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Physicians Heal Themselves... And You Get to Watch!

How we tested the User Interface conference web site

by Lori Landesman

Our mission at User Interface Engineering is to improve people's quality of life by reducing their frustration with technology. To that end, we work closely with designers and developers of various technologies to help them understand who uses their products, why, and where those people encounter frustration. Time and again we're reminded that, once you see people having problems using your product, it's relatively easy to brainstorm potential solutions. You can't devise solutions, though, if you haven't identified the problems.

In these pages – as in our courses and reports – we've often discussed why testing products for usability is so important: it helps you zero in on the problems and obstacles to success that people encounter when using your product. Our clients often ask us for a list of rules, something like a recipe, for how to design for usability. One of the most important things we tell them is, "Test. Test it now to see what the problems are, then test it again after you've redesigned to see what you've fixed and what's left, then test again." It's basically impossible to know before-hand if a design is going to be usable. You have to try it out and test it to see. It's a process we go through, too.

Because we spend so much time talking about web site usability issues, and also because we care about our company's bottom line, we're very concerned with making and keeping our sites usable. We devote most of our resources, though, to testing and researching other companies' sites. Consequently, and contrary to our better judgment, we sometimes neglect the usability of our own sites. When we get the time and resources, we try to practice what we preach.

We thought we'd share how we went about testing one of our own sites as a case study in cost-effective usability testing. We spent only a little time and money on the testing – all told, the testing took us about a week and cost \$450 – and we discovered some interesting things about where our users were having trouble. What we saw validated the importance of regular testing and reiterated some concepts that we

talk about frequently with our clients. We're hoping that by describing the choices we made, you might be able to pick up some pointers that help you decide how to test your own site.

The Site We Tested

We focused our efforts on our conference web site. User Interface Engineering hosts and manages a conference for web site and software designers and developers every six months. Because the roster of speakers and the conference location changes each time, the site changes with each conference; however, the basic layout has stayed the same for the past few conferences. The site is relatively small with pages devoted to the conference schedule, speakers, session descriptions, and registration. This small scope implied to us that we should be able to test with only a few users and get valuable feedback in a short period of time. In the end, we did discover enough about where users had problems with the site to make some important changes.

The actual site we tested was a slightly modified version of the web site for the User Interface 2000 West conference (www.ui2000.com), which had been held in San Francisco, CA in April, 2000. For this test, we changed the dates so it looked like the conference was "coming soon" rather than "already been," and we played with some wording and layouts that we had planned to change anyway.

We had originally hoped to bring in eight users to test the site. We were relying on our own advice that, for small sites offering users limited options and information, eight users would provide enough information for us to discover the site's major issues. Unfortunately, three of our users were unable to participate in testing at the last minute, and scheduling conflicts allowed us to bring in only one replacement. As we tell our clients, though, "A few users are better than no users," and that's exactly what consoled us in this case. We saw six more users than we had seen

before, and the feedback they offered has helped us define our redesign priorities for the site.

Six users may not sound like nearly enough to provide useful feedback, and, in fact, our own recent studies have shown that, on large e-commerce sites, bringing in many users may be required to discover all of the site's major problems.* We felt, though, that for this small site, starting to uncover some of the site's problems would be better than waiting (until who-knows-when?) for the time when we would be able to recruit twelve or more users. We're glad we didn't put it off.

The Users We Recruited

Determining the kind of users to recruit and schedule required not only that we have a very specific idea of who attends the User Interface conference, but also that we specifically target those users likely to register via the conference web site. We weren't simply interested in seeing whether people could find out about the conference via the web site, we also wanted to see what kinds of issues they might encounter during the registration process. We decided on the following criteria:

- **Users must demonstrate a personal or professional interest in web-site and/or software design**, so that they would fall into the conference's target audience. We also decided that our users could be usability professionals, a group we normally try to exclude from our tests. Because many of our conference attendees do fall into this category, we didn't want to eliminate them from testing, and risk excluding a significant segment of our audience.
- **Users must have attended an out-of-town conference where a hotel stay was required**, so that they would have previously demonstrated the willingness and ability to travel to a conference. This was unusually important to us because we decided to test a version of the site that showed the conference taking place in San Francisco. Because we held our testing in the Boston area, we

wanted users who might be willing to travel across country for the conference. Testing with out-of-town conference data allowed us to test the portion of our site devoted to hotel and travel information.

