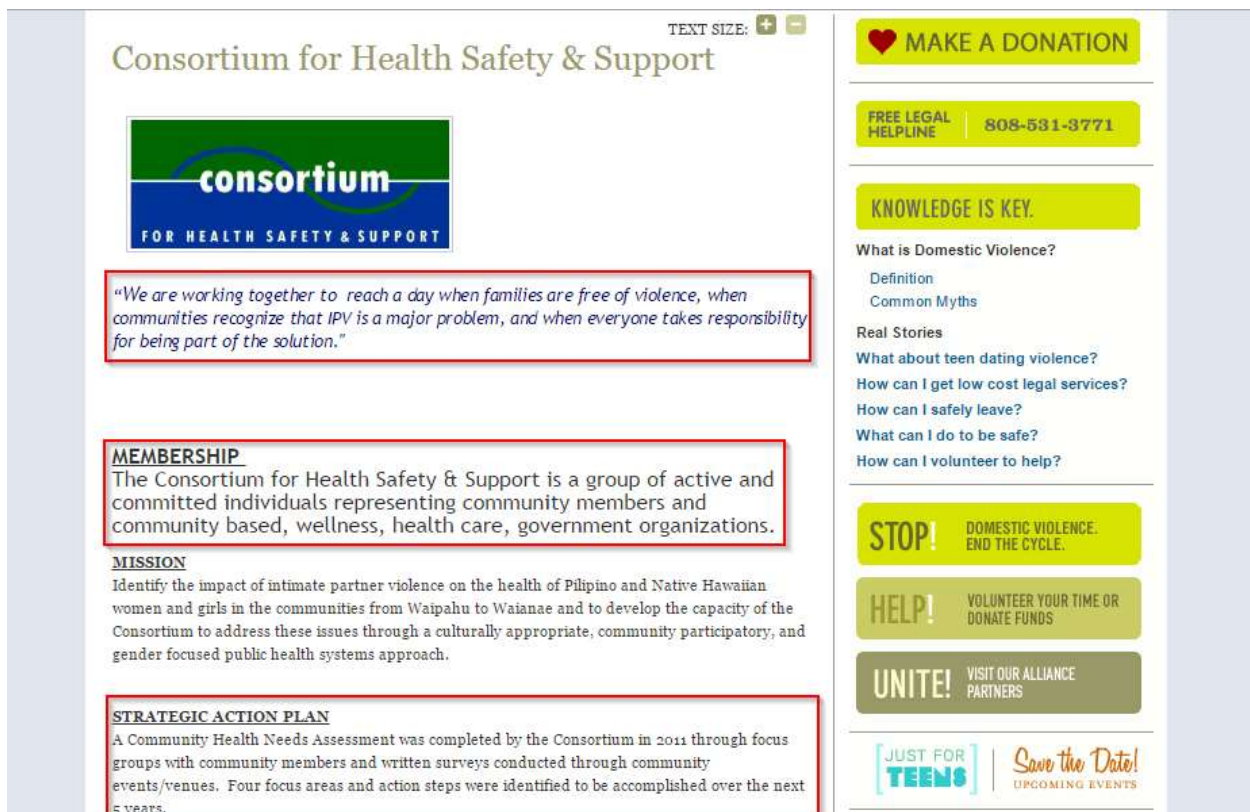
Recommendation/Proposed Solution:

Keep the fonts consistent.

9. On homepage, three different fonts are used for three different pieces of content, but the three paragraphs look like part of one article.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
9	On homepage, three different fonts are used for three different pieces of content, but the three paragraphs look like part of one article.	2	#4	Consistency and standards

Problem/Details:

There are three different fonts on home page for different contents. User would have the confusion that they are in one article.

Evidence:

Recommendation/Proposed Solution:

Add divider between different contents. Or add title to beginning of different content.

