

Web Documentation Project at the University of Delaware

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ABSTRACT

The Web Documentation Project at the University of Delaware (UD) organizes the computing help information available to the University community. The project's goal is to provide information to our users whenever they need it in a format they can understand without having to call the Help Center.

The Help Center staff realized that they needed a forum to disseminate information to the University community after the normal 8-5 workday. This forum would also provide users with quick information and solutions to common questions without having to wait for a return call during busy times of the day or semester. Using existing Web documents created by Information Technologies (IT) staff and calling upon staff members in other departments to fill in the documentation gaps, the first version of the Help Center web page went on-line in the fall semester of 1996.

Using this web page as a starting point, borrowing from the newly redesigned University web page and incorporating user input, the interface was redesigned with an emphasis placed on quickly finding information. An alphabetical index was added and the University's newly acquired Ultraseek Search Engine was customized to search relevant documents. The new version went on-line in the fall semester of 1999.

Since then, there has been a concerted effort to simplify existing documents and expand the number of areas covered. Prior to this process, most documents were placed in scattered directories owned by the people who created them which led to numerous documents that essentially contained the same information. Now the documents are being moved to central directories that better suit the subject matter and duplicate documents are being phased out. Using this process and user feedback, the Help Center staff continue to look for ways to improve the web page and the information provided.

Keywords

World Wide Web, Help Center, Documentation.

1. INTRODUCTION

The Help Center at the University of Delaware was created to inform and educate the users about technology related issues. At its inception, the Help Center discovered a need for a forum to answer repeated questions posed by the University community. This was especially important for questions that may arise after the 8-5 workday. The World Wide Web was seen as an ideal interface, or portal, to reach users other than by phone or paper. This portal would be pro-active in responding to problems and changes in hardware settings and software packages. It would also provide a method for users to submit feedback 24 hours a day, 7 days a week, which would be very helpful when a user discovers an issue at night or during the weekend or over a holiday when the Help Center is not staffed.

2. CREATION OF A WEB PORTAL

The types of calls the Help Center staff receives were reviewed and documents were created to answer the most common questions. The original version of the web page went online at the beginning of the fall semester in 1996. Additional documents were added as the need arose and as feedback was obtained from the Community. By the end of the spring semester in 1997, close to 10,000 hits had been registered.



Figure 1. Original Help Center Page

Originally, documents were scattered in various directories and created and updated without collaboration between departments and personnel. This caused duplicate information to be published

in different locations, and when changes needed to be made it was very difficult. The main links from the Help Center web page could point to current information while documents 2 or 3 levels deep could point to out of date information. This caused confusion when directions needed to be followed in order to set up software preferences.

Slowly, the scattered documents were moved to newly created central directories and links were updated. This made it easier to update information and was very important when the University obtained its new Ultraseek Search Engine. This search engine could be customized to search only Help Center documents for relevant information instead of all documents on the University web site.

3. REDESIGN OF THE PORTAL

The University of Delaware redesigned its top-level pages with a more customer-oriented and user-friendly look during the spring semester of 1999. Borrowing from these ideas, the Help Center staff began redesigning its own on-line look. The Help Center staff had many questions about the appearance of the new page and what web page features should be included from the old version. Should frames continue to be used? The staff decided that it would be best to continue using frames, but to change the layout. Instead of placing the frame down the left side of the screen, it would be placed across the top as a header. Using a header frame would give a consistent interface and titles, so users would know they are still in the Help Center section of the Web. The header frame also gives an easy way to navigate back to the Help Center home page instead of repeatedly clicking on the "Back" button in the Browser. It is difficult to anticipate who will create a page that will be linked from the Help Center page and whether they would include a header graphic if frames were not used. The header frame and main graphic can be changed with a minimum of trouble since they only need to be changed in one place. One downside to using frames is that users may have difficulty bookmarking a particular document in order to find it later. The browser will bookmark the main address and users will be taken back to the home page when they choose the Bookmark. From this point they must again navigate to the desired document.

An offshoot to using frames is that users assume that all the information is updated and maintained by the Help Center staff. From the users point of view, this provides a consistent interface. It is also easier to report errors or make suggestions since they do not have to know who actually owns the page. However, this can make finding the owner of the page difficult for Help Center staff if an error is reported, especially if there is no contact information on the page itself.

