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Creating a user friendly website for the Boys & Girls Clubs of Black Hawk County

Abstract

Website design can be overwhelming for many viewers. Many times viewers discontinue using sites, because it is not easy to navigate through the site. In creating the website for the Boys & Girls Clubs of Black Hawk County, user-friendliness was the focal point of the project. The Chief Professional Officer along with the staff at the Boys & Girls Clubs assisted with the development of a website by providing information that was to be included on the site. To ensure a professional look the designer relied on the four basic principles of design: contrast, repetition, alignment, and proximity. The design simplicity of the site will allow for the site to be updated with ease.

Creating a User Friendly Website

for the

Boys & Girls Clubs of Black Hawk County

A Graduate Project

Submitted to the

Division of Educational Technology

Department of Curriculum and Instruction

In Partial Fulfillment

of the Requirements of the Degree

Master of Arts

University of Northern Iowa

By

Kimberly M. Carter

Fall, 2002

This Graduate Project by: Kimberly M. Carter

Titled: Creating a User Friendly Website for the Boys & Girls Clubs of Black Hawk County

has been approved as meeting the research requirement for the Degree of Masters of Arts

Date Approved

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Abstract

Website design can be overwhelming for many viewers. Many times viewers discontinue using sites, because it is not easy to navigate through the site. In creating the website for the Boys & Girls Clubs of Black Hawk County, user-friendliness was the focal point of the project. The Chief Professional Officer along with the staff at the Boys & Girls Clubs assisted with the development of a website by providing information that was to be included on the site. To ensure a professional look the designer relied on the four basic principles of design, which includes: contrast, repetition, alignment, and proximity. The design simplicity of the site will allow for the site to be updated with ease.

Section I

Introduction

The purpose of this paper is to describe a graduate project website that was developed for the Boys & Girls Clubs of Black Hawk County. This website will give the club an existence on the World Wide Web, while encouraging the club's staff and its members to actively integrate technology into the daily activity at the club. The Boys & Girls Club currently has a technology group, and although the members of the technology group have not reached the level of developing a web page, they will maintain the site.

There are many elements to address when designing a website. One of the most important elements is the audience for whom the site is created. After meeting with the Chief Professional Officers (CPO) of the club, the designer and the CPO concluded that the audience would be those interested in knowing what the club has to offer. Once the audience was identified, the developer had to apply the elements of design to the site. According to Williams (1994) there are four basic principles to designing: contrast, repetition, alignment, and proximity. The designer relied on these four design elements throughout the development of this site.

Along with the four principles of design, the designer used an array of technical elements in the completion of this project. Hypertext Markup Language (HTML) is the language that the computer reads so that it can display the web page to the audience. The designer used HTML along with web page editing software to build the website for the Boys & Girls Club.

Information Gathering Process

The designer met on several occasions with the CPO, the technical director, and the staff of the club to gather the information that they thought was important to be included on the site. The designer also searched the web for other Boys & Girls Clubs' sites to evaluate the structure of these other sites, and see what information, if any, most of them had in common. This was done to identify items that may be present on several sites and to evaluate what is important to the Boys & Girls Clubs of America as an organization.

The designer found that the club's mission statement was on every site evaluated. This indicated to the designer that the mission statement was an important element and should reside on a page of its own on the site and that the button for the mission statement should be close to the top of the navigation table.

Mission Statement

The mission of the Boys & Girls Club of America is "To inspire and enable all young people, especially those from disadvantaged circumstances, to realize their full potential as productive, responsible and caring citizens". In keeping with the mission, the designer and the CPO decided that a member of the club will be given instructions on how to maintain the site. This was important for the designer to keep in mind when developing the site. The site must be created so that it could be easily manipulated and changed should the need arise.

Time Line

The designer along with the technology director and the C.P.O., was involved in the assignment of tasks that needed to be completed. At every meeting the designer would discuss what information was needed from the club and what the designer needed to prepare to present to the club for the next meeting. After each meeting a follow-up email was sent to reiterate the tasks assigned, who was responsible, and when tasks needed to be completed.

The designer allotted eight weeks for the development of the Boy & Girls Clubs of Black Hawk County website. Two weeks were dedicated to developing a site map, gathering information, and organizing the plan using storyboard techniques to determine how the website would look. Four weeks were dedicated to the actual design of the site and two weeks to make minor adjustments to the site following initial approval.

Technical Procedures

Web documents are written in HTML code so that web browsers,
Netscape Navigator and Internet Explorer, can properly display what is
represented by the codes. HTML is a formatting language that allows the
designer to correctly lay out the page with the text and images. All web based
documents for this project were saved with the file extension .html. This allowed
the file to be recognized as documents that were created to be displayed on the
World Wide Web.