10. Clicking on several links, e.g. DVAC blog, job posting, and teen site (Tap808), users are redirected to a new website. User would be surprised and doesn't remember how to go back.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
10	Clicking on several links, e.g. DVAC blog, job posting, and teen site (Tap808), users are redirected to a new website. User would be surprised and doesn't remember how to go back.	2	#6	Recognition rather than recall

Problem/Details:

Clicking on following links redirects users to a new website within the same window, which will surprise the users and they don't know how to go back: DVAC blog, Employment Opportunities, and Teen site.

Evidence:

Following is the DVAC blog link:
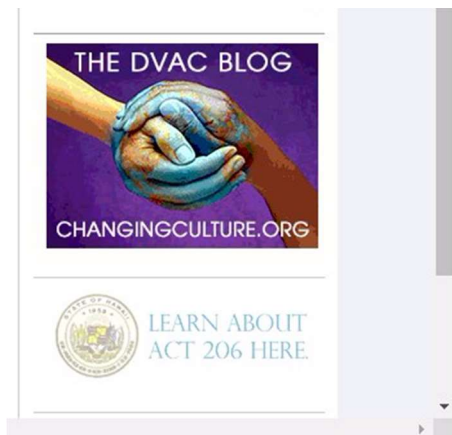
Go to News-> Employment Opportunities, the job title links redirect user to craiglist.com within the same window.

Go to Special Programs-> Teen Alert Program, TAP808 goes to a new website within the same window.

Recommendation/Proposed Solution:

If a link redirecting to a new website, the page should be opened in new tab or new window.

11. 'Just for teens' and 'Save the Date' graphics on the right column are in the same row. User might think they are one link, instead of two separate links.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
11	'Just for teens' and 'Save the Date' graphics on the right column are in the same row. User might think they are one link, instead of two separate links.	3	#4	Consistency and standards

Problem/Details:

User would think the graphic is one link leading to one URL, because of other graphic link examples.

Evidence:

'JUST FOR TEENS' graphic goes to Teen site; while 'Save the Date!' graphic goes to 'Special Events' page.

Recommendation/Proposed Solution:

Separate the teen site and the upcoming events graphics in two rows.

12. On 'Upcoming Events' page, underlined text looks like clickable link.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
12	On 'Upcoming Events' page, underlined text looks like clickable link.	2	#4	Consistency and standards

Problem/Details:

Underlined text looks like clickable link. This will confuse users.

Evidence:

Go to 'About Us'-> 'Special Events', 'Special Events for 2016' is underlined, which looks like a clickable link.

Recommendation/Proposed Solution:

Remove the underline.

13. On PayPal donation page, the purpose of donation is 'DVAC Generic Donation Button', which doesn't sound professional.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
13	On PayPal donation page, the purpose of donation is 'DVAC Generic Donation Button', which doesn't sound professional.	3	#8	Aesthetic and minimalist design

Problem/Details:

The purpose name is 'DVAC Generic Donation Button', which doesn't sound professional.

Evidence:

On homepage, click on 'MAKE A DONATION' button-> under the first option, click on 'Donate', the purpose of donation is 'DVAC Generic Donation Button'.

Recommendation/Proposed Solution:

Changed the description to 'make a Donation to the Domestic Violence Action Center '.

14. Under section title 'Real Stories', the contents are more like Q & A; there is no real story.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
14	Under section title 'Real Stories', the contents are more like Q & A; there is no real story.	1	#8	Aesthetic and minimalist design

Problem/Details:

The section title is 'Real Stories', but under it the topics are more like Q & A.

Evidence:

Recommendation/Proposed Solution:

1. Change the section name to 'Q & A'. Or,

2. Remove the irrelevant topics below, e.g. 'How can I volunteer to help?' is duplicate link of 'HELP!'
button.

15. On Donation page, '…' doesn't have any value, which can be removed.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
15	On donation page, '…' doesn't have any value, which can be removed.	0	#8	Aesthetic and minimalist design

Problem/Details:

'…' doesn't have any value on donation page.

Evidence:

On Homepage, click on 'MAKE A DONATION' button.

