Pamela P. Cote **pam@pcexpressions.com**
April 24, 2003

Overview
This article reviews documentation for a client who wants to be able to update a photo and it's caption on the staff directory page of his website. He has the necessary tools to size and compress a photo, a copy of HTML-Kit, and access to his web host. He is very experienced in specific applications such as Excel and has used the internet for over five years. He could probably learn html coding, but doesn't have the time. I designed a website for him and he requested this added feature. Unfortunately, he has been on vacation the past two weeks, and I haven't been able to add him as a usability tester.

The Test Design
I decided to use heuristic evaluation because of the difficulty of arranging a testing environment for observation and timing participants. I have used heuristic evaluations in the past and think that if a user is given a specific task within a given scenario, they can reasonably test functionality of the design. With the right mix of expertise, they can also offer specific suggestions for improvement.

This test used a high fidelity prototype without actually installing related software applications. It was a small portion of the entire process, but the same rules of consistency would apply to all portions, so observations of the testers would be relevant to the rest of the project.

This type of prototype is concrete and I think particularly suited to heuristic review. My testers, as business analysts, website owners, and internet users who are business owners, are confident in their own perceptions and I relied on their ability to relate them through the questionnaire.

The evaluation can be found at this link www.pcexpressions.com/TOC/usersurvey.htm. I created the evaluation and survey to be a self-contained online experience by incorporating the basic information needed. There are sections for background, scenario, task, and both pre and post-test questions. I believe the questions elicited effective responses with comments and suggestions for improvement.

When the tester submits the form, the information is returned to me via email. I have collated the answers in the appendix.

If I were working on a larger application or one that would apply to a large group of people with varied experience, I might have tried a low level prototype to encourage suggestions related to the process. High level prototypes tend to make people think their opinions won't count for much because the application is so far along.

The Testers
I was able to convince five testers with varying experience to complete the survey. One other person wasn't able to access it for some unknown reason.

Linda is an artist who has a start-up website. She has been using the internet for a couple of years, but has little knowledge of the underlying technology. She has

Pamela P. Cote pam@pcexpressions.com
April 24, 2003

successfully translated her previous Mac experience to a new PC. Like the client, she wants to be able to make updates to her website by herself and is reasonably confident that with instructions such as those she reviewed for this test, she can manage it.

Ron is a business analyst with a programming background. He uses the internet extensively for research purposes at work, and for pleasure at home. He is very experienced in many complex software applications.

Karen is an entrepreneur with a landscape contracting business and a retail store for nursery items. She has quite a bit of internet experience and intermediate to advanced knowledge of MS Office applications. She has a one page website, and is looking into expanding that into a fully fledged website.

Laura does contract work for small businesses, has her own website that was designed by a web designer. She is able to upload files, set up email boxes, and create basic web pages using MS Word, but those are for personal purposes such as to sell her sailboat.

Rowena is another artist, but uses the internet and email all the time to keep in touch. She may get a website sometime this year to list her shows and galleries with dates and some representative pieces of pottery that should be updated regularly.

I was able to observe Linda while taking the survey, and she asked me what the submit button was, but found it a little lower on the screen. She also wondered how to find out what version of internet explorer she had. It was interesting that the only question that came up about the task itself was the meaning of the question regarding the theme. I would like to be able to do more actual observations in the future. I found it difficult to stay totally in the background and not answer her questions as they arose.

I was able to see how long users took to complete the survey because of times in the server log. For the most part they took 12 – 15 minutes. It is hard to tell whether there were any interruptions when it took longer, or if they restarted the survey at a later time and could skip reading the instructions.

General Observations
These people do not have the training to design a website. They don't understand server side includes, which this particular web page uses in order to incorporate the photo and caption into the staff directory listing.

Even those for whom it is intended will do this task infrequently. It is not a primary task for them even if it is their responsibility. This set of instructions takes advantage of software that is already in use by the client, but even those that don't have direct exposure to HTML-Kit and Photoshop, were able to understand the instructions and relate them to existing experience.

They all understood what the end result should be, and the instructions were stated in contexts that they found familiar.

Pamela P. Cote **pam@pcexpressions.com**
April 24, 2003

The users who participated in my test included two who expressed interest in similar needs for this online documentation and the rest use the internet daily.

What is their attitude about the task?
None of the users would do this task on a daily or even monthly basis, so they need a very straightforward how-to guide. If there are enough built in affordances, they can simply look at the subtitles, or even glance at the pictures instead of reading the entire instruction each time.

Since this task is infrequent, I felt that the wide range of users gave me good data for analysis. I know all of these users and they wouldn't hesitate to speak their mind.

