Introduction

The Bishop Boyle Center is an organization that provides both community activities as well as job placement and career development services for the population of Homestead. The organization’s goal of improving the lives of Pittsburgh inhabitants is shown in the dedication of the staff to the center’s many programs. One of the center’s most active undertakings is the sustenance of the Bishop Boyle Career Center. For the past three months I have worked with the center’s director, Joe Carr, to explore Internet and web options to expand the capacity of the center. The following report is an analysis of the project we pursued.

Situational Description

Homestead’s Bishop Boyle Center is a community center sponsored by the Catholic church. Located at 120 E. Ninth Street next to the Salvation Army, the center serves an important role in helping community members find jobs and shape their futures. The 1986 closing of the largest employer in the area, the U.S. Steel Homestead Works, brought about many changes in the neighborhood including decreased enrollment in local schools and increased unemployment. One of the newly closed down public schools became the home of the center. In 1988, the Diocese of Pittsburgh renovated the school and established the Bishop Boyle Center to help the individuals and families of Homestead through the changing times.

Many classrooms and offices from the converted schoolhouse are now rented out by various non-profit organizations and small businesses (including a vegetarian food supplier in the school’s old cafeteria.) The Bishop Boyle Center occupies several areas of the building including basketball courts, office space, and a career center with computer and phone facilities. The bulletin boards that line the halls are filled with valuable news and information: job postings, employment periodicals, health care fliers, day care contacts, technology class announcements, and congratulatory messages for those who have recently landed jobs.

The mosaic of information available to community reflects the diverse interests that the Bishop Boyle Center has in helping the community. The center has many resources devoted to aiding people in their career searches. Counselors are available to talk about resumes and job opportunities and to teach people how to explore other options on their own. There are currently many employment aides online, and one goal of the Bishop Boyle Center is to expose people to computers and the Internet in their career development. Prospective employees who are familiar with computers are more employable and have the tools necessary to further their job growth on their own. The center is also greatly involved with youth programming. They currently house an after school program where kids can play sports and get schoolwork done. The Bishop Boyle Center would like to get the children in the after school program more involved in using the center’s computer equipment.

The national Weed and Seed program provides all of the technological equipment at the center. This program run by the Department of Justice describes itself as, "a multi-agency strategy that "weeds out" violent crime, gang activity, drug use, and drug trafficking in targeted neighborhoods and then "seeds" the target area by restoring these neighborhoods through social and economic revitalization."(http://www.ojp.usdoj.gov/eows) Joseph Carr, the center’s Director and my community partner, has been in charge of maintaining and regulating all of the equipment donated through Operation Weed and Seed.

Aside from being the Director of the Bishop Boyle Center, Joe Carr has many other responsibilities. He is the primary social worker for the career center, giving career counseling on a one-
on-one basis with members of the community seeking employment assistance. He is also very involved with work force development. When new employers in the area have hiring needs, they contact Joe and he helps them connect with potential employees by setting up and providing a location for job fairs and interview sessions. He also helps these potential employees get the skills they need to be qualified for these jobs. In addition to these duties, Joe also functions as the building manager for all the other tenants in the building. He acts as landlord to the converted school house and is in charge of lease agreements and building upkeep. As Director of the center, Joe also has several staff members working for him. Marlene Komorowski is the center's secretary and office administrator, and Dennis Miller is in charge of maintenance. Bishop Boyle Center also benefits from occasional volunteer work: Joy is a volunteer who spends 3-4 hours a week helping with computer job searches for community members. The center is also looking to hire a new individual to teach computer classes to community members.

