Heuristic Evaluation and Recommendation Plan

Target = www.Dreamhost.com

Ryan Basel
baselrp@gmail.com

Executive Summary

The following report provides a plan to test and improve the usability of the website www.dreamhost.com. The initial evaluation was performed using a heuristic evaluation as a usability inspection method. This method involves the evaluator comparing a set of pre-defined usability principles to an existing website while attempting to complete a task. The task chosen for this report was for a new user to upload a website to the host (dreamhost.com) for the first time.

For the evaluation, ten heuristics were used, while focusing on what is a primary task for any web hosting service: uploading a website. The goal of this project was to identify any major usability flaws in the current design of the website. The heuristics that were used are as follows:

1. Provide feedback
2. Use simple and natural language
3. Provide clearly marked exits
4. Be consistent
5. Error prevention
6. Recognition not recall
7. Reduce uncertainty
8. Use aesthetic and minimalist design
9. Deal with errors simply
10. Provide help

For a detailed explanation of each heuristic, please see page 3

The primary usability problems found from this evaluation can be grouped into five main categories. They are as follows:

1. The terminology is too 'system oriented' and lacks familiarity to the user.
2. The hierarchy of information is not organized properly to highlight priority tasks.
3. The design is not aesthetic, lacks minimalism, and contains unnecessary information.
4. The system does not provide clear and easy access to help with documentation.
5. The site does not provide proper cues and feedback to the user.

To further improve the usability of the site, I would recommend the use of various usability testing methodolgies. These include:

- **User Interviews and Observations** - For task analysis and prioritization

- **Closed Card Sorting** - For correcting the information architecture

- **Remote testing** (Assessment Test) - To identify other usability problems throughout the site

    (Comparative Test) - To compare new interface styles and color schemes

    (Verification Test) - To confirm that problems have been remedied and that new problems have not been created.

1.

Introduction

This report provides a detailed explanation of the heuristic evaluation and design recommendations for the site www.dreamhost.com. It begins with a summary of the product, a description of the user and the task in which the site is being used. It continues with a detailed analysis of the findings and then provides recommended solutions to increase the usability of the site.

Scenario

Product Description

DreamHost is a web hosting provider and domain name registrar. Users can use this site to host their web sites, buy server space, register and use domain names and gain access to cloud storage.
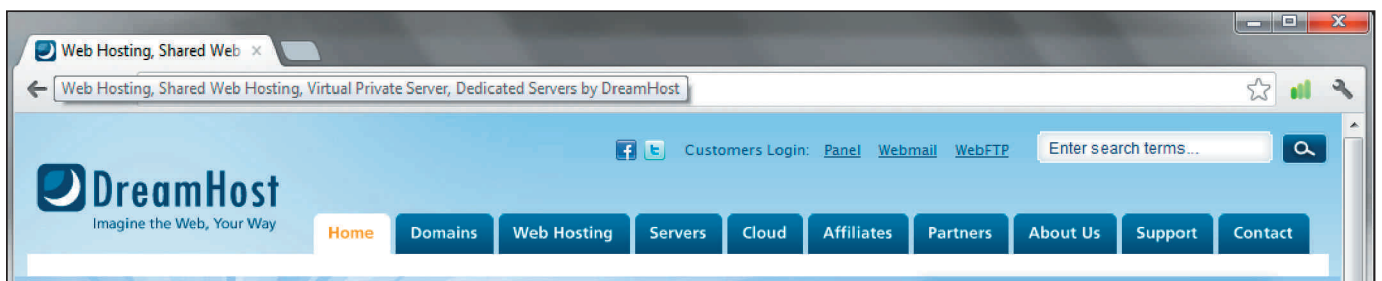
User Profile

- Average web-savvy user

- Knows how to surf the web and check email

- Has never uploaded a website before

- Does not consider himself an industry expert in websites, servers, etc.

Task

The user has just purchased domain space on the website dreamhost.com and he wishes to **upload his already built website to the new host.**

On the Dreamhost site, this is a four step process that involves logging into the site, navigating and using the "control panel", navigating and using the "domains page", and logging into the website's FTP.

This process should be painless and simple considering all he has to do is upload the site to their server. Uploading a website is a priority task for any web hosting service. A user would expect the process to be user friendly. Let's see what happens when he tries to upload his site for the first time.

Heuristics Used

1.

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

2.

Use Simple and Natural Language
The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms.

3.

Provide Clearly Marked Exits
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.

Be Consistent
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 not 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.

Reduce Uncertainty
Display data in a manner that is clear and obvious. The hierarchy of information and color scheme is organized to properly highlight priority tasks.

8.

Use 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.