Results Obtained
I had almost all females although I had invited several additional males to participate. They live in small cities and towns, but have some college if not degrees. They rate themselves as intermediate to very experienced although my observation of some of them shows they are either under or overestimating that rating.

I didn't include the type of internet connection they normally use, and that may determine how long each person was willing to wait for a page to load. In any case, I made an effort to make sure each page of the instructions was small and loaded quickly.

The testers didn't seem to like much animation. I found it unusual that when asked if the navigation scheme should change, two answered "it depends". In my opinion, it should be consistent throughout.

All who answered felt that the navigation should indicate where they have already visited. This is interesting because so many websites have gotten away from changing the color of visited links.

The testers thought the page content was well organized, except for a suggestion to add more white space between the navigation and the body content. That makes sense to me, and I had been thinking of doing that or finding another way to make the break between navigation and body content more obvious.
The terminology made sense to them. There was one suggestion to change the download terminology to use "click here" instead of "right click", but clicking would cause the file (and html) to open as a web page. The object is to download the file, so I stand by the words I used.

Regarding the navigation, there was a problem pointed out that related to the Staff page html being repeated several times instead of the correct titles. That will be corrected in a later version.

Pamela P. Cote pam@pcexpressions.com
April 24, 2003

There was a consistency problem on the insert photo page in that the navigation didn't quite match. That will be corrected in a later version. Otherwise, the look and feel was acceptable to the testers.

The links and navigation were easy to follow and consistent.

There was an expectation on the "check your work" page that didn't seem to be fulfilled. Several testers felt that the final results should be displayed on the "check your work" page. I had thought that just seeing the photo and caption would be enough since that is all they are changing with this task. I'm not sure whether it would be realistic to view the final result as the whole page including the staff directory. The staff directory is another section that the client wants to be able to update in a similar manner.

All testers felt they would be able to use these instructions successfully.

Questions for Follow-Up or Improvement
I should include questions that help determine their expertise on the internet. Self rating, in my opinion, seemed to be based more on length of experience rather than actual knowledge or breadth of experience.

I should have asked the testers in what cases they felt animation was acceptable. It may be that they would have suggested animation for some part of the instructions.

I should have encouraged an explanation about why some felt it was all right for the navigation scheme to change.

I need to ask more questions about showing the final product on the "check your work" page. For instance is it adequate to only show the photo and caption section of the page that is being updated or is it necessary to try to incorporate the other sections, which include the staff listing, header and footer.

User environments
The user environment would include an office or home office, with current technology. They would feel that an investment in computers was worthwhile, or they most likely wouldn't have their own websites.

Wrap-Up
I think the testing went well. There were some important points brought out that I need incorporate in the next version such as matching up titles to navigation links and fixing navigation labels. There are some suggestions to consider for further evaluation, especially regarding how to check the final product. The questions that were answered with comments rather than simple yes and no were very helpful to me, so I need to add more open ended questions instead of making it as easy as possible for the testers to get through the survey.

Pamela P. Cote pam@pcexpressions.com
April 24, 2003

Appendix – Collated survey answers

Personal Information

1. How old are you?
Ron: 45-54
Rowena: 55-64
Laura: 25-34
Karen: 45-54
Linda: 55-64

2. What is your gender?
Ron: male
Rowena: female
Laura: female
Karen: female
Linda: female

3. Where do you live?
Ron: Hager City
Rowena: Wisconsin
Laura: Salem, MA
Karen: MN
Linda: Arkansaw, Wisconsin

4. What is your highest level of education completed?
Ron: Bachelors degree
Rowena: Bachelors degree
Laura: Bachelors degree
Karen: High School
Linda: Bachelors degree

5. How would you rate your internet experience?
Ron: very experienced
Rowena: intermediate
Laura: very experienced
Karen: intermediate
Linda: intermediate

6. What World Wide Web Browser do you use most of the time?
Ron: IE 5.0
Rowena: IE 5.5
Laura: IE 6
Karen: IE 6.0
Linda: IE 5

Pamela P. Cote pam@pcexpressions.com
April 24, 2003

Web Preferences

7. How often do you use the World Wide Web?
Ron: Daily
Rowena: Daily
Laura: Daily
Karen: Daily
Linda: Daily

8. Do you think the World Wide Web is a useful information tool?
Ron: useful tool
Rowena: useful tool
Laura: useful tool
Karen: useful tool
Linda: useful tool

9. How long have you been using the World Wide Web?
Ron: 5 years +
Rowena: 2 years
Laura: 5 years +
Karen: don't know
Linda: 3 years

10. How long will you wait for the homepage of a site to open?
Ron: <1 minute
Rowena: > 1 minute
Laura: < 30 seconds
Karen: < 20 seconds
Linda: < 1 minute