The career center currently occupies one small room which functions as an administrative office and one large room that provides space for career counseling as well as the telephone and computer facilities. Marlene works in the office and has a dedicated machine there for her use. She has been using a 486 PC with an 850Mg hard drive running Windows 3.1 until this fall when she got a new Pentium II machine running Windows 98. Marlene is not totally proficient on the new computer, but she does have a Pentium at home and is very familiar with Microsoft Word and Excel. She is also comfortable reading to learn more about her new machine. Joe has a PC for his personal use as well. His machine is a Pentium laptop running Windows 95 that has an Ethernet card configured to connect with the Pittsburgh Diocese NT server downtown. Joe is quite comfortable with computers. He has recently taken a class in Microsoft Access and took programming classes years ago. He is mostly self taught in the daily uses of his computer including web browsing, email, document publication, graphic arts, hardware maintenance and trouble-shooting. Joe is in charge of all of the Bishop Boyle center's personal and public computers.

The public computer lab is located in the larger room of the Bishop Boyle career center. Along one wall there are currently 2 PC's available to staff and community members. Though Joe has a laptop, he usually works on the public machines to update them and to perform daily office tasks. The machines are Compaq Pentium 133s with 1.2 Gig hard drives and 16 and 32 Mg of RAM each. Both machines are Internet accessible with 33.6 Modems that share a phone line. These machines are also connected to a color scanner, a 100 Mg Zip disk, an HP DeskJet 1120 printer, and a CD burner (which isn't 100% functional yet.) The two PCs have different software installed, including MS Word and Excel 7, MS Works, MS Publisher, Netscape, Adobe PhotoShop, a typing tutorial program, an email program, and more. The center has also recently purchased 3 new Pentium II 350s that are not yet in use. One of these machines may soon be added to the career center computer lab.

A few general technology goals of the Bishop Boyle Center are to use computers to help people obtain jobs and to get community members, especially younger ones, excited about using and learning with computers. Joe estimates that the Bishop Boyle career center services about three hundred constituents per year, and since individuals primarily use the center's phones and computers, it is important that these facilities continue to develop. Joe Carr and I discussed several specific and general plans of improvement to offer to the center; and we hope to examine several options and invest our efforts in projects that will leave lasting benefits to the staff and community members of Homestead's Bishop Boyle Center.

**Analysis of Problems and Opportunities**

The main goal of the Bishop Boyle Center that directs the focus for this project is that of improving the technology to promote the mission of helping individuals advance their career plans. The center currently uses several different approaches to aide in career development. Aside from the invaluable resource of personal counseling, the staff at the center rely on Internet based tools to impart the most recent and relevant job postings to their community members. Right now the staff members are familiar with some of the popular web-based job search facilities. The web browsers on the career center
computers also have several useful sites bookmarked and some hot buttons for easy access to frequently viewed pages. However, the career center does not currently have its own website.

Developing a web site for the Bishop Boyle Career Center is the primary opportunity to explore for this semester. The website we intend to design will address several problems that the center faces in achieving its goals. These problems include the lack of a personalized, user-friendly, local, simple Internet employment resource; the inconvenience and expense of the current paper-based local employment resource; and the center’s lack of standardized feedback and statistics available regarding who is using the computer-based job tools.

Many of the existing web job search tools are very complex for someone who is not familiar with computers. Popular sites like Monster.com (http://www.monster.com) or Pittsburgh-Employment.com (http://www.pittsburgh-employment.com) can be very helpful, but require that users have an email address and some amount of prior skill doing Internet searches. These sites are often graphic intensive, java enhanced, and visually over stimulating which can make the job search quite complex and difficult for a novice user, which many of the center's constituents are. Searching these sites can be too time consuming for someone who just wants to know which stores in the area might be hiring for the week and what their offered salary is. The Bishop Boyle career center has access to this information: what jobs are available locally, what they pay, and what the qualifications are. A simple in-house web site with this information would provide great value to the community members, the center staff, and the organization as a whole in their mission to match suitable jobs with future employees.