Deal With Errors Simply
Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.
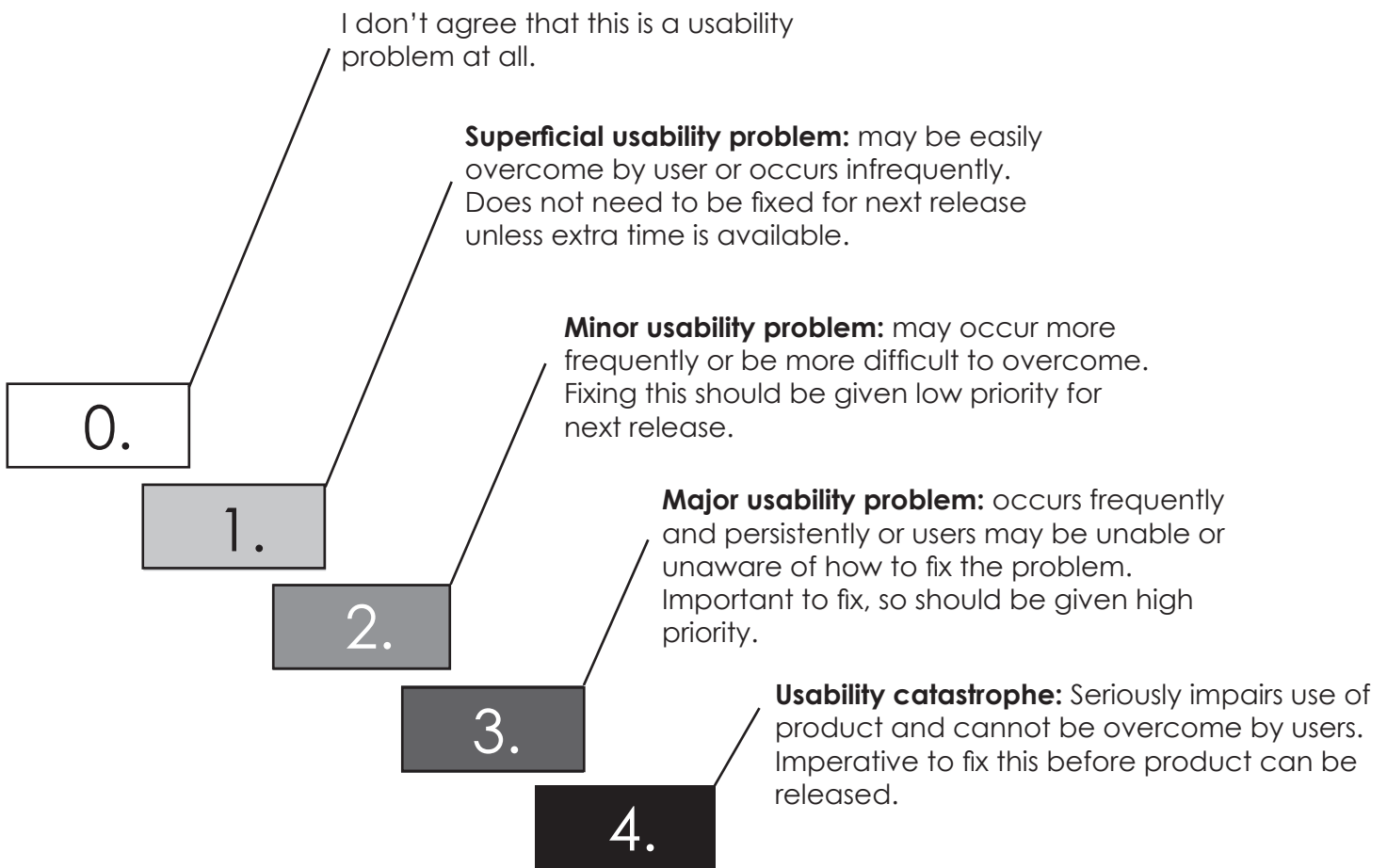
10.

Provide Help
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.

Nielsen (2005), Gerhardt-Powals (1996)

Severity Rankings

To further understand the impact of the usability problems encountered, an estimated severity ranking has been added to each of the issues. The problem severity was determined by the frequency of the problem, the ease with which the user could overcome the problem, and the persistence of the problem—whether it could be solved once or would continue to show up. This allows the readers of the report to prioritize which problems to fix immediately and which to delay.

I don't agree that this is a usability problem at all.

Superficial usability problem: may be easily overcome by user or occurs infrequently. Does not need to be fixed for next release unless extra time is available.

Minor usability problem: may occur more frequently or be more difficult to overcome. Fixing this should be given low priority for next release.

Major usability problem: occurs frequently and persistently or users may be unable or unaware of how to fix the problem. Important to fix, so should be given high priority.

Usability catastrophe: Seriously impairs use of product and cannot be overcome by users. Imperative to fix this before product can be released.

0.

1.

2.

3.

4.

Jakob Nielsen (Severity ratings for usability problems)

Summary of Findings

1. Home Page - Client Login

#	Problem	Severity	Heuristics Violated		Recommendation
1	Some language does not correspond with user terminology	3.	2.	Use simple & natural language	Change the terminology of the login section to be more familiar to the user.
2	Login area not high enough in the information hierarchy	2.	6. Recognition not Recall 7. Reduce Uncertainty		Change the aesthetics and color scheme of the the login area to indicate that it is a priority task.
3	User can not clearly distinguish what is clickable.	1.	1.	Provide Feedback	Change the aesthetics of the page options to clearly indicate what the user can click.

2. Welcome Page - Control Panel

#	Problem	Severity	Heuristics Violated		Recommendation
1	Some language does not correspond with user terminology	3.	2.	Use simple & natural language	Change the terminology of the page selections to be more familiar to the user.
2	Current information hierarchy does not provide clear directional paths	3.	6. Recognition not Recall 7. Reduce Uncertainty		Rework the information architecture, the aesthetics and color scheme of the the page to clearly indicate directional paths for priority tasks.
3	Navigation terminology is different from one menu to another	2.	4.	Be Consistent	Make sure all navigation terms are the same and lead to the correct page
4	Sources of help are not high enough in the information hierarchy.	2.	7. Reduce Uncertainty 10. Provide Help		Change the aesthetics and color scheme of the help areas to make "support" easier to find. Also include descriptive tooltips
5	User can not clearly distinguish what is clickable.	1.	1.	Provide Feedback	Change the aesthetics of the page options to clearly indicate what the user can click.
6	The page delivers too much information at one time.	1.	7. Reduce Uncertainty 8. Use Aesthetic & Minimalist Design		Rework the information architecture and aesthetics of the page to create order and eliminate unnecessary information

3. Manage Domains Page

#	Problem	Severity	Heuristics Violated	Recommendation
1	Some language does not correspond with user terminology	3.	2. Use simple & natural language	Change the terminology of the page selections to be more familiar to the user.
2	Current information hierarchy does not provide clear directional paths	3.	6. Recognition not Recall 7. Reduce Uncertainty	Rework the information architecture, the aesthetics and color scheme of the the page to clearly indicate directional paths for priority tasks.
3	Navigation terminology is different from one menu to another	2.	4. Be Consistent	Make sure all navigation terms are the same and lead to the correct page
4	Sources of help are not high enough in the information hierarchy.	2.	7. Reduce Uncertainty 10. Provide Help	Change the aesthetics and color scheme of the help areas to make them easier to find
5	User can not clearly distinguish what is clickable.	1.	1. Provide Feedback	Change the aesthetics of the page options to clearly indicate what the user can click.
6	The page delivers too much information at one time.	1.	7. Reduce Uncertainty 8. Use Aesthetic & Minimalist Design	Rework the information architecture and aesthetics of the page to create order and eliminate unnecessary information

4. WebFTP Login

#	Problem	Severity	Heuristics Violated	Recommendation
1	Some language does not correspond with user terminology	3.	2. Use simple & natural language	Consider changing the terminology of the login section to be more familiar to the user.
2	Sources of help are non - existent on the page	3.	5. Error Prevention 10. Provide Help	Add links to"Support" or tooltip dialogues to help the user complete the login task.
3	Error message is un-descriptive and provides little guidance.	3.	9. Deal With Errors Simply	Change the error message to one with more direction. Also include a link to "Support"
4	Green checkmark is used to "login" selection	1.	2. Use simple & natural language	Change the green checkmark to a "Login" button.

