Kelly Snow March 21, 2006 IS 213 Independent Assignment

Question 1 – Heuristic Evaluation of Cars 4 Causes

Methodology

I used Bruce Tognazzini's principles for interface design to evaluate the home page, how to donate page and donation form on http://www.cars4causes.net/. I have briefly summarized the heuristics I applied based on these principles http://www.asktog.com/basics/firstPrinciples.html.

- 1. **Consistency** consistency with user expectations and user behavior.
- 2. **Explorable Interfaces** Give users well-marked roads and landmarks, then let them shift into four-wheel drive. Offer users stable perceptual cues for a sense of "home." Make Actions reversible.
- 3. **Learnability** Ideally, products would have no learning curve: users would walk up to them for the very first time and achieve instant mastery. In practice, all applications and services, no matter how simple, will display a learning curve.
- 4. **Readability** Text that must be read should have high contrast.
- 5. **Visible Navigation** Most users cannot and will not build elaborate mental maps and will become lost or tired if expected to do so.

Severity Rating Scale

I used the following severity rating scale to determine the degree of violation.

- 0 = Not a usability problem
- 1 = Cosmetic problem only
- 2 = Minor usability problem
- 3 = Major usability problem
- 4 = Usability catastrophe

Homepage

http://www.cars4causes.net/

The homepage is the first opportunity to make an impression on the user. Within the first few moments, the user's task is to decide if they have arrived at the site they intended. On first glance, Cars 4 Causes does convey some association with cars. The cartoon banner conveys something to do with children. Beyond that, the use of color, graphics and animation contributes to an overwhelming visual clutter making it difficult to determine the exact purpose of the site.

Violation H1 Consistency

- Link names and destination pages are inconsistent. The right column contains two links
 of different names (Nationwide Car Donations, Donate your care with easy online form!)
 to the same destination with is an online donation form. This makes it difficult on the user
 to orient themselves to content and it is confusing to have multiple link names to the
 same destination. Severity 2
- Use of color is arbitrary. This contributes to visual clutter and confusion. Severity 2

Violation H2 Explorable Interfaces

- Once the user navigates away from the homepage it is unclear how to get back. Severity
- Navigation is located below other content, reducing the ability of the user to explore the site. Severity 4

Violation H3 Learnability

• The prominence of the header graphic and the location of the navigation which requires the user to scroll frequently hinder learnability of the site. The user can not easily learn

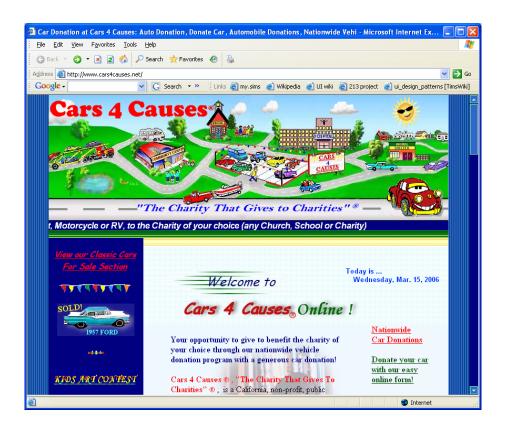
what the site is about or what the user can do on the site without spending effort investigating it. Severity 4

Violation H4 Readability

- In the main content area, the background pattern and image under the text make it difficult to read. Severity 2
- The copious use of exclamation points makes me anxious. The site demands my attention in so many locations. Severity 2
- Generally speaking, the formatting and treatment of text is problematic. The site
 combines animation, multiple colors and sizes as well as graphic and html text, making
 the site very difficult to read. There is no consistent format for headers, subheads, body
 text, navigation, etc. Severity 4
- The volume of content and the choice of content placement reduces this site's readability.
 On my screen resolution, the first ½ of the screen is dedicated to a graphic with no
 content. The next ¼ of the screen is used to repeat the name of the charity, a Welcome
 graphic and today's date none further distinguishes this site or provides me with
 information about it. Severity 4
- The site is cluttered with callouts and ads that pulls the user's attention in different directions without a clear starting point. Severity 3

Violation H5 Navigation

- Navigation is not visible without scrolling down the page. Severity 4
- Navigation is located below other content, reducing the ability of the user to explore the site. Severity 4



How to Donate

http://www.cars4causes.net/HowtoDonate.asp

The user wants to learn how to donate a vehicle and possibly understand the tax advantages of this. In all, this page does a good job of outline the steps the user needs to take and communicating what is expected of them. The same cosmetic and site organization issues persist.