The designer used web editing software to create this site. The software allowed the designer to design the page without the need of HTML coding. by automating the coding. Occasionally the designer had to use the raw HTML coding to troubleshoot or edit the website. Macrodmedia Dreamweaver MX, Macromedia Flash MX, and Photoshop 6 were the software programs used by the designer to develop this website. Macromedia Dreamweaver MX is the web editing software the designer used to complete the site. Macromedia Dreamweaver MX allows the designer to work in code view or design view. In code view, the designer is allowed to add HTML code the web site. In design view, the designer works in a view referred to as What You See Is What You Get (WYSIWYG).

The designer used Macromedia Flash MX to design an animation of the Boys & Girls Club logo. This is known as a Flash Intro and is located on the first page of the website. From this page the user is prompted to enter the site via a text hyperlink.

Photoshop 6 software was used to manipulate the images and to create the navigation buttons. The photos received from the club staff were very large files and had to be resized in Photoshop. Many of the photos were taken in poor lighting and had to be lightened in Photoshop. The designer also used this software to capture the blue color of the logo to apply it to the navigation buttons. To do this, the designer copied the logo image from the national site, and opened it in Photoshop. Using the eyedropper tool, the designer was able to select the color and apply it to the navigation buttons.

The designer had many pictures provide by the Boys & Girls Club. So that most of the pictures could be used and the site could remain relatively small in size, the designer decided to use a Macromedia Extension, called Advanced Random Image. The Macromedia Extension was created by Paul Davis and it allowed the designer to insert the images as a random slide show on the home page. Every three seconds an image from the extension list is loaded on the page, allowing the user to view many of the images provided by the club.

According to Williams & Tollett (2000) applying the four principles of design: alignment, proximity, repetition, and contrast, to a web page will give it a clean, neat, and professional look. To obtain this professional look, the designer created a template that would be used for all of the pages of the website. The template was designed by using the Boys & Girls Club logo, which was placed in a table across the top of the page. The street address and the phone numbers of the club were placed under the logo, and set off by a horizontal rule above and below it. The navigation buttons were also placed in a table along the left side of the page.

Section II

<u>Methodology</u>

Goals. The Boys & Girls Clubs of America prides itself on being "The Positive Place for Kids" (Boys & Girls Clubs of America, nd). In keeping with this theme, the goal of the Boys & Girls Club of Black Hawk County, along with the designer, wanted to provide the public with a positive inside look at what the club has to offer its members.

Developing Site Structure and Obtaining Resources. Meetings were held with several key people to develop the structure of the site. The designer met with the CPO, staff members, and the technology director of the club to develop ideas and to obtain pertinent information for the development of the site. The designer was provided with pictures, brochures from the National headquarters, newsletters, and other articles that contained information that needed to be included on the site.

Technical Elements Used to Complete This Project. The website was developed on a Macintosh computer equipped with the OS9.1 operating system, with 160 megabytes of Random Access Memory (RAM). An UMAX Astor 610s scanner and an Olympus Digital camera were used to capture images used on the site.

Navigational Structure. The navigation of a site is extremely important. The CPO of the Boys & Girls Clubs made it clear throughout the development stage that the site should be user friendly. As stated by Williams and Tollett (2002):

An important aspect of navigation design is the sense of page continuity and site consistency that is created by the repetition of the same navigation system on every page. In web design this is commonly called persistent navigation. This repetition helps to reinforce the sites identify as it adds a sense of familiarity for the viewer. (p. 220)

The designer captured this element by placing the same navigation format on every page in an exact location on each page. The user is allowed to navigate to any other page within the site, as well as the National Boys & Girls Club National website. The designer created the buttons in Photoshop. The buttons were designed as blue rectangular shaped buttons with white text; this kept the color scheme consistent.

Site Planning. The designer used the storyboard technique to plan the development of the site. Inspiration software was used as a designing tool for the storyboard. The designer and the CPO met to discuss what needed to be present on the site, and used this information to develop a site map. This allowed the designer to develop the site with ease. Once all the information was conceptually organized, the designer was able to quickly develop the site.

Gathering Information. The gathering of the information for the site was a slow process. The CPO delegated the responsibility to her staff. Each program director was responsible for providing information about his/her specific program area to the designer either by email or on disk. Several of the individuals were slow at providing the information. Much of the information was received in print form and the designer had to type the information into the computer.

Exploring the Web. Boys & Girls Club of America is a national organization, with clubs all across the continental United States and Canada. The CPO had reviewed several websites created for other clubs, and had gathered ideas from these sites to incorporate into this site. The designer also viewed these same sites to develop ideas for the site being developed. Many of

the sites viewed by the designer were cluttered and did not follow the principles of design.