Specific Problem Areas

1. Home Page - Client Login

The client login is not clearly marked and the three underlined options that exist are confusing. A user may eventually notice "customer login" to the left, however there is no clear indication of if it is clickable or not. (In this case it is not)

A user is left guessing between the three options without knowing that the "Panel" link leads them to the login screen. User could feel punished for not understanding the page terminology.

The sales side of the website is beautifully designed with clear navigation tabs, while the client portion is hidden, un-bolded, and almost the same colors as the background. The information hierarchy and color scheme cause for the login area to be noticed last.

Heuristic Violations

1.
Provide Feedback

2.
Use Simple
& Natural Language

6.
Recognition not Recall

7.
Reduce Uncertainty

Which one lets me login?

Can I click that?

What's a Panel?
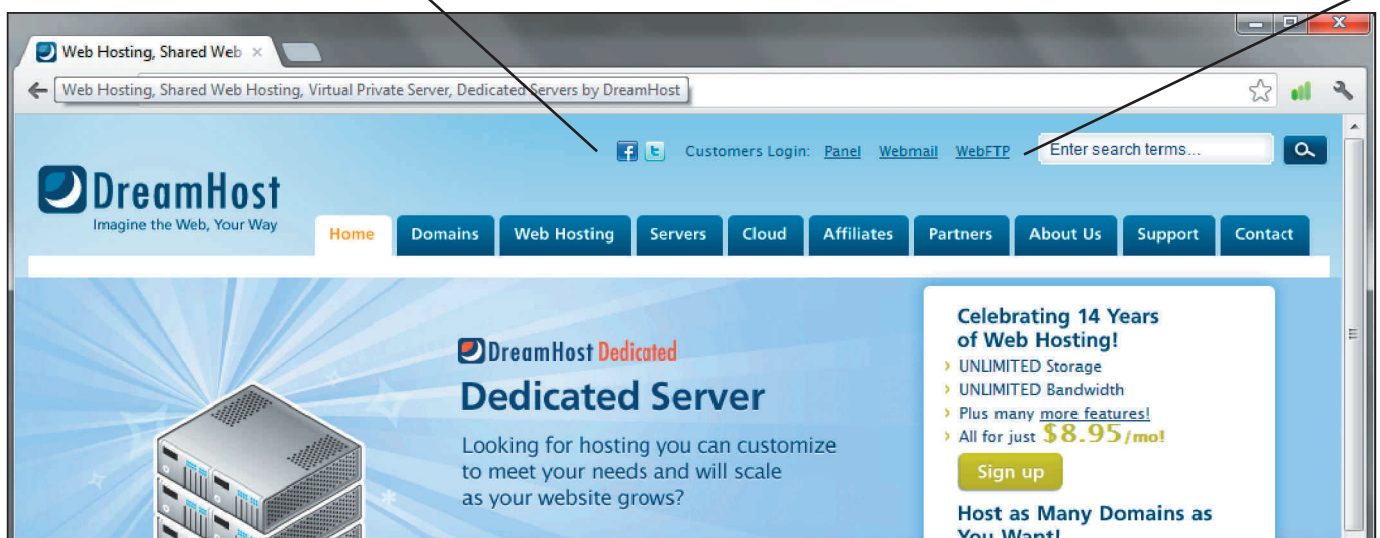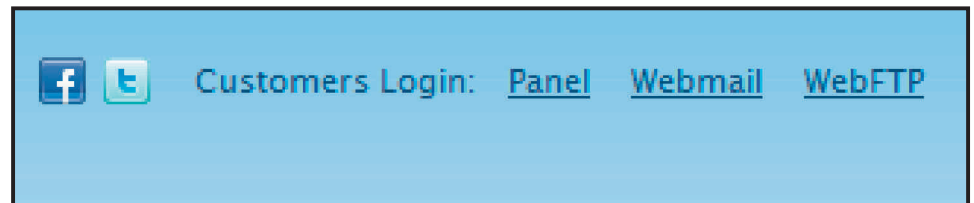
Recommendation

The simple solution to this problem is to change the terminology and the aesthetics of the login section. The following example shows an "Already a Customer?" section that is clearly marked with black text. Also, the three options to login have been replaced with one large "Login Here" button. The button has a white background and a raised shadow allowing the user to clearly identify that the object is clickable.

Step 1
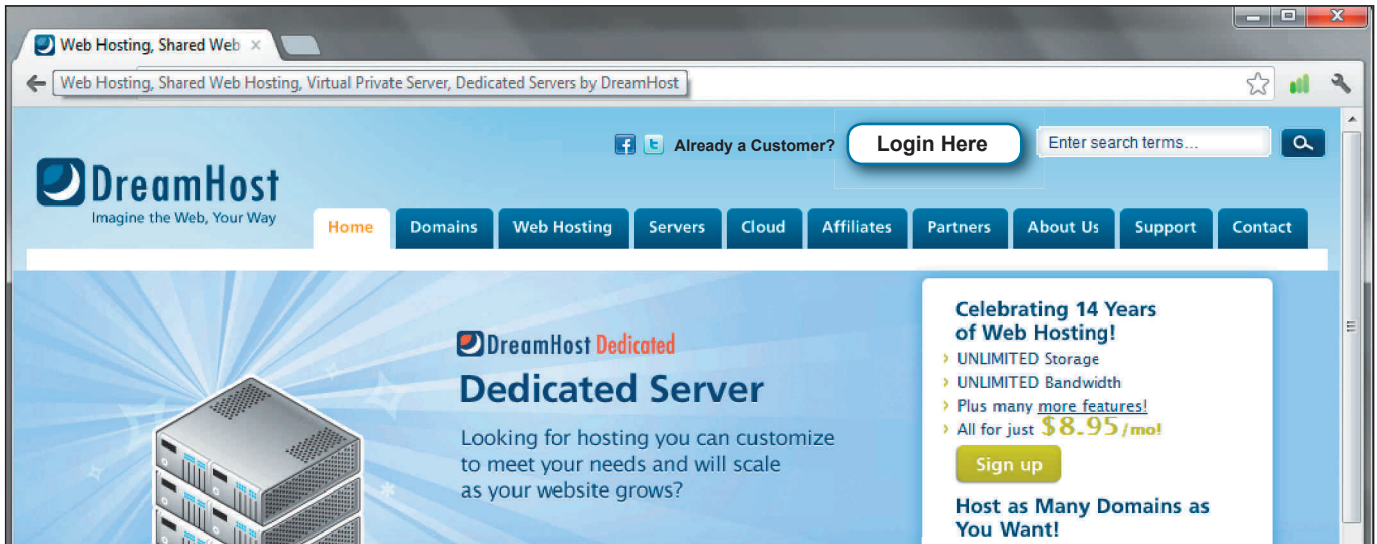
The three options to login (Panel, Webmail, WebFTP) exist because these three areas are the most used areas on the site. It makes perfect sense to allow an experienced user to shortcut from the homepage to the area wanted. However, the current setup is confusing for newer users and they could easily become lost within the first step. Placing a single "Login Here" option as the first step, then allowing the user to choose between the three shortcuts, accomplishes both goals. The newer users are directly pointed to where they need to go, and the experienced users can shortcut to their destination.

