A final point was made about Home Pages. These pages are the landing point for the site, and their only purpose is to get users to other pages on the site that have the actual content they are looking for. Home Pages were compared to hotel lobbies—an entry point that you pass through to get to your room, the restaurant, a meeting room, the health club, etc. Virtually no one goes to a hotel for the lobby. Further, if the lobby conceals the availability and location of the hotel “content” the result will be considerable frustration.

The talk contained much more information than can be covered here. The UIE web site (www.uiie.com) is an excellent resource for additional information.

The Scent of a Web Page - continued from page 5

The January GBC/ACM general meeting had an excellent turn-out with 80 people showing up to hear Jared Spool of User Interface Engineering (www.uiie.com) talk about The Scent of a Web Page: Five Types of Navigation Pages. The presentation was excellent—close to two hours of useful content with many questions from the audience.

Case studies based on extensive user research from eCommerce sites provided solid evidence for the key ideas:

People go to Web sites to accomplish something or to get something. Navigation pulls users through a Web site; “Scent” pulls users through the site. Scent is defined as information that causes people to click on a link—it includes context, trigger words, pictures, and other information that leads people to believe the link will be useful to them.

The challenge for Web designers is to move people from the landing page—where they first enter the site, often the home page or a search result—to the target page with the information they need.

Research revealed some surprising failure indicators. In this case, failure is leaving the Web site without accomplishing the desired goal; the case study involved people trying to purchase something from several online stores. The first indicator of trouble was use of the Back button, which Jared called “The button of Doom.” Users who ultimately succeeded in accomplishing their task rarely used the Back button, and the more times the Back button was used the more likely failure became.

The second was pogo sticking—bouncing up and down from a page to its links. This behavior indicated that there was not enough scent on the links to identify the correct target page. Sites with good scent enabled people to readily find what they were looking for.

The third failure factor was, surprisingly, search. When a site has good scent, users have enough information to drill down and find what they are looking for. Without the rich contextual information of scent, they are forced to use a few keywords and hope that they are using the same keywords as the site developer. The combination of broad searches returning too many hits, narrow searches missing information, differing keywords and the lack of context results in in-site searching often resulting in failure. Current search technology is crude and limited.

Jared emphasized that these factors are indicators that the user is having trouble and is likely to fail to accomplish their goal, not actual causes of failure. If you see this behavior in web logs it is a warning sign to look at the site design and to consider a usability study with your users.

Jared offered suggestions for building scent. One was the importance of trigger words—a description of the content contained in the link. His studies showed that 7-12 word descriptions were the most effective, and that it is critical to include the users trigger word in the link. Longer or shorter descriptions can work, but the vast majority of successful descriptions were 7-12 words. This shows a major weakness of traditional navigation links, which are often only 1-2 words long and contain very little context or scent.

Another suggestion was the importance of showing all information on the page. The common approach of using pull-down menus for navigation is extremely error prone, as it both reduces context and hides information. Links on pull-down menus are much less likely to be found than clear links on the page with adequate scent.

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Continue on page 4
Identify the Quoters

1 - Cogito, ergo sum. (I think, therefore, I am.)  k - Rene Descartes
2 - Sometimes I think the surest sign that intelligent life exists elsewhere in the Universe is that none of it has tried to contact us.  d - Bill Watterson
3 - There are in fact two things, science and opinion; the former begets knowledge, the latter ignorance.  f - Hippocrates
4 - There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact. e - Mark Twain
5 - Give me a lever long enough and a fulcrum on which to place it, and I shall move the world. g - Archimedes
6 - Computers make it easier to do a lot of things, but most of the things they make it easier to do don’t need to be done. h - Andy Rooney
7 - Black holes are where God divided by zero. i - Stephen Wright
8 - Astronomers say the Universe is finite, which is a comforting thought for those people who can’t remember where they leave things. j - Woody Allen
9 - Mathematics is the queen of the sciences.  e - Carl Friedrich Gauss
10 - As far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality a - Albert Einstein
11 - Mathematics may be defined as the subject in which we never know what we are talking about, nor whether refer to reality d - Hippocrates
12 - Mathematics may be defined as the subject in which we never know what we are talking about, nor whether refer to reality c - Rene Descartes
13 + 3 + 4 + 5 + 6 + 7 + 8 + 9 = 100  f - Bertrand Russell

Digits Puzzle

Using the sequence of digits: 123456789, place plus or minus signs between them so that the arithmetic operation totals 100. For example:

$$12 + 3 - 4 + 5 + 67 + 8 + 9 = 100$$

Please send solutions to editor@gbcacm.org

Members Sought for the Advisory Panel for the
Greater Boston Chapter of the ACM

The Greater Boston Chapter of the ACM was losing money on its Professional Development Seminars and is in the process of reformulating the Professional Development Seminars to provide more value to the attendees and make them financially sustainable (i.e., either to break even or generate a small surplus).