- **Users must not have previously registered for a User Interface conference via the web site**, so that the process would be unfamiliar to them. It would be highly unusual for a person to register for the conference more than once every six months, so we thought it was safe to assume that it would be a new experience for almost every visitor (Who remembers a form they filled out on the web six months ago?). We wanted our users' experience to reflect this unfamiliarity.

We agreed that it was OK for a user to have attended a previous User Interface conference. In fact, that was good because it assured us that the person was a member of our target audience. In the final tally, only one of our six users had previously attended.

With these qualifications in mind, we began combing our user database for potential candidates, conducting telephone screenings where we verified the specifics, and scheduling users to come in for testing sessions. Admittedly, we had it easier than some of our clients when it comes to recruiting users: we have a large database of users that we've built up over the years from having conducted hundreds of usability tests. Having a lot of potential users, however, is not a guarantee that a specified number of users will arrive at the testing site as scheduled. We learned this the hard way when three of our users backed out on short notice. We were able to schedule only one replacement. When scheduling users in the past, we had been more vigilant about emphasizing the importance of the tests, providing reminder telephone calls the day before the test, and scheduling a backup user or two just in case. In those cases, we had fewer problems related to cancellations.

* (See the beginning of the next article, page 10, for more on this research)

Who were the users? Here's how they described their jobs in our pre-test questionnaire:

User	Job Title	Job Description
1	Information Architect	Design web sites in user-centric manner; design navigation and layout of content
2	Travel Consultant	Arrange travel for business and leisure clients; design and develop web sites for pleasure
3	Technical Writer	Write technical hardware and software (networking protocols) documentation
4	Usability Engineer	Plan and administer usability tests; write usability reports; facilitate focus groups, walkthroughs; conduct heuristic evals.
5	Freelance Web Designer	Design and revise usable web sites; web site search engine positioning
6	Systems Analyst	Maintain database, data integrity; design and develop web sites

The "Lab"

If you've read our articles before, you probably know that we usually don't use a formal lab for testing. We decided that the conference room right across the hall from my office would do just fine. The setup was very basic. We had a laptop computer on the conference table at one end of the room with two chairs in front of it; one for the user, one for the facilitator. We plugged a large monitor into the laptop and had it facing away from the laptop towards the other end of the conference room for observers to watch during the tests. This allowed them to see the user's actions onscreen up close and to hear the user's comments simultaneously. The conference room is small, but because we never had more than two observers in the room during a session (a small audience by User Interface Engineering standards, but appropriate for this series of tests), we never had more than four people in the room at once.

Although we were testing a web site, we didn't use an Internet connection. We decided to have users access the site's pages from User Interface Engineering's local server. At the time of our testing, we had just moved into our new office space, which hadn't had a reliable Internet connection installed yet. Since we weren't interested in page load issues, we decided to get around the connection problem by having users avoid the Internet altogether. Because they were using a

browser (the laptop offered both Netscape Navigator and Internet Explorer) where the necessary start pages had been previously bookmarked, most of our users never realized that they weren't looking at the site on the Internet. Therefore, we were able to circumvent the connection problem while still allowing users to have an Internet-browsing experience.

The Tasks

Devising tasks for our tests was challenging because we wanted all the users to go through the site to determine whether the conference was interesting to them. We felt that, while watching them do this, we would easily notice many of the site's problems, both in layout and quality of information. Therefore, we decided on a very open-ended first task:

We understand that you are a web-site/software designer/developer who has attended conferences in that field before. Today, we're going to have you look at a web site for a conference that might be of interest to you. We would like you to spend some time determining if you think you would attend this conference, and, if so, which sessions you would choose.

Take some time right now to go through the site and learn about the conference. Which are the sessions you would attend?

This first task often took users up to an hour, and through much of the site. Some users would read about each presenter and their presentations, take time to understand the daily schedule, and investigate the conference pricing before making a decision. Others would briefly scan the session titles looking for words that caught their attention, and leave it at that. In each case, though, we let the users tell us when they had completed the task.