Step 2
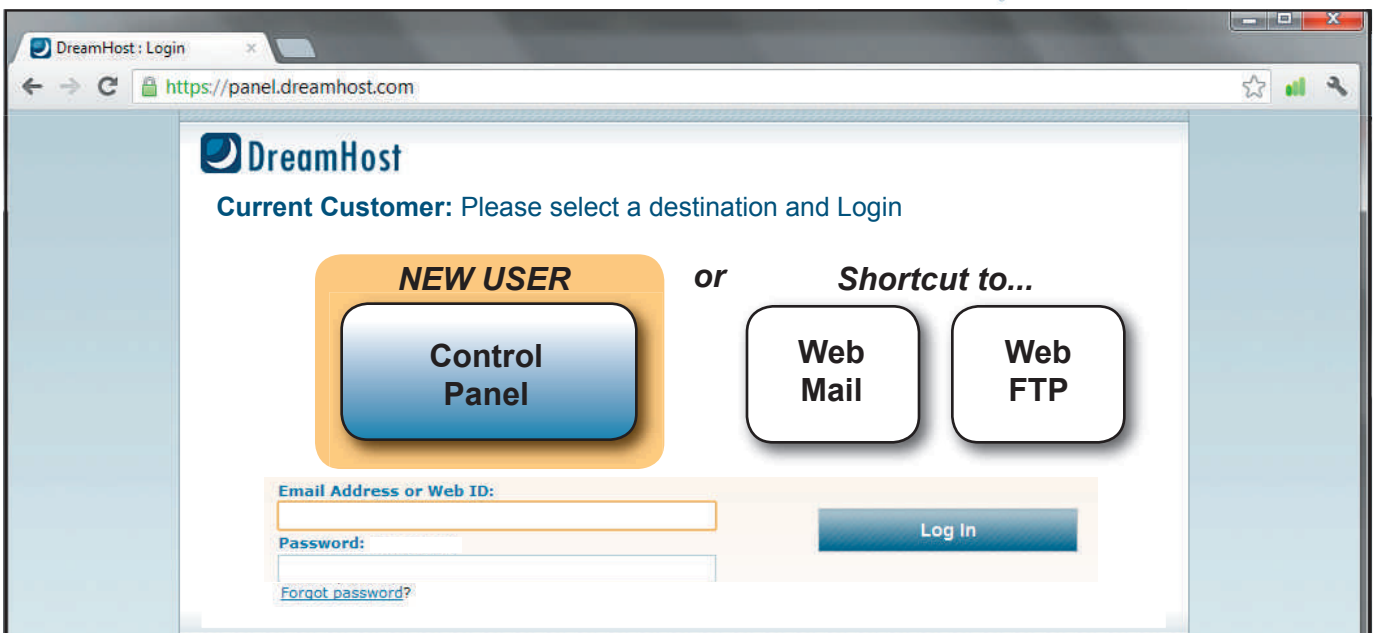
2. Welcome Page - Control Panel

The welcome page throws too much information at the user at one time. Also, the color scheme allows critical information to fade into the background. The page as a whole seems like a blur with no clear hierarchy of information.

The paragraph welcoming a new user to the site is supposed to be the 'Help' area, however, the information communicated is mostly useless, does not provide any concrete steps to follow, and demands too much attention. The only other location for help is in the top right corner, under the "Support Wiki" link. The link is not in clear view and the font is too small for such an important feature. The user is left settling for the "Search Bar".

Both the toolbox and the main menu navigation bars on the left blend into the background. Most of the terms in the menus would be unfamiliar to a new user and it seems like a lot of the links go to the same place yet have different names.

After searching the page a user may find the "Let's Get Started" section toward the bottom, but after further investigation they would be even more confused. The user is left wondering if the boxes are clickable or not. The logos are so small they might as well not even be on the page. Also, the terminology used is not actionable and does not provide clear direction for the user. Although the correct link is "Domain Hosting" there is still no clear path to upload a new website.