At present, the center also publishes a hard copy of a weekly newsletter with these available jobs listings (JOB_BANK). The center uses JOB_BANK as one of its own job placement resources and also distributes it to several dozen other Pittsburgh career center organizations with similar goals. There is a considerable amount of work which goes into compiling the list of weekly jobs: typing it up, printing it out, copying the set, filing it, stamping the set, and mailing them out to the other organizations. Most of these other organizations also have Internet access, so much of this work could be reduced if the newsletter were to simply be published online and updated weekly. Then the center would have a neat, efficient and more cost effective method of cataloging and distributing its available job information. The other career center organizations that use JOB_BANK would also share the benefit of a simple, local, user-friendly Internet job resource, and this furthers the mission of Bishop Boyle center in helping as many people find jobs as possible.

Right now, the center helps many people find jobs, but the staff doesn't have solid figures of how many people they help and in what aspects they are able to provide services. This information is important to the center both for reporting to their parent organization, the Diocese of Pittsburgh, and for future funding requests and for the center's own management and planning. Our web site could potentially address this problem by using some statistical reporting features. From a solution as basic as a web counter (which tracks the number of times a page is loaded) to more complex CGI form processing, a web site for the center could provide some tracking of how many people are using the career center machines for Internet job searching and finding what they need. Though this would not provide statistics for the center regarding who is using the computers for non-job-search related tasks, like resume typing, or who is using the center for non-computer services, like phone usage, it would still be beneficial to know how an emerging technology like the Internet can help people find jobs.

My community partner, Joe Carr, is quite familiar with computers and is the primary contact for community members looking for jobs through the Bishop Boyle Center. Joe is adept at using the web as a job placement tool, but he knows very little about HTML and what goes into publishing a web page. Our undertaking this project would also expand his web knowledge and teach him how to do HTML editing and file transfer to ensure he will be able to maintain and update a web page for the center. I am familiar with HTML publishing and feel that my skills will be applicable to this project. There are several aspects of the site that I will still need to research and learn more about such as the statistical
features of web counters and/or CGI scripts and some user interface design elements. Within the scope of this semester, I believe it is quite feasible for both Joe and I to acquire the skills that we need to make this project successful.

## Work Plan

<table>
<thead>
<tr>
<th>Projects and Tasks</th>
<th>Who responsible</th>
<th>October</th>
<th>November</th>
</tr>
</thead>
<tbody>
<tr>
<td>Become familiar with web tools &amp; ISP</td>
<td>both</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Find out how to set up a page with ISP</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Test run current web authoring package</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Look for other possible authoring tools</td>
<td>student</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Find out what features ISP supports</td>
<td>student</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Research ISP’s reporting capabilities</td>
<td>student</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Survey different browsers on machines</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>Getting started with HTML techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Design a sample HTML page tutorial</td>
<td>student</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Go over tutorial with CP</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Try to post sample page to ISP to view</td>
<td>student</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>Getting started with web page design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Discuss desired features of the web page</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Develop optional and mandatory features</td>
<td>both</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Discuss basic web layout and navigation</td>
<td>both</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Design thumbnail sketch of layout</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Brainstorm best file naming scheme</td>
<td>student</td>
<td>#</td>
<td></td>
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<tr>
<td>• Decide on file naming for easy updates</td>
<td>both</td>
<td>#</td>
<td></td>
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<tr>
<td>• Get machines set up for file transfer cap.</td>
<td>student</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Teach CP how to do file transfer</td>
<td>both</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Web page back end development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Develop method for easy updates</td>
<td>student</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Implement simplified JOBBANK to test</td>
<td>student</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Research methods to report page hits</td>
<td>student</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Research CGI functions</td>
<td>student</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Discuss how CGI might fit in page purpose</td>
<td>both</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Web page front end development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Decide what authoring tool to use</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Author simple JOBBANK with web tool</td>
<td>both</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Review and analyze HTML made by tool</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Practice manually editing HTML</td>
<td>CP</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• Practice updating and uploading simple file</td>
<td>CP</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>• View simple tool-made results online</td>
<td>both</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>Integrated web page development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Implement simplified CGI code</td>
<td>student</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Review CGI functionality (current/desired)</td>
<td>both</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Construct working final artistic design</td>
<td>both</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Make more realistic JOBBANK files</td>
<td>student</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Link the links, add the art, etc...</td>
<td>student</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• Continue to make corrections</td>
<td>student</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Web page is acquiring sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CP is comfortable accessing all files</td>
<td>CP</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• CP is comfortable updating &amp; uploading</td>
<td>CP</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>• CP can “read” the working HTML code</td>
<td>CP</td>
<td>#</td>
<td></td>
</tr>
</tbody>
</table>
Projects and Tasks