One of our main goals in testing the site was to see how the registration process worked. We suspected that some of our conference attendees had had problems with our online form, so we wanted to watch our users fill it out as if they were registering. In order to do this, we had to overcome two hurdles:

1. We had to figure out how to get users who may not have been interested in the conference to register for it.
2. We had to get around having users register using their own credit card. Even though we weren't actually connected to the Internet and this wasn't a real conference, we didn't want to do anything to cause users discomfort.

In order to deal with the first problem, we came up with two different versions of task number two. If the user was interested in the conference, we said:

Please fill out the conference registration form as you would if you were registering online and submit it.

For those users who said that they were not interested in attending the conference, we said:

Your management at work has indicated that they want you to attend this conference. Please fill out the conference registration form as you would if you were registering online and submit it.

We know that a portion of our audience at the conference attends because they were told they had to. This task allowed us to get a glimpse of how this kind of person might handle the registration form and to see whether user interest was at all related to success in registering on the web site.

To get around the second problem, we simply waited until users got to the portion of the form that asked them to choose their method of payment. At this point, we verbally asked the users what their choice would be, and gave them a dummy credit card number to use in filling out the form.

Finally, we wanted to see how the site supported conference attendees who traveled to the conference from out of town. Therefore, we devised our third and final task:

Do you remember where the conference is taking place? How will you get there? Would you normally book the itinerary yourself? If so, how would you go about that?

No testing session lasted more than an hour and a half, and we paid each participant \$75 for helping us.

What We Observed

Much of what we saw during the testing reiterated for us the importance of designing for scent, the quality that pulls users toward the information they're seeking. In many cases, we found that certain links simply didn't give off enough scent to our users. They weren't able to get a good enough sense of where the links would lead to have enough confidence to click on them. Sometimes, this meant that users missed out on information that would have been useful to them.

Examples of links lacking scent: Here are some links that confused our users during testing:

Link	What the user(s) thought	What we meant
"Conference Notes"	A section containing other information about the conference	Conference proceedings, books that accompany each session with copies of the slides presented and other notes
"SF Gate"	Information about the Golden Gate Bridge	A site that offers information about events, activities and news in the San Francisco Bay Area
"Featured Talks"	The most important talks at the conference, like keynotes	Short, ninety-minute presentations offered on Tuesday (as opposed to the day-long sessions on Monday and Wednesday)

We also realized that we fell into a trap that we explicitly warn our clients about – assuming that users have as much information as the designers do. This became obvious when we tested the registration page, where registrants must indicate which sessions they plan to attend on the first and third days of the conference. The form offers a list of available speaker names and session titles. Users must click on radio buttons to indicate their choices. Over and over again, we saw users forget which sessions they had intended to register for. Though it had been clear to them when they read the session descriptions, they could no longer remember when confronted with a

list. Further complicating the problem, many of the speakers have similar-sounding last names (Gomoll and Goodwin; Hewett and Horton).

Some users clicked the back button or another link to go back to the descriptions. Then, when they returned to the registration page, everything they had filled out was gone! We saw other users register for different sessions than they had indicated interest in earlier. These problems emphasized to us how important it is to provide some mechanism on the registration page for allowing users to access session descriptions while filling out the registration form. We're considering a few options; we'll have to test to see which one works best.

We saw a range of other problems, some of which are highlighted in the images in this issue. Based on what we saw, we're working on short-term fixes that can immediately be implemented, and a longer-term redesign where we address some of the more difficult

issues. Testing opened our eyes to problems we hadn't even realized existed and helped us prioritize the work to fix them.

For More Information

If you'd like to test your own web site, but aren't sure how to begin or what to look for when testing, you might be interested in our two-day course, "Web Sites that Work: Designing with Your Eyes Open." We'll be teaching it in the San Francisco area on February 12-13. For more information and other course dates and locations, see our web site at: <http://www.uie.com/courses.htm>)

We also have a report series, "Designing Information-Rich Web Sites" that details our findings from conducting and watching numerous studies on some of the web's most popular sites. For more information, see www.uie.com/reports.com

The following are some examples of user difficulties.

Although we tried to explain the conference schedule on the home page, many users didn't understand which talks they had to register for and which they could just show up for at the conference.