Which way do I go?
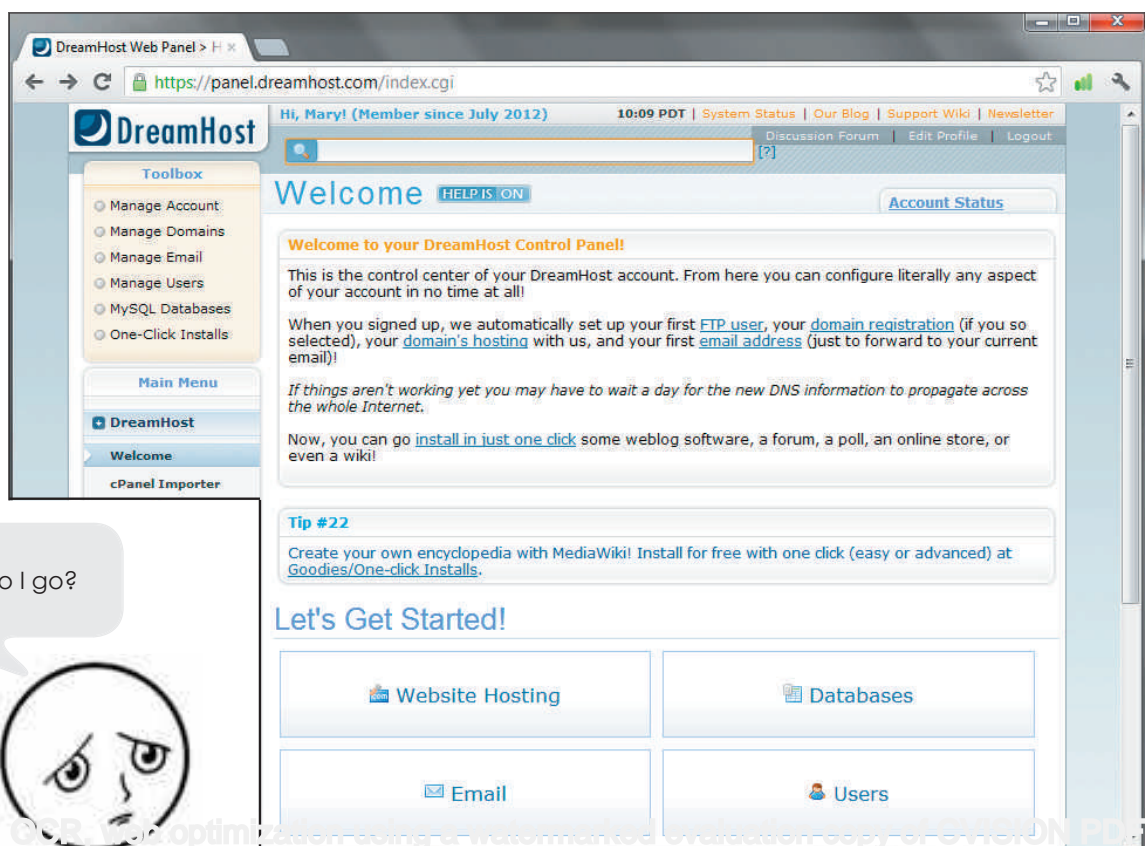
Recommendation

One possible solution to these problems is to reorganize the information on the page and create consistency between the terminologies. In the example below, the page has been cleared of clutter and the information has been organized into six obviously clickable boxes. The terminology of the menus now correlates with the bulk of the page. Also their color scheme has been changed in order to make them stand out more. It is recommended that the visual design team add logos for each of the six main categories. Also, the navigation area in the top right corner, has been done away with. It has been replaced with a clearly marked "Need Help? CLICK HERE" button that guides the user to the 'Support Wiki'.
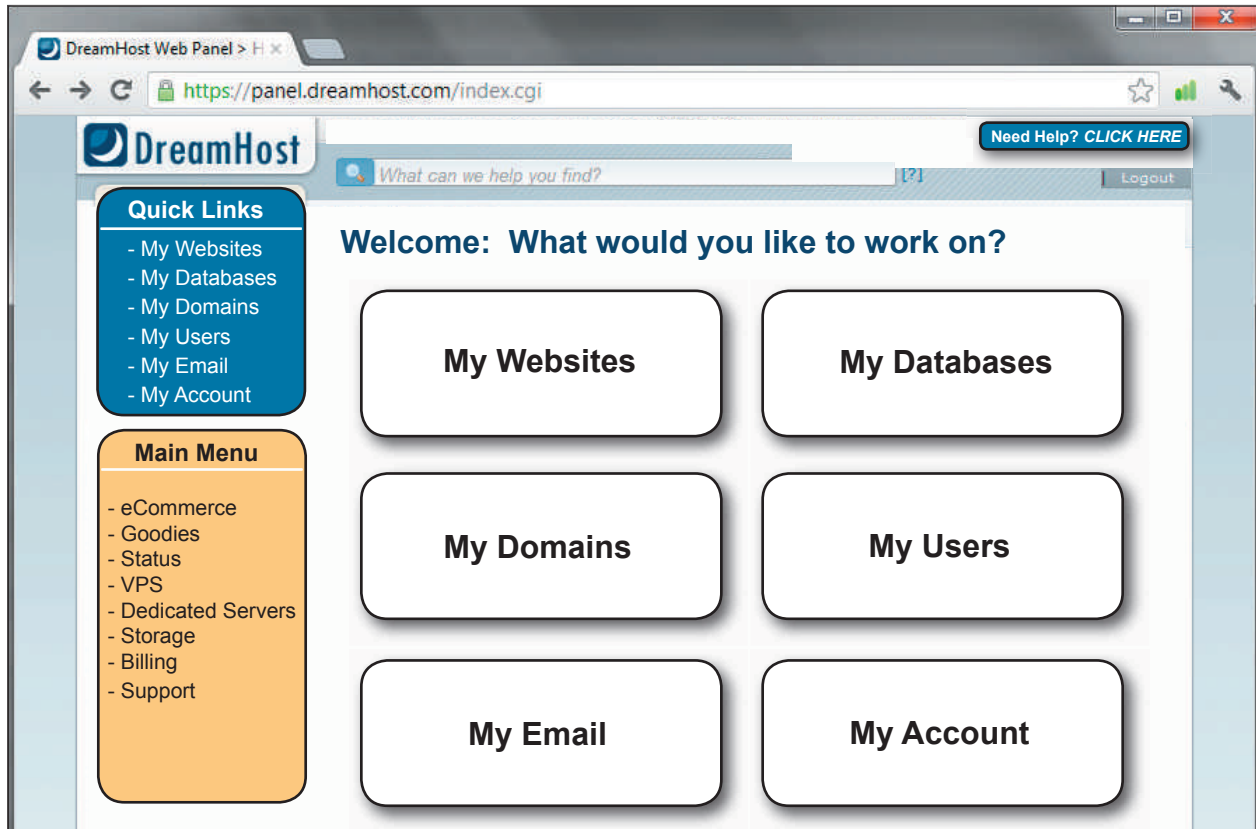
The addition of simple and concise tooltips for each navigation selection allows the user to make more educated decisions while navigating the site.
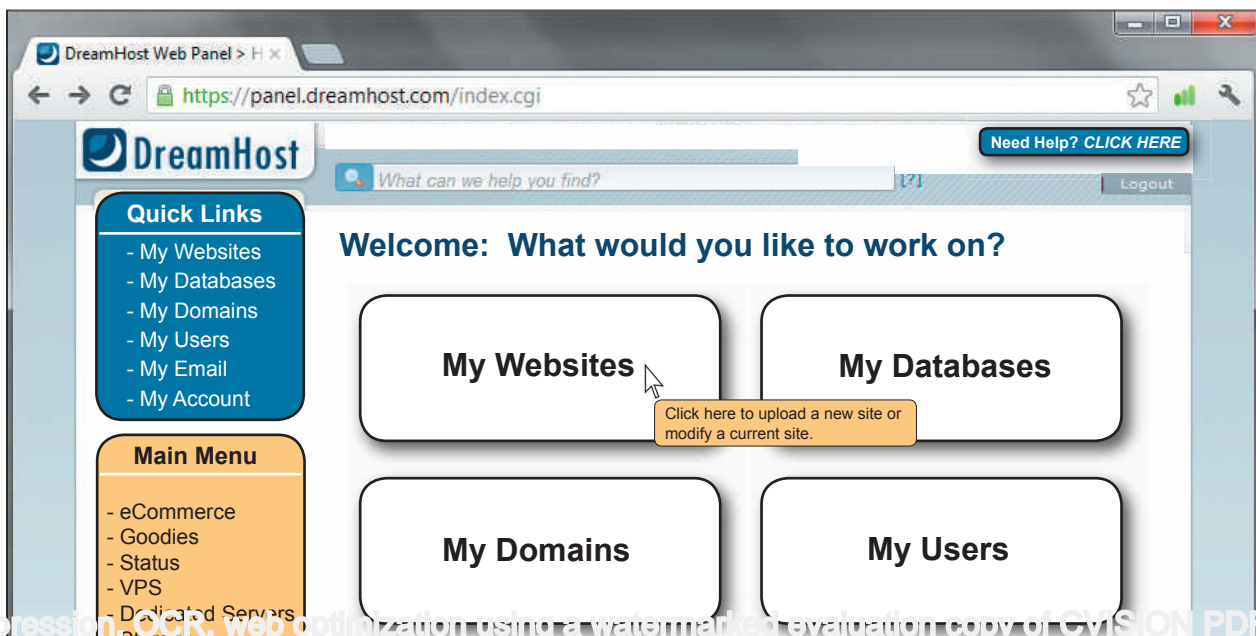
3. *Manage Domains Page*