Violation H1 Consistency

- Headline is underlined like a link, but it is not. Use of underline is inconsistent with standard web practice and it is inconsistent with the way it is applied elsewhere on this page. Note the red underline link to the donation form in step 1. Severity 2
- Use of color is arbitrary. This contributes to visual clutter and confusion. Severity 2

Violation H2 Explorable Interfaces

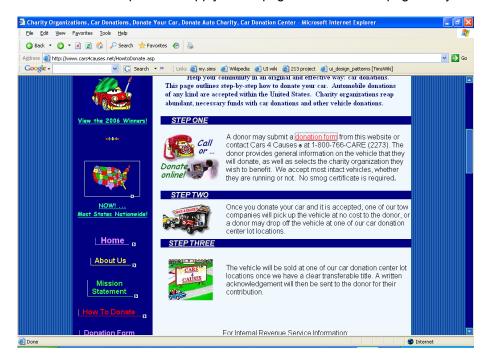
- The most important content on this page is not immediately visible and the user has to scroll. Since the charity is based on car donations, it is particularly bad in this case to not place that more prominently on the page. Severity 3.
- The 3-step process contains a link to the donation form within the context of the step. This is good. However, the image to the left asking the user to donate online could also be a link to provide another opportunity. The same image asking the user to call should contain the phone number. Both of these solutions might reduce the need to read through a paragraph to locate the right information to complete step 1. Severity 1.

H3 Learnability

The content is organized in three steps with description of what the donor needs to do
and what will be requested of the donor in the future. The content is brief and clearly
written. While the images are a little distracting, in all this particular part of the site works
well. Severity 0

Violation H5 Navigation

The same problems apply to this page as in the home page analysis.



Donation Form

http://www.cars4causes.net/donationform.asp

In general, the donation form is poorly formatted making it difficult to fill out. There is much opportunity to improve this form by choosing different form elements, revising labels and using a consistent two column layout. I went ahead and submitted the form — although this was accidental. I deliberately did not fill out all required fields, assuming the submission would not take place. I was wrong. I have since contacted them to remove my submission. Overall the online donation experience does not feel professional or secure. I would urge potential donors to call instead.

Violation H1 Consistency

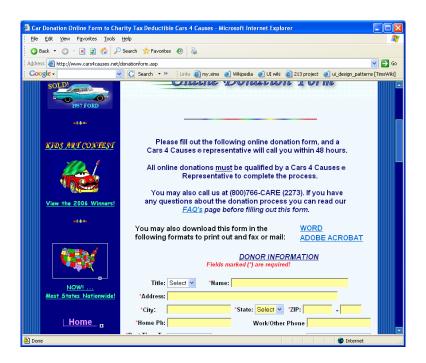
 Despite leaving many required fields blank, the form submitted anyway. This is more of a burden on the charity than me as they will have to track down more details. However, the form does not do what I expect it to do. Severity 3

Violation H4 Readability

- Some of the field labels are unclear until the answers are revealed (Running, How long sitting). Severity 1
- Some field labels are too lengthy. Do you know what mechanical problems the vehicle has? could be better labeled as "Describe Mechanical Problems." Severity 1.
- The form is quite long with some sections that are optional. this form would be best broken up into multiple steps so as not to expose additional form information (charity of choice, how did you hear about us) to users who don't want to fill out the information. Severity 2

Violation H5 Navigation

- The form fields seem haphazardly organized, making it difficult to tab from one field to the next without losing track of the cursor. Severity 3
- The use of drop downs in the Vehicle Information section is tedious. Radio buttons would facilitate faster entry in every case. Severity 2



Cars for Sale Page

http://www.cars4causes.net/C4CLocations.asp

This page makes the user work hard to find the useful information on it. In addition to the format and design issues that distract the user, the content should be brief and accurately described by the page title.

Violation H1 Consistency

The cars for sale section is misleading in that it really is a listing of sales locations, not
actual cars for sale listed online. This is inconsistent with users expectations. Some users
may be interested in a list of physical locations but will miss with the link name. Severity
3.

Violation H4 Readability

• The most important information on the page is far down beneath images, headers and lengthy preamble about a different section of the site (classic cars). Severity 3.



Newsletter

http://www.cars4causes.net/winter 2005 2006newsletter.asp

This page complicates the task of accessing the current newsletter by adding a link that doesn't work, at title that looks like a link and a link to archives.

Violation H1 Consistency

• The page title and links are the same size and are underlined. This makes it confusing as to what is a link and what is not. Severity 2.

Violation H5 Navigation

- HTML link displays "coming soon." It should not be on the page if it is not ready. Severity
- The link to the current newsletter is not names as such. Instead it is named a file format. This forces the user to confirm what they are actually trying to download by first downloading, then opening it to see if it is the current newsletter. Link names need to say what it is. Severity 3.
- The page invites the user to choose a format, however there is only one (pdf) since there
 is no content behind the HTML link. This renders the page title is inaccurate as there is
 no choice to be made. Severity 2.
- The link to "archives" looks like a page format option because it is treated like PDF and HTML links. Severity 2.



Question 2 – Light Switch Redesign

Existing Light Panels

Rear Light Panel

Front Light Panel