Recommendation/Proposed Solution:

1. Remove '...'. Or,

2. Adjust the font size of 'Give A Gift to Bring Peace to Island Families …' , so the sentence can be in one line.

16. On 'Staff' page, title 'Program & Service' and 'Executive Officers' should be in the same format.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
16	On 'Staff' page, title 'Program & Service' and 'Executive Officers' should be in the same format.	2	#4	Consistency and standards

Problem/Details:

On 'Staff' page, title 'Program & Service' and 'Executive Officers' should be in the same format.

Evidence:

Go to 'About Us' - > 'Staff', section titles are not in the same font.
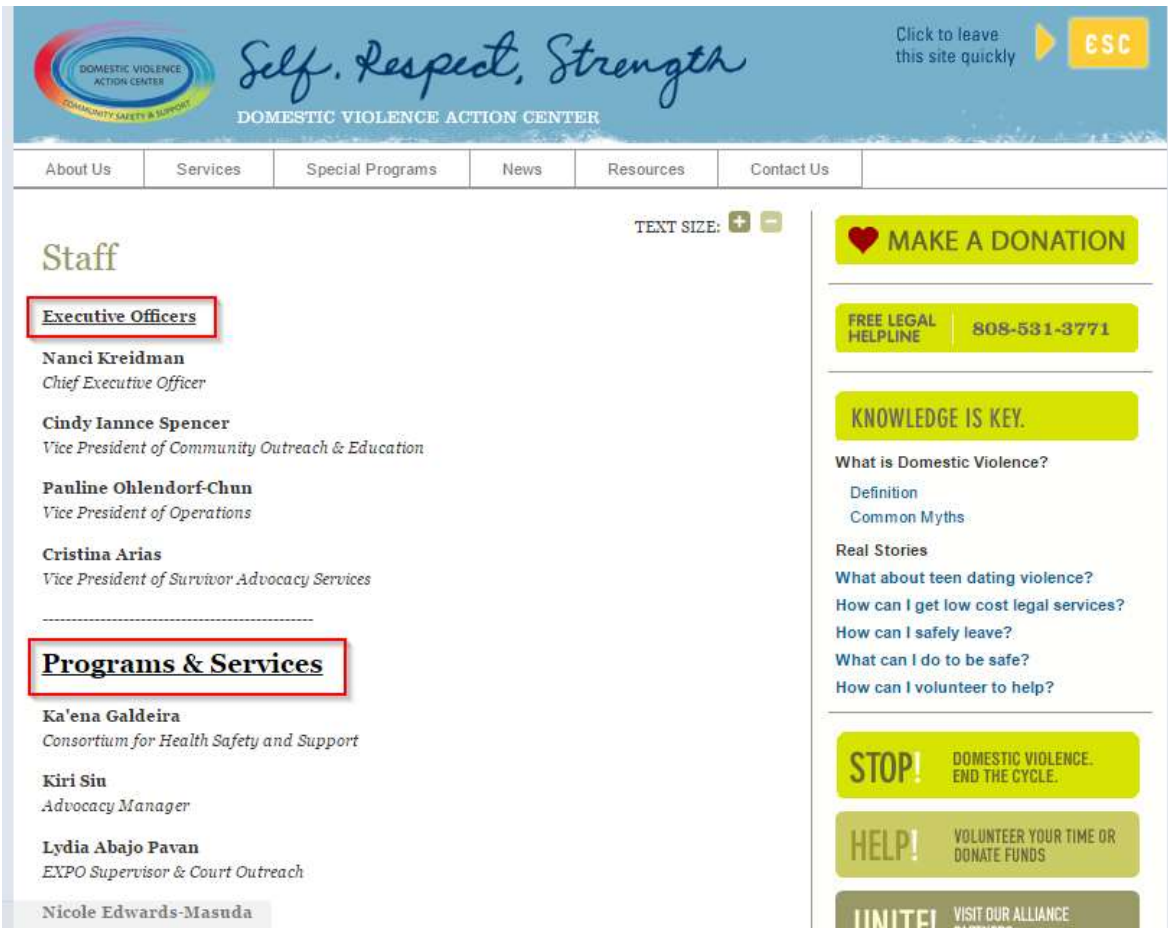
Recommendation/Proposed Solution:

Correct the font.