To begin with, the "Website Hosting" link takes the user to the "Manage Domains" page. While this is the correct location to upload a site, the user is presented with a page that handles both website modification and domain modification. This could be confusing and should be separated.

This page displays too much information without a clear hierarchy. The 'Domain Management" box is the first item on the page, yet it provides the user no real direction. One would be tempted to use the Search Box to look for everything.

The next thing to catch the eye is the "Add New Domain / Sub Domain" link. While this could be useful at some point, it is doubtful it is used frequently enough to demand a high spot in the visual hierarchy.

Eventually the user would notice the "All domains listed on this account" area. Here they can see their domain name and the status of the page. This is the proper location to upload a new site to the domain. However, there is no clear indication of how to start that process. The underlined links at the bottom of the area are not clearly clickable and the user has to guess which one will take him to the correct location. Also, one would wonder if every user would understand their terminology (FTP or WebFTP)?

This page has the same 'help' options as the welcome page. The 'Support Wiki' is located in the top right corner and not easy to notice

1.
Provide Feedback

2.
Use Simple & Natural Language

4.
Be Consistent

6.
Recognition not Recall

7.
Reduce Uncertainty

8.
Use Aesthetic & Minimalist Design

10.
Provide Help

Which FTP is the right one?

I thought I clicked "Website Hosting"

Recommendation

It is recommended that all information and tasks be organized and handled under their appropriate title. Domain addition and editing should be handled under the "My Domains" link, while website modification should be handled under the "My Websites" link. Each category should have their own page, process and path through the website.

The example below is the link that a user would arrive at after clicking on the "My Websites" link. The page is easy to read and understand. There are two steps involved. The user must first select which domain they would like to edit. Then the user must select which editing action they would like to use.
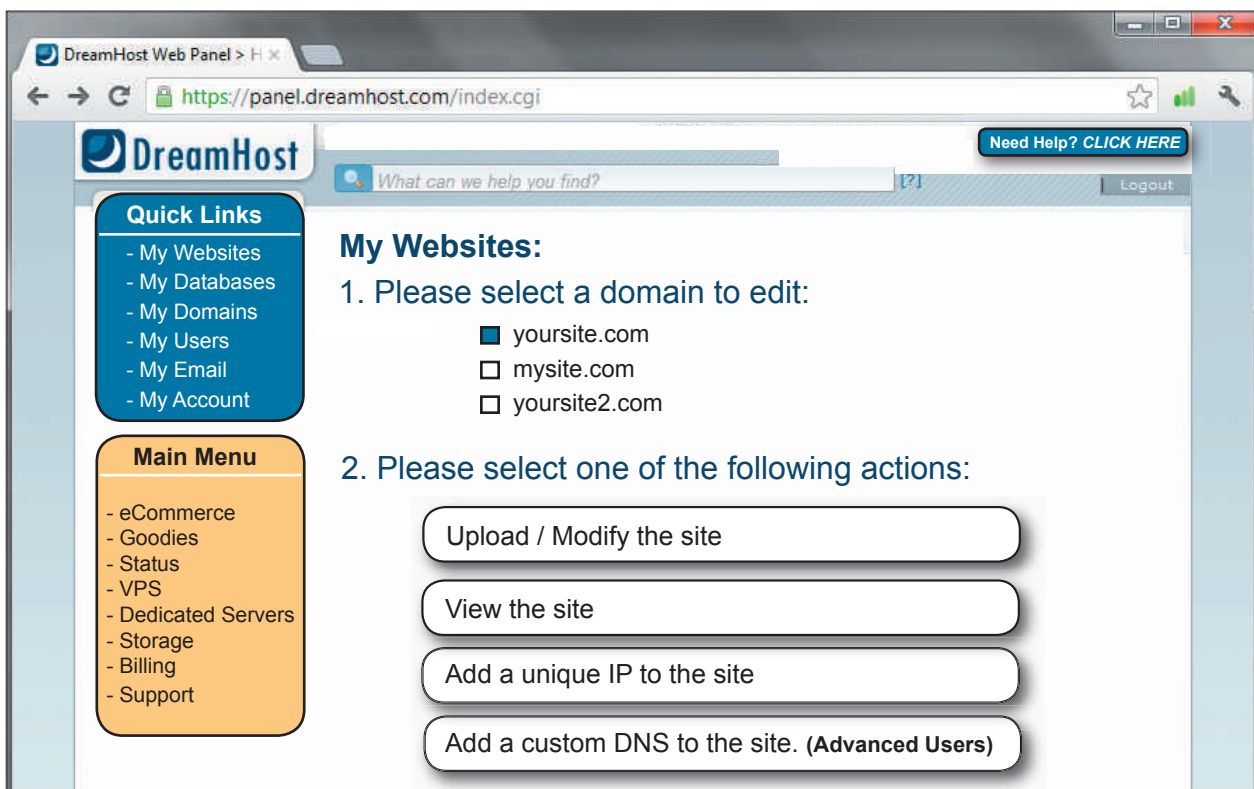
The navigation area in the top right corner has been done away with. It has been replaced with a clearly marked "Need Help? CLICK HERE" button that guides the user to the 'Support Wiki'.