<table>
<thead>
<tr>
<th>Who responsible</th>
<th>October</th>
<th>November</th>
</tr>
</thead>
<tbody>
<tr>
<td>User test web page on staff and clients</td>
<td>both</td>
<td># #</td>
</tr>
</tbody>
</table>

Final product time is here

- All links and scripts are fully functional
- Final working BETA version of site
- Final web page finished

Outcomes: Evidence of Increased Capacity

The goal for this semester’s project is to develop a JOBBANK web site (see Appendix A) which Joe will be able to update and maintain weekly for the job placement services of the Bishop Boyle Center as well as several dozen other community organizations. In order to do this, Joe learned about HTML code, what is involved with creating a new web site, and how to edit, maintain, and transfer files with the server.

Joe’s increased HTML coding capacity is evidenced by the fact that he can look at simple HTML files and understand how the tags work and what a few of them do. For instance, he can identify which code generates boldface, italics, underline, hard returns and different font sizes.

In terms of creating the new site, Joe was curious about whether it was economically feasible to obtain a domain name for JOBBANK or the Bishop Boyle Center. We did some research and Joe now knows what is involved technologically and financially with acquiring a personal and unique domain name. He decided that the value of a unique name was not worth the price of obtaining one.

Once we began development of the site, Joe and I discussed the file structure system of the web site. Since there are approximately 50 files that make up the web site, it was important that Joe and I create a file hierarchy and organization method that made sense. Joe was able to analyze the advantages and disadvantages of different systems. He was able to decide that it is better for the organization if the site has fewer files that require some HTML editing rather than a larger number of files that require only changing file names for updating. Joe is now able to FTP files from the ISP server to a local computer and from the local computer back to the server. Doing this, he is able to download an existing HTML file from the server, open it in MS Word and modify it, and then FTP the new file back to the proper directory on the server. Additionally, Joe shows an interest in making the HTML editing process more efficient, so he has attempted to use the UNIX editor Pico to make very minor changes to HTML files directly on the server via a telnet session.

Most recently, in between our weekly sessions, Joe posted the first job listing by himself to the website. I had only made temporary files with no actual job information in them, but Joe downloaded one of these temporary files, edited it to contain a real job post with current, relevant information, and then posted it to the server so that it could be viewed from any web browser. This was done entirely without my help or even the aid of any of the directional resource documents.

The Career Center PCs have also shown evidence of increased capacity. At least one machine is now equipped with WinZip, a GUI FTP program, and the latest version of MS Word which allows text files to be saved as HTML (we identified which word processing tools and web authoring tools were not useful to our project as well.) The Bishop Boyle Center’s ISP account is set up to host a web site and a working version of the JOBBANK can currently be viewed from the ISP’s server with IE and Netscape at http://www.thesafety.net/~boyle.

The Bishop Boyle Center now has evidence of increased capacity as well with the functionality of an introductory login page on the web site. I created a CGI script that the login page executes which
requires that any user of the site enter at least a name (and ideally several other pieces of personal information) into a form which then emails the data back to Joe. There is also a CGI script which runs on the comments page which will email Joe with any comments that a user enters into a blank text field. This benefits the center by providing an increase in reporting capabilities of who is using the center’s tools.

At this point, the JOBANK site has yet to be tested by actual individuals seeking employment, so we unfortunately do not have a gauge as to whether or not the constituents’ capacity has been increased in their search to obtain jobs.