11. How much animation do you like to see on websites?
Ron: some
Rowena: n/a
Laura: none
Karen: none
Linda: some

12. When using a web site, where would you first look for site navigation links?
Ron: top
Rowena: top
Laura: left
Karen: left
Linda: top

13. Should the navigation scheme stay the same on all pages or should it change depending on which page you are on?
Ron: yes
Rowena: depends
Laura: yes
Karen: yes
Linda: depends

14. Do you want the page to indicate which pages you have already visited?
Ron: yes
Rowena: yes
Laura: yes
Karen: yes
Linda: no opinion

Page Content

15. Is text broken into easy to read sections?
Ron: Yes
Rowena: Yes
Laura: Yes
Karen: Yes
Linda: Yes

16. Is there too much content per page?
Ron: No
Rowena: No
Laura: now, don't need to scroll too much
Karen: No
Linda: No

17. Is the page too long or require too much scrolling?
Ron: No
Rowena: No
Laura: No
Karen: No
Linda: No

18. Is there enough white space?
Ron: Yes
Rowena: Yes
Laura: you should make more delineation between the navigation and the body text - maybe a wider margin to the left of the body

Karen: Yes
Linda: Yes

The Real World

19. Are the terms easy to understand?
Ron: Yes
Rowena: Yes
Laura: I'm not familiar with HTML-Kit, but the instructions for opening and the snapshots of the screen help identify that I'm doing the correct think
Karen: Yes
Linda: Yes

20. Are there any links you don't understand?
Ron: !st page - "To download copy of the template, right click here" should just be "click here". Otherwise links are easy to understand.
Rowena: No
Laura: I don't understand the references to staff and availability, but since they are part of the self-help center, maybe they are other pages on the website that the user can change themselves?
Karen: No
Linda: No

21. Do you know what each navigation term means?
Ron: Yes
Rowena: Yes
Laura: There seem to be duplicates - or triplicates under the Staff navigation. Doesn't seem to tell me much, maybe something that hasn't been developed yet?
Karen: Yes
Linda: Yes

22. Do the terms fit your vocabulary?
Ron: Yes
Rowena: Yes
Laura: The terms in the instruction set make sense.
Karen: Yes
Linda: yes, I understand what they mean

Look and Feel

23. Is there a theme and does the web page stick to it?
Ron: Yes
Rowena: Yes
Laura: Yes, the same color scheme, fonts, grouping, are used on all pages I could view. The same types of cues (what does it look like) are used.

Karen: not sure what this means
Linda: yes

24. Is the theme consistent with the message?
Ron: Yes
Rowena: Yes
Laura: Not inconsistent.
Karen: see above
Linda: Yes

25. Is the font color a good pairing with the background?
Ron: Yes
Rowena: Yes
Laura: Yes
Karen: Yes
Linda: yes

26. Is there anything that detracts from the message of the site?
Ron: No
Rowena: No
Laura: Since the title of the insert photo page says replace, either the nav should match the page title or vice versa
Karen: No
Linda: No

Coding

27. Does the first page appear quickly?
Ron: Yes
Rowena: Yes
Laura: Yes
Karen: yes
Linda: yes

28. Do you see any place where a warning or error message would be useful?
Ron: No
Rowena: No
Laura: No
Karen: no
Linda: no

29. Do you find what you expect on the "check your work" page?
Ron: Somewhat, it would be better if a link allowed you to see the new screen with picture & captions.
Rowena: Yes

Laura: at first I thought the what does it look like would show me the finished product, but it makes sense given the actual instruction that it shows the buttons to click
Karen: yes
Linda: it would be nice to see the actual results

30. Were the "what does it look like" links helpful?
Ron: Yes
Rowena: Yes
Laura: very helpful
Karen: yes I liked that part
Linda: yes

Consistency

31. Are standards followed throughout the pages?
Ron: Yes
Rowena: Yes
Laura: Yes
Karen: yes
Linda: yes

32. Are links readily noticed?
Ron: Yes
Rowena: Yes
Laura: Yes
Karen: yes
Linda: yes

33. Is navigation easy to follow, and consistent?
Ron: Yes
Rowena: Yes
Laura: Yes
Karen: yes
Linda: yes

34. Is there good organization?
Ron: Yes
Rowena: Yes
Laura: Yes
Karen: yes, easy to follow
Linda: yes

Pamela P. Cote pam@pcexpressions.com
April 24, 2003

Summary

35. With your skill level, do you think you could accomplish the task described successfully?
Ron: Yes
Rowena: Yes
Laura: Yes
Karen: yes
Linda: yes, no problem