The information displayed on the page is now very clear and organized. A user can easily understand the terminology and see the path they need to take in order to upload a site to their domain. The user no longer has to figure out which FTP link will take them to the correct place for uploading. Once the user selects "Upload / Modify the site" they are immediately taken to the WebFTP login screen.

4. WebFTP Login

At first glance, the 'WebFTP' login seems crisp and clean with a minimalist design and understandable terminology. However, a newer user would have problems understanding what they are asking for in the requested fields.

Once a user enters their login information, they are presented with the option of clicking a green checkmark or a grey X. While the user would most likely make the correct selection, this is not standard for most acceptance interactions.

The user would assume that their 'Login' and 'Password' are the same as those used for the Dreamhost website. Unfortunately, this is not the case, and as shown below, an undescriptive error box is displayed when the incorrect login information is entered. There is no link for help provided.

Heuristic Violations

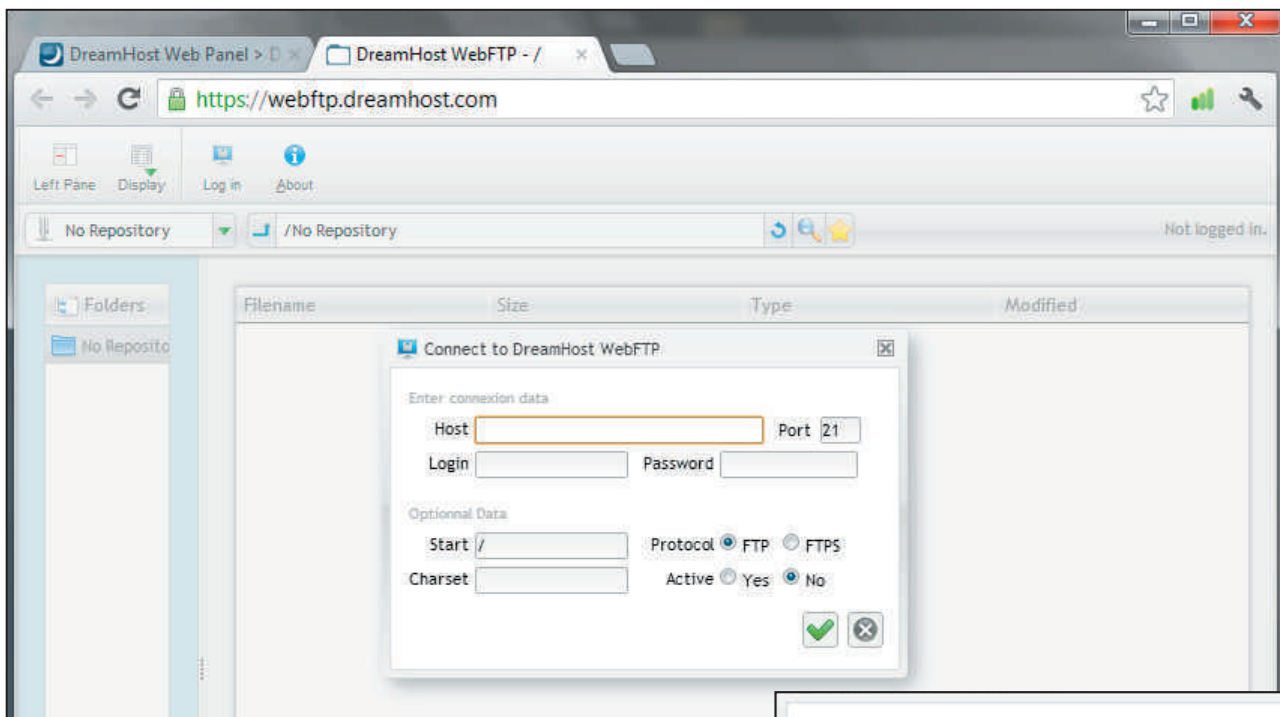**2.**
Use Simple
& Natural Language
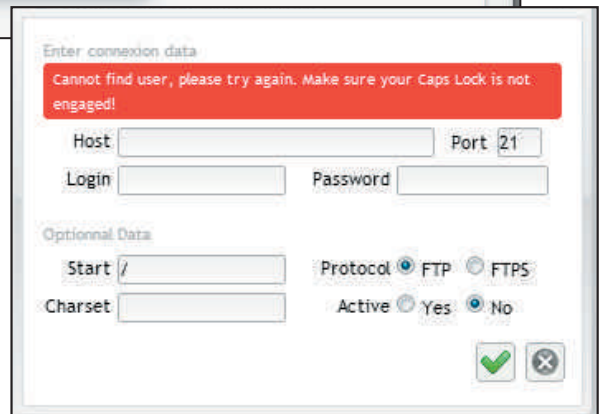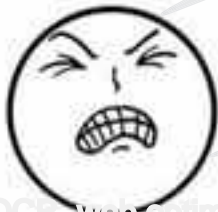
5.
Error Prevention

9.
Deal With Errors Simply

10.
Provide Help

Recommendation

One possible solution to these issues would be to make the login information of the dreamhost website and the WebFTP identical. If this is not possible in every situation, then it is also recommended that tooltips or a solution key be added to the login screen. In order to help prevent error, these tooltips would explain what each field is asking for and where a user could locate it.

