Proposal to Develop the ACM/SIGCHI Bulletin website

ES Designs is pleased to present the following proposal to help build the ACM/SIGCHI Bulletin website. I believe that I can develop the ACM/SIGCHI Bulletin site to your satisfaction under your schedule by using UserLand's Manila content management system. In addition, I believe that ES Designs can provide hosting for your site at a cost well below any other hosting option.

Qualifications

ES Designs is a small venture run by Thomas Clifton. I have been working with UserLand Manila for over three years and building websites with UserLand Frontier for over eight years. I have developed and implemented a large Manila hosting site for De Anza Community College faculty and a multi-tiered Manila site for the Foothill De Anza Community College District. In addition, I have developed sites for several nonprofit groups in San Jose, including the Campus Community Association and the University Neighborhoods Coalition.

Site Requirements

Manila Features

UserLand Manila can achieve over 90% of the required functionality for the ACM/SIGCHI Bulletin website. Manila is a content management system that allows users to create and manage web content through a web browser. Users can add text, pictures, and binary files (pdfs, Excel documents, Word documents, etc.) to the website. Templates are used to maintain the look and feel of the site. These templates provide the surrounding html to set the page’s appearance, so users do not need to know html when creating or editing text.

Manila offers several levels of user access and allows controls of what parts of the site they can view. For example you may allow anyone to read stories (pages) on the site, but limit access to the discussion features to members of the site. Manila also provides three levels of editorial control. Contributing editors can add stories, pictures, and gems (binary files) and edit stories they have created. Content editors can also add stories, pictures, and gems, as well as edit the content of any story or picture added to the site. Contributing editors and Content editors cannot, however, edit the templates that give the site its look and feel. Managing editors have complete control over the site. They can edit all content on the site in addition to editing the site templates. Managing editors can also perform administrative functions like adding or removing members from the site, deleting discussions, pictures, and stories, and setting up and maintaining the site hierarchy.

Managing editors can also send email bulletins to members of the site. Members can opt-in to /
receive bulletins when they join the site. Members can also specify whether they receive bulletins as plain text or as html. The Managing editor can control the look of the html email, so it can look very similar to the site.

Another important feature of Manila is that it has built-in Discussion groups. These allow members to post comments on any story on the site. Members can also initiate new discussions. Discussions can be viewed chronologically or a list of recent topics. All discussion messages are archived and can be accessed through a calendar interface. The discussion group can be set up to send copies of every new discussion message to a list of email recipients.

Manila has a built-in search engine that indexes all stories and discussion messages when they are posted or edited. The search engine can be configured to search a single site or all of the sites on the server.

Recently, Manila has added features that allow Manila sites to be used as a weblog. The News Item feature allows you to create a Manila News site where the home page becomes a weblog. Editors can add news items, such as a headline and a link to a new story, add a summary if they wish and then post it to the website. The Managing editor can then review the item, make edits if necessary, and post it to the home page. On the home page, items are listed in stratigraphic order (youngest on top). While you can specify that particular news items come from different departments, all the news items from different departments are combined into a single list.

Manila has also added the ability to aggregate headlines and summaries from various sources. To use the news aggregator, you subscribe to various RSS (Real Simple Syndication) news feeds created by weblogs or other Manila News sites (described above). Every hour the site reads the RSS news feeds and posts any new items. In this case, headlines, links and summaries can be generated on separate Manila sites (or other weblogs). Like the Manila News site, the news aggregator displays news items in stratigraphic order. The primary difference is that the news aggregator automatically combines news from multiple sites, while the Manila News site is manually created by one or more editors on the single site.

It should be noted that any Manila News site creates an RSS feed that can be read by the news aggregator. So you can have multiple Manila News sites generating a list of news items on the home page or a sub page.

Limitations of Manila

Manila interface is easy to use. The editor logs in and sees the page with a new menu that allows access all the stories and pictures on the site. The editor goes to a story and there is a button at the
bottom of the page that says "Edit This Page". Click on the button and the page reloads with the page text in a text box that you can edit. With this simplicity, however, comes limitations. While it is easy to change the general appearance of a page, it is difficult to change the editing environment or how the process works.

For example you can't change the name of the "Edit This Page" button, without editing the code that creates the button. Manila uses a proprietary scripting language called UserTalk to create the editing environment. Editing the code that creates the editing environment requires an expert in UserTalk. In addition, these changes shouldn't be done because an automatic update of the code would wipe them out.

Manila allows two distinct templates per site, one for the home page and one for all of the other pages. Sites that require greater flexibility, like changing navigation as you dive into deeper levels of the site, require multiple Manila sites for implementation. The Foothill De Anza Community College district site\(^2\) is an example of this. The site is composed of 30 distinct Manila websites.

Other limitations include items that appear to be incomplete or poorly implemented. For example there are two ways to send email to groups of people, through the bulletins interface and through discussion groups, but they do not use the same methods for creating and sending email. As a result, discussion messages are always sent as plain text and the Managing editor must maintain the list of email recipients. In cases like this, it may be possible to create custom code to allow the discussion group emails to use the same process as the bulletins. This would allow the users to control whether they received the discussion group emails and whether they received them as plain text or html.

Manila's calendar interface is for archiving only. You cannot use it as an event calendar. Fortunately, Manila provides an plug-in architecture that allows developers to extend Manila's capabilities. In this case, there are two Manila plug-ins that provide event calendar capabilities. The webScheduler plug-in was created by ES Designs and provides both an event calendar and a daily scheduler.