**Outcomes: Evidence of Sustainability**

Joe has the tools and knowledge necessary to make the JOBANK system useful as an employment resource that will be updated weekly. So long as he (of someone he might train in the future) is in charge of the center’s web site, it should be sustainable. The evidence of this is that firstly, Joe can FTP the existing HTML job information files of previous weeks from the server to the office machine. Using MS Word 7, he can then edit the “new employment” HTML files to include the latest information he has about job information, and he can update the “employment archive” HTML files to include the previous week’s “new” jobs. When this editing is done, Joe can then FTP the new files back to the server where they will replace the old set of files, thereby automatically updating the web site with the latest information. Secondly, and perhaps more importantly, Joe shows excitement about the possibilities for the web site that go beyond the scope of this semester. His attitude indicates that this project will be maintained and even improved upon in the future.

There is evidence of technical sustainability as well. Right now the career center has several reliable machines which are connected to the Internet. So long as Joe (or a trained successor) is around to do routine maintenance and trouble-shooting on the machines, they should all be functional for viewing our web site. Also, this site will be viewed not just by patrons of the Bishop Boyle center, but also by other partnered job placement centers and organizations in Pittsburgh. We are testing the site on various browsers and machines to simulate other possible technical environments that may be accessing the JOBANK, however we have already experienced a good deal of platform dependent variation in appearance. These differences include relative placement of images and text depending on factors like browser type, monitor size, relative browser window size on desktop and browser version.

On the server end, the ISP where we have our files stored seems pretty reliable. All CGI functionality is supported and our quota space is not constraining. If, at a later date, we need to change ISPs, Joe knows how to FTP all the files to a local computer for storage. There is some risk that if the center ever needs to change servers, though, that there may be some compatibility problems with the C code used to generate the CGI.

In terms of sustainability to the organization, right now the center has a very small staff and Joe is the only person with technical expertise. The skeleton of the web site will remain available to the organization regardless of who is on the staff, however the usefulness of the site hinges upon its weekly maintenance by Joe. Without a weekly update of current available jobs, the site’s function is void. Thus, at this point, the evidence of sustainability to the organization relies on Joe’s continued employment or his training of a successor. With the Joe’s knowledge and the resources currently available (see Appendices B, C, D), the center should have the tools necessary to train another staff member to update the weekly website, should Joe no longer be able to maintain it.

**Recommendations**

1. **Further learning of HTML**

   I would suggest to Joe that he continue learning more about HTML code so that he can extend his role in the life of the web site beyond the necessary weekly updates. Joe has a good intuitive feel for
computers, how they work, and how code works. I think, if he is interested, that it is very feasible for him to continue learning more about HTML on his own (see resources for suggestions on further study.) I believe this would be helpful both for trouble-shooting and touching up the existing site, as well as possibly doing major changes or making new sites in the future.

2. **Learn more about UNIX editing**

   The process of downloading the old HTML files from the server each week, updating locally them using MS Word, and then re-uploading them back to the server is a reliable procedure. However, I believe that in the interest of efficiency and speed, Joe can undertake learning a simple UNIX editor to speed up this operation. Joe seems to be quite familiar with the command prompt environment of DOS, and UNIX commands are not all that different (to the extent that they would be used here) so I don’t think this is an unreasonable future goal.

3. **Feedback on the site**

   It is important to know how the end users are receiving our web product. Since user testing seems to be outside the scope of this semester due to a lack of time, I recommend soliciting feedback from as many people as possible. First, listen to the people who use the JOBBANK at the Career Center and see what comments and suggestions they have. Secondly, contact the other organizations us the JOBBANK and find out what they think of the site. Things to look for are whether or not they are comfortable with navigation (forward, backward, following links to get what they want,) do they understand the terminology used on the site, do the pages load quickly enough or are users complaining of the wait, do they find the web method easier to use than the paper method and if not, why not? Keep a critical ear and eye out for improvements to make to the site.

4. **Publicity**

   During this semester we did not outline a plan for how to publicize this website with either the other career center organizations or on the web in general. Once the site has develops a larger volume of job postings, I recommend trying to gain some publicity for the site. This will not only help more people get jobs, but will potentially lead to further improvement of the site via feedback from unaffiliated users. I have included some publicity resources in the following resources section.