17. Menu name 'Special Events' and page title 'Upcoming Events' should be consistent.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
17	Menu name 'Special Events' and page title 'Upcoming Events' should be consistent.	1	#4	Consistency and standards

Problem/Details:

The menu name says 'Special Events', but the page title says 'Upcoming Events'.

Evidence:

Go to 'About Us'-> 'Special Events', or go to 'News'-> 'Special Events', the page title is 'Upcoming Events'.

Recommendation/Proposed Solution:

Keep them consistent.

18. On 'Special Programs' page, the link names don't match the names under menu.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
18	On 'Special Programs' page, the link names don't match the names under menu.	1	#4	Consistency and standards

Problem/Details:

The link names on this page don't match the names under menu.

Evidence:

Click on Home-> 'Special Programs', the links on the page don't match the menu dropdown.

Recommendation/Proposed Solution:

Keep them consistent.

19. On special program pages, clicking on 'contact us' link opens outlook mailbox. If users don't set up outlook mailbox, they are not able to send email or see DVAC's email address.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
19	On special program pages, clicking on 'contact us' link opens outlook mailbox. If users don't set up outlook mailbox, they are not able to send email or see DVAC's email address.	3	#4 #5	Consistency and standards; Error prevention

Problem/Details:

By clicking on 'contact us', user expects to see the contact page, but this is an email link. For users who didn't set up outlook mailbox, this is not usable.

Evidence:

Go to 'Special Programs'-> 'DV Action Ready', click on 'contact us' on the page.

Go to 'Special Programs'-> 'Hoʻoikaika ʻOhana', click on 'contact us' on the page.

Recommendation/Proposed Solution:

1. Redirect users to 'Contact us' page. Or,

2. Change 'contact us' to 'email us'. Or,

3. Add a message box called 'Leave us a message', so users don't need to use mailbox to send DVAC messages.

20. On 'News' page, the link names don't match the names under menu.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
20	On 'News' page, the link names don't match the names under menu.	1	#4	Consistency and standards

Problem/Details:

The names on this page don't match those ones under the menu.

Evidence:

Go to Home-> 'News', the menu names in the dropdown don't match the ones on 'News' page.

Recommendation/Proposed Solution:

Keep them consistent.

21. Duplicate menu items: special events, legal helpline.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic
21	Duplicate menu items: special events, legal helpline.	2	#8	Aesthetic and minimalist design

Problem/Details:

'Special Events' and 'Legal Helpline' are shown up twice in the menu dropdowns. Is that necessary?

Evidence:

'Special Events' shows up twice at: 'About us'-> 'Special Events', and 'News' -> 'Special Events'.

'Legal Helpline' shows up twice at: 'Services'-> 'Legal Helpline', and 'Resources'-> 'Legal Helpine'.

Recommendation/Proposed Solution:

Remove duplicate items.

22. Newsletter signup text field is too small for email address.

#	Problem	Severity (0-4, 4 is highest)	Heuristic Number	Heuristic

22	Newsletter signup text field is too small for email address.	3	#5	Error prevention

Problem/Details:

The text field is too small for email address.

Evidence:

Go to 'News'-> 'Think Green / E-Newsletter', the text field is too small for email address.

Recommendation/Proposed Solution:

Make the sign up interface larger.

4. Appendix: Nielsen's 10 Heuristics

#1 Visibility of system status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

#2 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.

#3 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.

#4 Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

#5 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.

#6 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.

 #7 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.

#8 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.

#9 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.

#10 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.

5. Reference

[1] Nielsen's heuristic list: https://www.nngroup.com/articles/ten-usability-heuristics/

[2] UX Check: http://www.uxcheck.co/

[3] Giving Users a Quick Disguised Exit From a Website: https://css-tricks.com/website-escape/