Monday, April 17 Full-Day Seminars 8:30a.m.-5:30p.m.	Tuesday, April 18 Featured Talks & Reception	Wednesday, April 19 Full-Day Seminars 8:30a.m.-5:30p.m.
Register for one of the four seminars below:	Attend one talk per time slot (no need to register):	Register for one of the four seminars below:

Our bottom navigation bar confused some users. They didn't see enough information to understand where they were in the site or what they should click on next.

UI2001 West Home	Full-day Seminars	Featured Talks	Registration Information	Hotel Info	UI2001 West Notes	Previous UI Notes	UI2000 (Nov. 1999)
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Our users were confused by these links to web sites providing more information about San Francisco. Links such as "San Francisco Gate" didn't describe what users would get if they clicked on it... so they didn't!

Places to go, things to do, people to see:

[San Francisco City Span](#)
[San Francisco International Airport](#)
[San Francisco Gate](#)

Comparison of old web site...

Users didn't understand that "Start Something!" was the conference theme. They were confused or put off when they read it at the top of the page. "Sounds cheesy," said one user.

Users saw the words "Featured Talks" but didn't know what this meant. Some assumed that these talks were more important than other talks, but they weren't sure why.

Some session titles were confusing to users, causing them not to read the session description. Users who hadn't read Alan Cooper's book of the same title, didn't understand what the session "Taking Control Back from the Inmates" would be covering.

Users didn't know where to begin when confronted with the entire conference schedule. Some would begin clicking through one talk at a time trying to find talks that were interesting to them; others tried to figure out how the conference schedule worked. Many ended up confused.

To many of our users, the price of the conference was the most important information. They were surprised that the link to registration information was all the way at the bottom of the page. Some users never scrolled enough to see it and wondered why this information was missing.

Users didn't understand the bottom navigation bar. The links didn't provide enough description for users to know what to click on next. Many missed the navigation panel altogether after clicking links higher on the page.

Start Something!

User Interface 2001 West
April 17-19, 2001 in San Francisco, CA

User Interface 2001 West is a three-day conference for people who have hands-on involvement in product and web site development. You'll come away with practical knowledge that you can use immediately in your work.

We sought out the world's best authorities on eight important issues in user interface design. The result is a conference that we would love to attend and think you will too.

We've kept the same format as User Interface 2000: two days of full-day sessions and a middle "sampler" day with 90-minute featured talks by each of the conference speakers. This means you can attend two in-depth seminars and still hear four additional speakers.

On the middle day, we'll even include lunch, after which User Interface Engineering's Jared M. Spool will give a keynote address guaranteed to keep you awake! And be sure to join us for the cocktail reception that same evening, where you can mingle and munch with new friends and old.

User Interface 2001 West
Schedule


Monday, April 17 Full-Day Seminars 8:30a.m.-5:30p.m.	Tuesday, April 18 Featured Talks & Reception	Wednesday, April 19 Full-Day Seminars 8:30a.m.-5:30p.m.
<p>Register for one of the four seminars below:</p> <p>Inventing Interfaces: Tactics, Tricks, and Techniques for Breakthrough Innovations Larry Constantine Lucy Lockwood</p> <p>Discovering User Needs: Field Techniques You Can Use Kate Gornoll Eric Bond</p> <p>Information Architecture Design Peter Morville Samantha Bailey</p> <p>The Essentials of Screen Design and Layout Sarah Bloomer</p>	<p>Attend one talk per time slot (no need to register):</p> <p>8:30 to 10:00</p> <ul style="list-style-type: none"> • Abstract Prototyping: Using Content and Navigation Models Effectively Larry Constantine Lucy Lockwood • Stories, Photos, Posters, & More: Dealing With Field Study Data Kate Gornoll Eric Bond <p>10:15 to 11:45</p> <ul style="list-style-type: none"> • Designing Search Systems for Web Sites and Intranets Peter Morville Samantha Bailey • Something Magic Happens: Transforming User Needs and Business Goals into Screen Design Sarah Bloomer <p>12:00 to 2:00 Lunch & Keynote</p> <ul style="list-style-type: none"> • Gambling With the Blind Squirrels: Secrets to Successful Products Jared M. Spool <p>2:00 to 3:30</p> <ul style="list-style-type: none"> • Working With Memory Dr. Thomas Hewett • Stump The Expert! Lynda Weinman <p>4:00 to 5:30</p> <ul style="list-style-type: none"> • Web-Based Training: Teaching Anything to Anybody, Anytime, Anywhere Bill Horton Kit Horton • Why Software Sucks: And How Good Design Methods Can Fix It Kim Goodwin <p>5:30 to 7:30</p> <ul style="list-style-type: none"> • Conference Reception 	<p>Register for one of the four seminars below:</p> <p>Taking Control Back From the Inmates Kim Goodwin</p> <p>Web-Based Training: Designing Applications That Teach Bill Horton Kit Horton</p> <p>Designing With the Mind in Mind Dr. Thomas Hewett</p> <p>Vectors on the Web Lynda Weinman</p>