5. **New Website Features**

   At this time the website should be fully functional, however there are always opportunities for improvement. I recommend browsing the web and looking at other job sites (some have been included in the resources section) and seeing what features might be a beneficial addition to the JOBBANK site. Remember, you can view the source code for any web page to see how certain sites function/look the way they do by clicking the browser’s View menu and then selecting Source, Document Source, or Page Source, depending on the browser. Some additional features that might be useful are: a resources page displaying links from JOBBANK to other job sites, a home page for the Bishop Boyle Center with a link to JOBBANK and other pages like the Pittsburgh Diocese, a way to store the scanned events images so that they load quickly and can be printed from remote computers.

**Resources**

**Simple Online (and free) HTML editing resources**

- Basic HTML tutorial (made by Toby): [http://www.thesafety.net/~boyle/Help/tutorial.html](http://www.thesafety.net/~boyle/Help/tutorial.html)
- Introduction to HTML: [http://www.cwru.edu/help/introHTML/toc.html](http://www.cwru.edu/help/introHTML/toc.html)

**Advanced Online HTML resources**

- The World Wide Web Consortium: [http://www.w3.org/](http://www.w3.org/)

**CGI resources**
Simple CGI explanation and tutorial: http://www.whizkidtech.net/cgi-bin/tutorial
Helpful CGI examples: http://www.cgi.com/toc.html

Books to buy if you want more HTML information
HTML for Dummies by Ed Tittel, Steve James, and Natanya Pitts

Places to buy these books and others online
Amazon.com books: http://www.amazon.com
Barnes and Noble: http://www.bn.com
Fatbrain books: http://www.clbooks.com

Description of all current JOBANK web page files and their function
Details of the names, locations, and functions of web files (made by Toby): see Appendix B

Unix resources
Basic tutorial to telnet to server and execute Unix commands (made by Toby): see Appendix C
Unix tutorial for beginners: http://www.ee.surrey.ac.uk/Teaching/Unix/
Unix Primer (shows similarities between UNIX and DOS): http://bignosebird.com/unix.shtml

Unix editor resources
How to do very simple editing using Pico (made by Toby): see Appendix C
VI tutorial (very good, but long and intricate): http://bignosebird.com/docs/vi.shtml
Pico tutorial: http://www.usd.edu/trio/tut/pico/index.html

FTP resources
Where to re-download the FTPX graphical FTP program: http://www.ftpx.com/

Weekly Updates
Directive plan for weekly updates of the JOBANK web site (made by Toby): see Appendix D

Examples of other job site web pages
International job search: http://www.monster.com
Computer Jobs: http://www.computerjobs.com
Pittsburgh Jobs: http://www.pittsburgh-employment.com
Carnegie Mellon’s Career Center: http://synergy.as.cmu.edu/career/
Another general job site: http://www.americasemployers.com/
Yet another job site: http://www.iwantajob.com/

Publicity
List of publicity links: http://www.instantweb.com/help/sites/webhelp.html#publicize
More publicity links: http://www.senate.gov/~leahy/publicize.html
Publicize site via Internet search engines: http://www.netcreations.com/postmaster/
Web promotion for a charge (not recommended – just FYI): http://www.submit-it.com/
The Social Web by Richard Seltzer
Appendix A

Screen shots of the JOBBANK website:
Appendix B

Description of files in home.thesafety.net/~boyle/public_html:

Within the folder public_html we have the following files and folders:

I will describe each file in this directory, then each folder, then the contents of these folders.