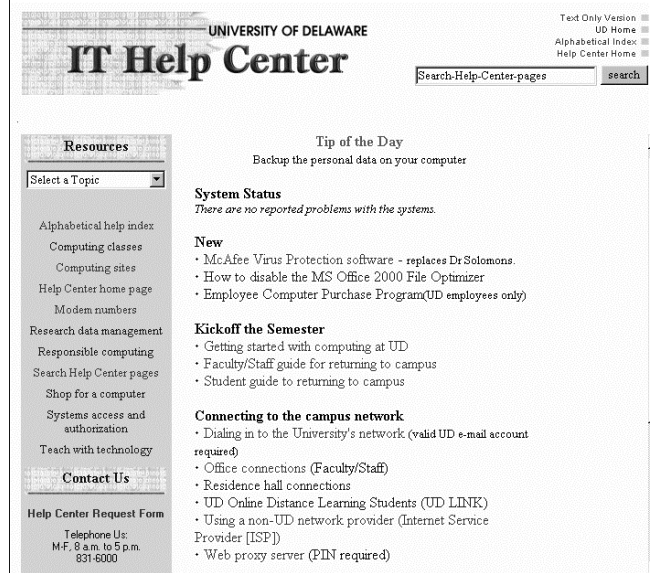


Figure 2. Redesigned Help Center Page

4. FEATURES OF THE WEB PAGE

The next question the Help Center staff faced was how much Browser technology should be included, particularly concerning the use of Javascript? The reasonable assumption is that users would have a later version of either Internet Explorer or Netscape Navigator and these versions support Javascript. The enabling of Javascript in the Browser is not necessary to navigate and obtain information; but, if enabled, the Browser gives extra information and makes navigation easier. One example is the drop-down menu. Without Javascript, the menu would not work. However, if users do not have access to the menu, they can still get to all the menu entries by browsing the Alphabetical Index.

Another example is the Tip of the Day section that was recently added. Again, it is not necessary to view this information, but it does provide the Help Center staff with a method of relaying information to the University Community during a crisis, such as a new virus or when a new version of a software package becomes available. The tip can be a link to a document with full information or instructions on cleaning up a virus or installing the latest version of anti-virus software available at the University. The tip is normally used as friendly reminders on certain subjects such as disseminating passwords and saving e-mail.

An Alphabetical Index was added that lists key concepts such as e-mail, password, or Excel. Within this index, there are links to all the major documents dealing with each concept. There are also redundant entries since there are different ways to look up different problems. For example, a user looking for assistance with e-mail can look under "e-mail", "Netscape", "Messenger", or "Pine". This index is constantly updated as new documents are created and new keywords are brought to the Help Centers staff's attention for existing documents.

Also included with the Alphabetical Index is a link to the Ultraseek Search Engine that the University recently obtained.

The search engine has been customized to search relevant directories for computing and technology documents rather than the entire University domain. This eliminates many unwanted returns from non-technical documents that appear in Departmental and personal directories. The Help Center staff and User Services staff are still reviewing the documents that are scattered in personal directories that are currently searched and moving them to the central directory structure. This will eventually allow those directories to be removed from the search parameter and will eliminate returns on older documents that are stored in personal directories.

A System Status section has been included in the new page. This dynamically inserts a separate file into the page when it is displayed in a Browser. Each member of the Help Center has access to this file that contains a brief line that shows the status of the system. This page is updated when the Help Center is informed of a pending outage for maintenance or upgrades. It is also changed when a problem with one of the central servers or Departmental servers is detected. Unfortunately, this file cannot be updated if the central server goes down for any reason. This eliminates some of the calls that are received from users inquiring if the problem they are experiencing is local to their office or widespread. The feedback from the Community has been positive; frequently, when there is a problem, users notify the Help Center staff that there was not mention of it on the web page.

During different times of the semester, different headings are expanded to make it more convenient for users to find information about certain actions that are commonly performed. At the beginning of the semester there are links that point to documents for activating an e-mail account and tips on properly maintaining it. At the end of the semester there are links to activating vacation programs for e-mail, forwarding e-mail, changing voicemail options, and setting up a personal computer to use the computer from home instead of a dorm room. During times when these headings are not expanded, clicking on the heading will take the user to a page where the links are listed.

5. EFFECTIVENESS

To help ascertain the effectiveness of the portal, there is a counter embedded in the header frame which increases each time it is loaded. This was placed in the header rather than the body so that the numbers were not inflated as each user reloaded the main page when searching for information. From Thursday May 4 to Friday May 5, during roughly a 24-hour period we registered 652 hits; whereas we averaged approximately 200 hits per 24-hour period before and after. During this time frame, the Love Letter Worm was released and, within a few hours, the Help Center had information available on the Web warning of this and informing of the availability of the anti-virus update available for Dr Solomon's anti-virus software. There was an Alert Box placed on the top-level University web pages that would open in a separate window to provide critical information to users as shown in Figure 3. If the user chose the option to not see the Alert Box again, they could still get to the information from the top-level pages by choosing the link in the "News" box as shown in Figure 4. From May 18 to May 19, when the New Love Worm was released, we only had 170 hits on our page; but during this time

we also had problems with the central servers, so users could not check their e-mail and therefore spread the Worm. By the time the servers were running word had spread throughout the Community about the new Worm.