As seen in the graphic below, a "Need Help? CLICK HERE" button has been added that acts as a link to the 'Uploading Your Site' section of the Support Wiki. This provides access to help at any point in the process. Also, the green checkmark has been replaced with a "Login" button in order to maximize clarity.
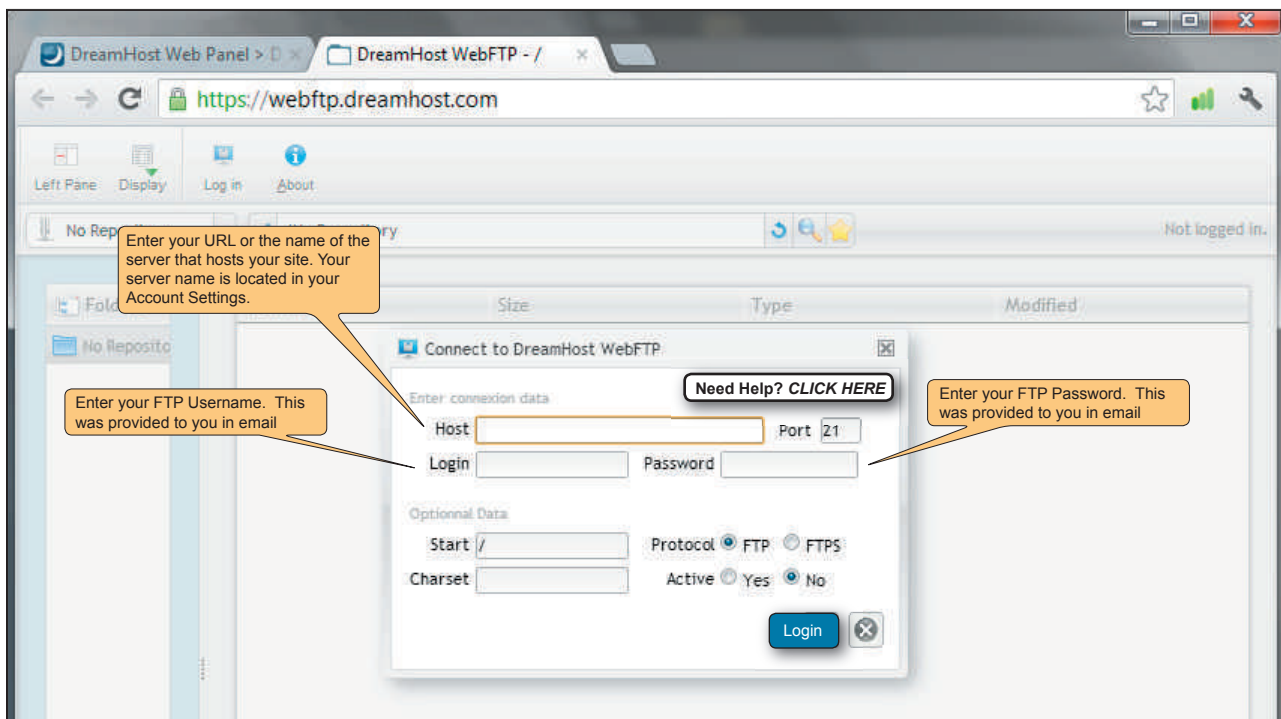
The error message has been changed to a more descriptive phrase that clearly communicates the problem and constructively suggests a solution.

A "Still No Luck? CLICK HERE FOR HELP" link has also been added to provide emergency access to the "Uploading Your Site" section of the Support Wiki.
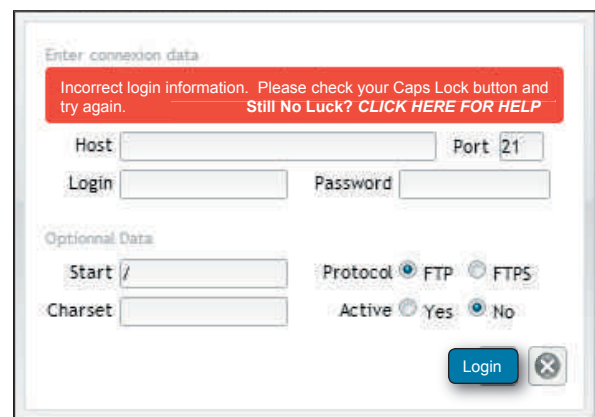
Summary

While the sales side of the dreamhost site (the homepage) is easy to navigate and use, a detailed evaluation of the inner workings (the client side) of the site has brought to light many usability problems.

The primary usability problems found from this evaluation can be grouped into five main categories. They are as follows:

1. The terminology is too 'system oriented' and lacks familiarity to the user.
2. The hierarchy of information is not organized properly to highlight priority tasks.
3. The design is not aesthetic, lacks minimalism, and contains unnecessary information.
4. The system does not provide clear and easy access to help with documentation.
5. The site does not provide proper cues and feedback to the user.

These issues were addressed in more detail in the above report. It is recommended that further usability testing take place in order to create and implement more user-centered solutions. Here are a few suggestions.

- **User Interviews and Observations** - For task analysis and prioritization

- **Closed Card Sorting** - For correcting the information architecture

- **Remote testing** (Assessment Test) - To identify other usability problems throughout the site

(Comparative Test) - To compare new interface styles and color schemes

(Verification Test) - To confirm that problems have been remedied and that new problems have not been created.

Resources

Nielsen, J. (n.d.) Severity Rankings for Usability Problems. Access February 22, 2005,
http://www.useit.com/papers/heuristic/severityrating.html

Nielsen, J. (n.d.). Ten Usability Heuristics. Accessed February 9, 2005,
http://www.useit.com/papers/heuristic/heuristic_list.html

Cognitive engineering principles for enhancing human - computer performance, Gerhardt-Powals, J., International Journal of Human-Computer Interaction, 8(2), 189-211, (1996)

Ryan Basel
baselrp@gmail.com