User Interface 2000 drew more than 400 satisfied attendees (our largest conference ever!), and we're confident that User Interface 2001 West will also be a huge success. We look forward to seeing you there!

If you already know which sessions you want to attend, check out our [registration information](#) for pricing and how to register. Or go directly to the [online registration form](#).

UI2001 West Home
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UI2000 (Nov. 1999)

...to the new conference site.



make your mark

User Interface 2001

October 30-November 1, 2000
Boston, MA

User Interface 2001 is a three-day conference for people who have hands-on involvement in product and web-site development. You'll come away with practical knowledge that you can use immediately in your work.

Check out the [schedule](#) or [find out about the speakers](#).

User Interface 2001 Schedule

Sunday, October 29 (6:00p.m.-8:00p.m.)
- Welcome reception and name badge pickup

Monday, October 30 (8:30a.m.-5:30p.m.)
- Full-day seminars (Register for one of four)

Topics & Speakers	
- <i>scenario building</i> John M. Carroll & Mary Beth Rosson	- <i>visual literacy</i> Bill Horton
- <i>goal-directed design</i> Kim Goodwin	- <i>information design</i> Janice (Ginny) Redish, Ph.D.

Tuesday, October 31 (8:30a.m.-7:30p.m.)
- **Featured talks (Attend four of eight 90-minute talks)**
- **Reception—5:30-7:30p.m., hors d'oeuvres & cash bar**

Wednesday, November 1 (8:30a.m.-5:30p.m.)
- Full-day seminars (Register for one of four)

Topics & Speakers	
- <i>inventing interfaces</i> Larry Constantine & Lucy Lockwood	- <i>field study techniques</i> Kate Gomoll & Ellen Story
- <i>designing with the mind</i> Dr. Thomas Hewett	- <i>screen design and layout</i> Shane Morris

We scour the planet looking for experts who have killer courses on eight important issues in user interface design. When we find them, we put them through a rigorous review process, checking the evaluations from previous conferences, talking to people who've taken their courses, and painstakingly going through their material. We add them to the program only after we're satisfied we've found the best. The result is a conference that we would love to attend and think you will too.

User Interface 2000 West drew more than 500 satisfied attendees (our largest conference ever!), and we're confident that User Interface 2001 will also be a huge success. We look forward to seeing you there!

UI2001 Home

Monday Full-day Seminars
Register for one of four full-day seminars.

Tuesday Featured Talks
Attend four of eight 90-minute talks.

Wednesday Full-day Seminars
Register for one of four full-day seminars.

Pricing & Policies
Find out about cost, cancellation, session changes, and how to contact us.

Register Online
Once you've decided what to attend, register and arrange payment here.

Plan Your Stay
Find out about the conference hotel and what there is to do while you're in town.

Conference Proceedings
You'll receive free printed notes for each session you attend. Or you can buy a complete set.

We hope that associating the conference theme with a logo makes using a theme seem less strange to site visitors.

We've added a navigation panel to the left side of the home page and used associated text with each link to help add scent to each of the links.

Rather than offering the title of each talk, we've described the topic it covers, to make it more accessible to users.

Instead of presenting the entire schedule for the middle day on the home page, we've tried to describe what a Featured Talk is so that people will understand the difference is between the Monday/Wednesday schedule and the Tuesday schedule.

We've kept the navigation panel at the bottom of the home page and added associated text with each link (just like in the left panel) to help add scent to each of the links.