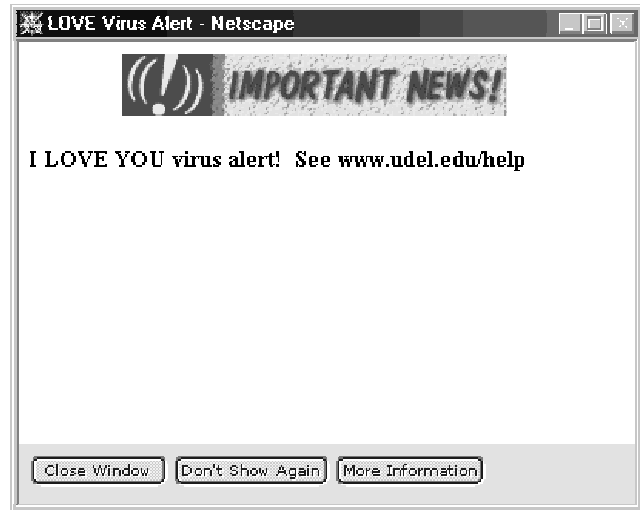


Figure 3. Virus Alert Window

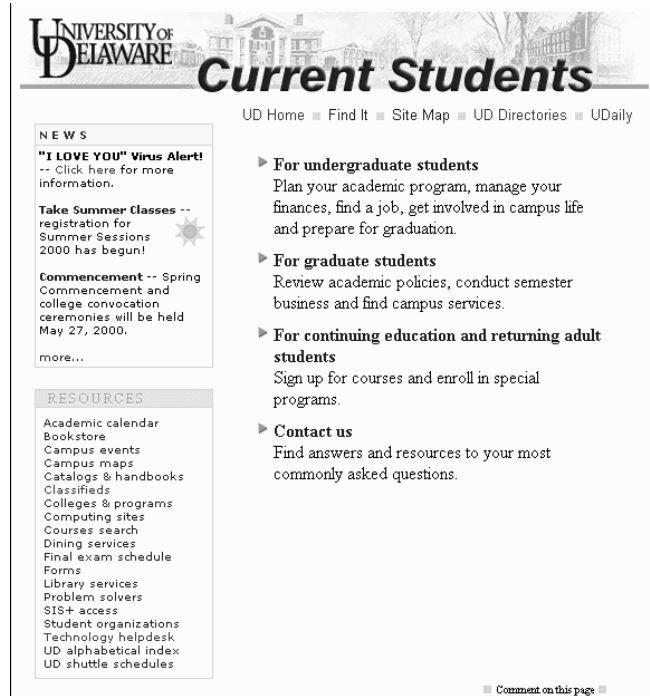


Figure 4. Current Student News box

6. UNIVERSITY SERVICES

One of the most frequented links is the Network page. UD allows users to activate and maintain their e-mail from a Web page by using their Social Security Number and their secret PIN. A new student can use a Netscape browser from almost any Internet-connected computer and activate their account, choose a username, set a password, register their personal computer for a dormitory connection and set a forwarding address in order to

send their UD e-mail to a personal e-mail address on another server such as Yahoo or AOL. Figure 5 shows an example of some of the options that are available. If a user forgets their password, they can access this web page at any time, even after business hours, in order to choose a new one. Once chosen, the password is active and can be used within a few moments.

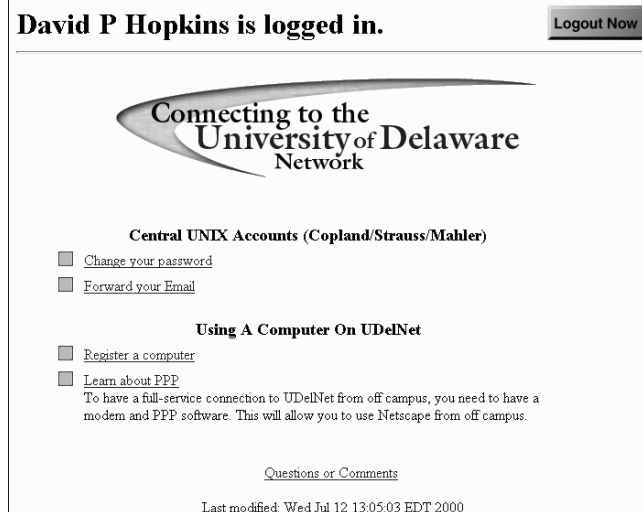


Figure 5. Network page

UD also provides Internet access to members of the University Community from home by using a modem and in residence halls

by using an Ethernet card. During the summer, numerous CD's are created and placed in residence halls with software and instructions for connecting from both on and off campus. The documents that are included on the CD are then copied to the Web. This allows students and employees who do not have the CD access to the same information in a convenient format. Having the CD available in the University Bookstore allows users who do not have access to the Internet an option for setting up their own computer on their own.

7. CONCLUSIONS

UD has embraced this portal and many expect new information to be accessible in a timely manner when a new version of a software package is available or when a virus is found. During the Love Letter Worm incident, there were links from UD's top-level web pages pointing directly to an informational page maintained by the Help Center staff. When word had spread that there was a fix for the virus some users called before the page could be updated to let us know of the new information since they did not see it on the page.

While many Universities have web pages for their Help Centers, they do not seem to offer the information in the same format as UD. While there is obviously no right or wrong way to present the information, the Help Center staff feel that our efforts are very proactive in informing and educating our Community. The staff constantly ask for, and receive, feedback from the Community regarding the web page and try to incorporate these suggestions and comments in order to make the portal easier to navigate.