Files

index.html is the main html page that will load for the URL http://www.thesafety.net/~boyle. This is currently the login page.

e-mail.c is the source code written in C which is a text file that is used to generate the program that runs when the “Send” button is pressed on the login page. You can edit this file.

email.cgi is the binary executable file that actually runs when the “Send” button is pressed on the login page. You cannot edit this file – it will look like a bunch of garbage characters. If you ever want to edit the program that runs on the login page (for example, to change the email address that the program sends its mail to) you will have to edit the email.c file and then remake the email.cgi file. To do this, you edit the email.c file (you can do this with pico or by FTPing the file to a local machine, changing it, then FTPing it back to the server.) Then you must telnet to home.thesafety.net and then change directories to public_html and then at the command prompt type: gcc –o email.cgi email.c (this is called compiling the C code.)

Folders

CGI_backup is a folder which will contain the original C files that I made at the end of this semester. If you ever modify email.c or email_comments.c and you save the changes and this messes up the file, you can copy either of these two files back over your changes and then compile the old C code and you should be fine.

e-mail.c is a copy of the email.c file in the public_html folder.

email_comments.c is a copy of the email_comments.c file in the public_html/Comments folder.

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Comments is the folder which contains the files needed for the comments pages.

*after_comments.html* is the page which loads after a user successfully submits a comment.

*comments.html* is the page which contains the field where a user submits his/her comments.

*email_comments.c* is the source code written in C which is a text file that is used to generate the program that runs when the “Send” button is pressed on the comments page. You can edit this file.

*email_comments.cgi* is the binary executable file that actually runs when the “Send” button is pressed on the comments page. You cannot edit this file – it will look like a bunch of garbage characters. If you ever want to edit this program you will have to edit the *email_comments.c* file and then remake the *email_comments.cgi* file. After editing the *email_comments.c* file, you can remake the *email_comments.cgi* file by compiling the C code from a telnet command prompt when in the public_html/Comments folder:

```
gcc -o email_comments.cgi email_comments.c
```

Events is a folder which contains the pages with links to recent events as well as any images pertaining to these events.

*Eagle.gif* is one of the sample images we uploaded.

*events.html* is the main page that loads when any of the “Events” buttons from the title bar are pressed. This loads the yellow bordered page with the “Job Fairs and Special Events” text in the embedded frame.

*events_welcome.html* is the “Job Fairs and Special Events” page that goes in the embedded frame. If you want to add events to this page, you will want to modify this file.

*Giant_E2.jpg* is another of the sample images we uploaded.
Help is a folder which contains help files for the web page (plus the html tutorial I made.)

**help.html** is the file that loads into all the different colored frames when the help button is clicked.

**job_definitions.html** is the file with examples for each of the different job categories.

Home is a folder which contains all the files needed for the page that loads directly following the login.

**home.html** is the main page that loads directly after login and also when any of the “Home” buttons from the title bar are pressed. This loads the yellow bordered page with the “Welcome to JOBBANK” text in the embedded frame.

**home_contents.html** is the page that loads the frame in the left hand margin

**home_corner.html** is the page that loads in the upper left corner (it is now just plain yellow.)

**home_header.html** is the page that loads into the top JOBBANK title bar that has all the buttons.

**home_welcome.html** is the “Welcome to JOBBANK” page that loads into the embedded frame.
Images is a folder that contains all the images for the pages.

left_arrow.gif is the image of the arrow that appears on the New Jobs and Old Jobs pages.

stripes_ (all) are the images that appear as buttons on the title bar.
NewJobs is the folder with all the pages for the New Jobs posting section.

LABORER JOBS.htm is a file that you added to this directory. Woo hoo!! 😊

newjobs.html is the main page that loads directly after pressing the “New Jobs” button. This loads the red bordered page with “Welcome to New Job Postings” in the embedded frame.

new_contents, corner, header, and welcome.html are the files that function as described above for the home files – these are the four component pages of the main red frame screen.

new_general, office, prof, service, and tech.html are the pages with the different new jobs.