The Manila environment does not provide a spelling checker. For this functionality, most users will copy and paste text from an environment that allows spell checking into Manila. It may be possible to use a server based spell checker such as JSpell\(^6\) in conjunction with Manila to provide spell checking capabilities.

Some of the functions that ACM/SIGCHI is looking for would require development of new Manila plug-ins. In past projects, I have let clients work with Manila for a while so they develop an understanding of how the environment works and what its limitations are. During this time, we may look for alternate ways of getting things done within the Manila environment. Once we know that
Manila won't do something that needs to be done, I can develop a plug-in that provides the functionality.

Proposal

A set of Manila sites could be used to achieve much of the functionality outlined in the scenarios in the RFP. I envision a site similar to the Foothill De Anza Community College district site, though on a smaller scale. The ACM/SIGCHI Bulletin site could be built using 3 to 9 Manila sites (though it may require more sites if you need to create 3rd or 4th level directories). The site could easily be designed, implemented, and tested in 6 weeks, allowing you to take the site live in mid-September. I would be willing to work in all three phases of the project and can provide a hosting environment for the site.

Design Phase

While my strengths are in implementing designs in Manila, I can create a website design for the Bulletin if necessary. My website designs tend to be simple, utilizing mostly text and some graphics. Sites that I have designed include the Campus Community Association website and ES Designs site. More often I have implemented designs by others in Manila, these include the University Neighborhoods Coalition, the De Anza College Faculty Directory, and the Foothill De Anza Community College District. In the first three cases, I took an existing design and implemented it in Manila. For the Foothill De Anza site, I worked with the designer. In implementing designs in Manila, it is best if I work closely with the designer so that the end design is easy to implement within Manila.

Development Phase

During this phase, I would implement the site design in Manila and provide training for the site editors. If necessary, I would purchase UserLand Frontier (at the nonprofit rate), JSpell HTML Server License (if feasible), and Timbuktu to allow remote access to the server. I would also use this time to develop any new features required for the site.

Technical Implementation Phase

For this phase, I would suggest that ACM/SIGCHI consider using ES Designs' Manila Hosting service. The hosting service runs on a 1Ghz Apple Xserve box with 768 MB RAM and two 60 Gig Hard drives. The box is sitting at Bay Area Internet Systems in Santa Clara, CA (about 15 minutes from my office). This system allows both Manila and Apache hosting and it would be easy to
install JSpell on it.

If ACM wants to develop its own server for the project, I would suggest using the Apple Xserve. The 1.33 GHz model could easily handle the server load. The server should have Frontier and Timbuktu installed on it. If JSpell can be integrated into the Manila environment, then the server would need a single server license for JSpell. Frontier, Timbuktu, and JSpell will also run on a Windows server. Maintenance for this server should be minimal, probably no more than 4 hours/month.

Costs

Below is an outline of the proposed costs. For labor costs, I am using ES Designs nonprofit/educational rate of $40/hr. I am also using nonprofit/educational rates for ES Designs' Hosting and UserLand Manila software. It may be possible for ACM to get educational/nonprofit discounts on the Xserve box, Timbuktu, and JSpell.

ES Designs performing both Design and Development
Design Phase - 60 hrs
Development Phase
  Implementation and Development - 80 hrs
  Training - 8 hrs
  Maintenance/Support - 10 hrs/month for 12 months (120 hrs)
Total Hours - 268 hrs
Total Labor costs - $10720

ES Designs performing only Development
Design Phase - 24 hrs
Development Phase
  Implementation and Development - 80 hrs
  Training - 8 hrs
  Maintenance/Support - 10 hrs/month for 12 months (120 hrs)
Total Hours - 232 hrs
Total Labor costs - $9280

Technical Implementation Phase
Server Costs
Apple Xserve - $3025
UserLand Frontier (nonprofit license) - $300
JSpell HTML Server License (if feasible) - $170
Timbuktu Remote access license - $103
Maintenance - 4 hrs/month (48 hrs) - $1920
Total Server costs - $5518

Hosting Costs (ES Designs)
Set Up Fee - $25
1 Year Hosting (nonprofit) - $150
Advanced Features (JSpell if feasible) - $25
Total Hosting costs - $200 for 1 year
Based on these costs, I can develop four possible proposals.

1) I would provide both design and development services and ACM would provide hosting per my specifications. The total cost for this would be $16,238. The actual costs could be lower if ACM were able to secure a comparable server at lower cost.

2) I would provide design and development services along with ES Designs' hosting services. The total cost for this would be $10,920.

3) I would only provide development services (though would work with the designer to ensure easy implementation in Manila). ACM would provide hosting and the cost could be up to $14,798.

4) I would only provide development services (though would work with the designer to ensure easy implementation in Manila). ES Designs would provide hosting and the cost is $9,480.

Thank you for the opportunity to develop this proposal. I believe that ES Designs' Manila design, development, and hosting can provide the best possible solution for the ACM/SIGCHI Bulletin site. I hope you concur.

Prepared by Tom Clifton, ES Designs 7/14/03

Footnotes
1) http://faculty.deanza.fhda.edu/
2) http://www.fhda.edu/
3) http://www.nagleepark.org/
4) http://www.university-neighbor.org/
5) http://faculty.deanza.fhda.edu/support/discuss
6) http://www.jspell.com/
7) http://www.es-designs.com/