Tentative Plan for the Site

After gathering the needed information, the designer organized the layout of the site. The CPO made a few changes to present some information in a different manner. The designer added the requested pages and information to the final draft of the site.

Section III

The Project

Flash Intro Page. The first page of the website is the Flash page.

Although there is not much information on this page it is considered the first page of the site. When a web site is placed on a server, the server needs to know what page is the first page of the site. In order for the server to recognize the page it must be saved as specified (i.e. index.html). This allows web browsers,

Netscape Navigator and Internet Explorer to recognize this as the starting point of this site. From this Flash pag,e the user is instructed to click hyper linked text to navigate to the home page of the site.

Main Page. This is the first page of the Boys & Girls Clubs of Black Hawk County website. This page is arranged with a navigational table on the left side of the page. Viewers can navigate through each page of the website by clicking on the appropriate buttons that are linked to the pages of the site.

<u>Primary Consideration</u>. This website was designed in a way that will allow for quick load time. User friendliness was another consideration given to the views of the site. This was accomplished by placing the same navigational buttons on each page of the website.

Creation of the Club's Pages. The Boys & Girls Clubs of America logo is placed on the top of the page, along with the location and phone information.

Navigational buttons are located on the left of the page. The navigation buttons are labeled with the names of the pages within the site. These pages consist of: The National Website, Mission, History, Chief Professional Officer, Board of Directors, Staff Members, Programs, Youth of the Month, Employee of the Month, Community Partners, and Calendar. The design layout of all the pages is consistent throughout the site.

To allow the viewer to see activities that are held at the clubs, a random image slideshow is located in the center of this page. Java Script programming language was used to achieve this function. The Macromedia Dreamweaver advanced image file extension had to be installed within the site for the slideshow to function correctly.

Site Construction. Viewers can navigate to any section of the site from each of the pages. This was done to present a user-friendly environment for the viewer. Through the pages of the site the viewer can read the mission statement, read the history, meet the Chief Professional Officer, meet the board members, meet the staff, and gain a knowledge of the programs offered. Viewers can also read a short biography of the employee and the youth of the

month, identify the community partners who assist with activities at the club, and also view upcoming events that will be held at the club via an external calendar page.

<u>Directors and Staff.</u> The Board of Directors' page consists of a table listing of all of the members and is hypertext linked to their email addresses. The staff page is constructed in the same manner, giving the viewer the option to email members of the staff. This was done to allow viewers a means of contacting the individuals listed on these pages directly from the website. The Overall Site Structure is outlined in Appendix B.

<u>Usability Testing.</u> Several individuals on several different computers, using both Internet Explorer and Netscape Navigator, tested the Boys & Girls Clubs of Black Hawk County website. Each of the individuals gave feedback to the designer. This feedback was used to "tweak" the site.

After the final draft of the website was completed, the designer asked several colleagues and two professors from the University of Northern Iowa to navigate through the sight and provide feedback. The color scheme of the site was ideal. A white background was used with black text and the buttons and contrasting elements were in blue, the national color for the Boys & Girls Club of America. The navigation of the site was user friendly and the images loaded quickly. One professor suggested that the logo match the blue color of the buttons. This was done by using Photo Shop 6.

Section IV

Conclusion

When designing a website the four principles of design are crucial elements that should be applied. According to Williams (1994), related items should be grouped together. When creating this site the designer applied this element to the template for each page. The name, location, and phone numbers are located in close proximity of each other, along with the navigational structure being placed together in a table. All elements on the pages are lined up with another element on the page. Nothing is arbitrarily placed on the pages. This is an example of the alignment principle. The designer used a template to assure that repetition was present within the site. Each page contains like elements, and those elements are placed in the same location throughout the site. "Don't be a wimp" is a statement made by Williams (1994 p. 53). This statement refers to the contrast principle. The designer made contrast with font size, color, and style throughout the site. Drop Caps were used at the beginning of a piece to obtain this effect.

Images should be manipulated to acquire the shortest load time without pixilating the image. This was done using PhotoShop 6. The designer resized many images and saved time in a format for the World Wide Web, which allows for quicker load time.

The website was viewed by many individuals, on many different platforms, using different internet browsers. The designer of this site suggests that web

pages be viewed by the developer on several different machines and platforms to ensure that they will be viewed the same way by all viewers, despite the platform or browser used.

The designer recommends that the storyboard technique be used when designing a website. This allows the designer and the client to view the layout of the site before the technical elements are applied. When constructing a site for a non-profit organization, the designer suggests that the national chapter of the organization be contacted so that there are no discrepancies with any national guidelines.

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