We have a group of volunteers actively analyzing our situation, the environment of commercial courses and conferences in the area, and the needs and desires of our attendees. They are working on plans for the restructured Professional Development Seminars series.

We could use your help in either of two ways. One way would be to join the group of volunteers planning the format and operation of our restructured Professional Development Seminars. The other way would be to serve on an advisory panel whose opinions we could ask as we plan the restructured PDS series. We might ask for your opinions via E-Mail or telephone calls, or possibly at a “focus group type meeting”, but we have no current plans for a focus group type meeting.

Please check one of the boxes below, if you would be willing to help us.

☐ I am willing to work on the GBC/ACM volunteer committee planning the format and operation of the restructured Professional Development Seminars.

☐ I am willing to serve as a member of the advisory panel and provide (by E-Mail or phone, or possibly by attending a focus group type meeting) my opinions, or answer questions about how my needs as a potential Professional Development Seminar attendee might best be served and what GBC/ACM should do.

Name: _____________________________________________
E-Mail Address: _____________________________________________
Home Phone Number(s): _____________________________________________
Home City/State: _____________________________________________
Work Phone Numbers(s): _____________________________________________
Work City/State: _____________________________________________

We would appreciate your filling out this form and mailing it to:

Volunteer for GBC/ACM
P.O. Box 465
Lexington, MA 02420

or E-mail a message to volunteer@gbcacm.org

Please provide the above information and stating your willingness to serve on the advisory panel and/or your willingness to work on the GBC/ACM planning committee.
IMPORTANT NOTICE - PLEASE READ
Request to send email address

Sometime in the future, we will be switching from a hard to soft copy of the Real Times. In order to send you notification of the Newsletter posting, we need your email address. We are asking the members to send their email address to the following:

membership@gbcacm.org

Please include your first and last name, membership identification number (found on the address label) and if you would like to receive email copy/notification of the Real Times once it goes into soft copy.

The GBC/ACM will not disclose your email address outside the chapter without your permission.

Please check the privacy policy at:
http://www.gbcacm.org/website/privacy.php

State of GBC/ACM Seminar Series

We are working on improving our PDS Seminars, and getting better attendance. We are in a state of flux right now...

Expect more information soon. In the meantime, please come to our exciting program of free evening seminars.

Reminder to mail in your annual dues

Please check the address label of the Real Times for your membership expiration date. If this date has passed or will be reached within the next few months, please submit your dues. Send a $10 check payable to GBC/ACM and mail to:

GBC/ACM
P.O. Box 465
Lexington, MA 02420

Please include: Name, Membership ID, Address, Phone Number, Email Address.
GBC/ACM March 2006 Meeting

Integrating Java and C++

Speaker: Alexander R. Krapf
Date/Time: Thursday, March 16, 2006, 7-9 PM
Location: IBM Innovation Center, 404 Wyman Street, Waltham, MA

Alex will start out by discussing the reasons why you would wish to integrate Java and C++. These include use cases such as gradual port, calling Enterprise Java from C++, publishing C++ bindings for your Java API, using third party Java code, standardizing on a particular library for all applications, and many more. He will first contrast integration with porting, then go on to describe the technical challenges that you encounter when you attempt to perform an integration of this kind. This part of the talk will go into technical details of object model mapping and in-process integration using the Java native interface (JNI) vs. out-of-process integration using sockets. A demo of some popular use cases and time for questions will round out the evening.

Alex has been working in computer science for 17 years. His employers include DDI, Thomson Financial, IBM, and Hitachi. He’s been doing C++ for nearly the entire time and started with Java when it was in v0.7. In 1999 Alex co-founded Codemesh, Inc. and has since been working there on language interoperability solutions, specializing on the topic of integration across computer languages (Java, C++, .NET). Alex holds a BS in Electrical Engineering from the University of Stuttgart, Germany.

The IBM Innovation Center is located at 404 Wyman Street, Waltham. There is free parking in the garage at the north end of the building. To reach the meeting room, walk out the front of the garage and around to your right to the front door of the building.

Directions to the room will be available when you sign in at the front desk. Directions are available online at [http://www.developer.ibm.com/isv/sqc/waltham.pdf](http://www.developer.ibm.com/isv/sqc/waltham.pdf). For further information, contact Peter Mager (<p.mager@computer.org>.)