OldJobs is folder with all the pages for the Old Jobs posting section.

oldjobs.html is the main page that loads directly after pressing the “Old Jobs” button. This loads the blue bordered page with “Welcome to Old Job Postings” in the embedded frame.

old_contents, corner, header, and welcome.html are the files that function as described above for the home files – these are the four component pages of the main blue frame screen.

old_general, office, prof, service, and tech.html are the pages with the different old jobs.
Appendix C

Instructions to telnet into the Safety Net server and edit a file with the Unix editor Pico

1) Open a telnet session with The Safety Net. To do this, go to the start menu, select Run, then type telnet home.thesafety.net

2) When the telnet session opens, login as “boyle” with your password. Once you have logged in you will be able to interact with your files on the Unix operating system.

3) You are now at a command prompt in your home directory. This directory contains several files that contain your account preferences and one directory, public_html, that contains all the web page files. All the preference files’ names begin with a period. If you want to view the list of files in a directory, type “ls”, however this will exclude the period files. If you want to view ALL the files, type “ls –a” (although I don’t think this is ever necessary.)
4) To access the web page files, change directories with the “cd” command. You can now see all the web page files.

5) You will be able to edit the text code for any .html or .c files. All .cgi, .gif, and .jpg files will look meaningless if you try to edit them in a Unix editor. Pico is the name of the most simple Unix editor. To open a file in Pico, simply type “pico <filename>” where <filename> is the complete name of the file you would like to edit. For example, typing “pico index.html” will produce the following:

6) In the Pico editor, the first line is a header that tells you which file you are editing. The main body of the window contains the text of the file. The bottom 3 lines contain a footer with Pico commands. The ‘^’ symbol means to type the control key.

7) You can navigate in Pico using the arrow keys. The only way you can scroll up and down in your document is to use the arrow keys. You cannot edit the file using the mouse. Any text you type will add text to the document at the cursor. To delete, you can use the backspace key (the delete key functions like the backspace key as well.)

Appendix C, continued
8) You will not be able to **copy and paste** in the traditional MS Word way, however it is possible. You cannot cut text with the mouse, but you can select text to copy. If you select text with the mouse and then click on Edit on the window frame and then select Copy, window will store this text in its buffer. If you then move the arrow keys to where you would like to paste the text, you can then click on Edit and then Paste and the buffer will paste in the text from the windows buffer as if you had typed it. Here is an example of copying and pasting a line from the new_tech.html page:

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**Appendix C, continued**
9) When you are done editing the document, you type control + x to exit and then follow the questions that ask whether or not you want to save the changes to the file and what you want the name of this altered file to be.

10) After editing a file, you will return to the command prompt. When you are ready to exit telnet, you will have to type the word “exit” twice and then you will see the following window. Click OK and you can close the larger window.
Appendix D

Directions for weekly updates of the JOBBANK job description files:

1) Open an FTP session to home.thesafety.net

2) Download the following files to a temporary location on the local hard drive:

- New Job listings
  1) public_html/NewJobs/new_general.html
  2) public_html/NewJobs/new_office.html
  3) public_html/NewJobs/new_prof.html
  4) public_html/NewJobs/new_service.html
  5) public_html/NewJobs/new_tech.html

- Old Job listings
  1) public_html/OldJobs/old_general.html
  2) public_html/OldJobs/old_office.html
  3) public_html/OldJobs/old_prof.html
  4) public_html/OldJobs/old_service.html
  5) public_html/OldJobs/old_tech.html

- Events (if any changes)
  1) public_html/Events/events.html

3) To edit any of the files now on the hard drive, open them in the most recent version of MS Word on the local machine.

4) Open each of the pages of new job listings from the previous week and copy the postings for each job type. Then paste these new job posts into the body of the old job listings pages for each job type so that the old job listings pages now contain last week’s new jobs.

5) Add all of the jobs for the next week to the new jobs listings pages.

6) Add any links for new events files to the events.html page.

7) FTP these edited files back to the server along with any additional images or HTML files that are linked from the updated files. All graphics that are accessed by the events page should go in the public_html/Events folder.

8) If there are any small changes that need to be made or if there are HTML editing changes that need to be made that MS Word will not code properly, try editing the HTML files directly on the server. For help doing this, refer to the telnet/Unix tutorial (in Appendix C.)