ABSTRACT
The primary purpose of this project is to redesign an existing website for the Sisters of the Academy, whose current web master is located at Auburn University. While the current (and newly re-designed) website is nicely formatted, the project team members see room for further improvements. Among other things, the objectives of the redesign were to improve the visibility, navigation, and accessibility such that the site is amenable to maintenance and is user friendly. The purpose of this paper is to elaborate on the user centered design process taken to improve the SOTA website.

Author Keywords
User Centered Design, Website Design, Web interfaces, web content improvement, information architecture.

INTRODUCTION
The goal of the Sisters of the Academy (hereby known as SOTA; http://www.sistersoftheacademy.org) is an organization consisting of primarily female African-American members with high-level degrees. More specifically, the members are members of the academic community consisting of both graduate students as well as those who have earned PhDs in their respective fields. They serve as the sister organization to the, similarly structured, Brothers of the Academy organization (http://www.brothersoftheacademy.org). Both organizations seek to advocate and facilitate success of its members in the academic community. The objective of the SOTA website is to effectively present information about the organization, including information on: increasing membership, planned and past events, as well as provide an effective means of disseminating information about each of the members (via the membership biographies).

PAPER STRUCTURE
Respective of the design issues involved in the re-design of the website, we have divided the remainder of this document into several sections. We begin by describing the previous incarnations of the site. This is followed by our evaluation and redesign process. We will then conclude with the additional project goals achieved through the re-design and will discuss the maintenance from the point of re-submission to the SOTA webmaster.

THE SOTA WEBSITE(S)
As previously mentioned, the underlying goal of the website is the dissemination of organizational information. It is important to understand SOTA leadership team’s vision, and to conform to their concept of a successful and informative website. Since the presentation media is via the web, several aspects of content delivery must be considered:

Business Requirements: this involves knowing what the organization wishes to do with the website.

Audience: involves understanding the demographics and relative computing environments of the intended visitors to the website.

Intended Content: it is necessary to be cognizant of all the possibilities with respect to content. In terms of design, it is very important to center the design around current and future content. This is especially true when dealing with time and contextually relevant data.

Site Organization: quite clearly, the intent is to organize and present the data such that it is efficient and relevant to context.

Navigational Structure: The website should be well marked and user-friendly. Users should not have any problem navigating the website. Links should be categorized according to their relevance: Global, Local, and contextual.

In addition to the above mentioned aspects, the development team also wished to consider the use of color clear navigational cues to best present the site contents and allow for the most effective visitor experience.

Original Website
The original SOTA website (Figure 1), while well intended was riddled with user interface problems. The most important aspect for websites, readability, was a clear issue for the original site, as none of the text was readable. Additionally, the color scheme and use of images did not clearly reflect the professional nature of the organization. Moreover, because
of the readability issues, it had an adverse effect on the navigational component. Given all of the interface issues, it was clear that a re-design became necessary.

SOTA Re-Designed
The re-designed SOTA website is a well needed, drastic change to the site contents and presentation (Figure 2). The most effective change is the improved use of color, which achieves a more eye friendly website. The most important issue has been resolved by providing readable text content. Despite the changes, the site still suffers from a navigational issue. Though there is a clearly marked navigational area, the text, navigational and hyperlinked components utilized the same colors, with one exception: the linked text would only become highlighted on a mouse-over. Thus it had become clear to the project team that further re-design was necessary. Upon further discussion with the SOTA webmaster, there were further additions to the content: Providing a template for member biographies and adding links for fill-in membership applications and event registration forms.

USER-CENTERED WEBSITE REDESIGN PROCESS
Basing our work on the re-designed website, the team members conducted a visual and contextual evaluation. In doing so, we resolved to focus on the aspects driving the Information Architecture process with respect to web-design: Content reflective of the organizations goals and geared to an intended audience. Site organization, Navigation, and user-friendly color schemes were also an important factor. The objective of the re-design is geared towards an improvement of content delivery and navigation by adjusting the color scheme to focus the users more on the content and less on “figuring out the navigation”. One final aspect of our analysis involves concerns for accessibility, as one cannot assume that there will be no visitors with visual impairments.

As stated by [4] the navigational components should be clearly marked with a different color (or style) than that of the content text. The content focus should lead the user to the important tidbits on the current page and less on the surrounding images and navigational components [1]. With respect to accessibility concerns, we intended to simplify the content by reducing the need for image-based navigation and increasing the flexibility of the interface. In the context of full compatibility with the W3C accessibility standards, the site will include alternate stylesheets that would apply to the site.

UCD-based SOTA Website
The proposed site is based on our user-centered evaluation and design process described previously. As a result of the process, the images navigational area have been converted to text based buttons. The color scheme now shows a clear contrast and allows the user to focus on either the navigational areas or on the content itself. The hyperlinks in the content is clearly marked in a the expected style (color and underlined). In order to keep the content structure similar to that of the previous incarnation, we simply adjusted the format to accommodate the navigation structure on both the right side as well as on the bottom border of the page content. The additional requirement of adding member biographical information was simply a matter of devising a academically centered biographical template and adding local navigation for accessing the members alphabetically. The result of our re-design is illustrated in Figure 3.

CONCLUSION
Because of the fact that the website is managed with Dreamweaver, the entire set of content is based on a standardized template. Therefore all necessary changes to the global navigation structure are done simply by changing the template. It is our belief that by making the changes to the content
that we have achieved a more efficient and pleasing web interface for the delivery of the SOTA web content. Thus far we have received positive feedback from both the webmaster and several members of the leadership team. According to our goals, we not only provided a user-centered website, we have shown that applying the UCD process to a website allows a developer to easily create a professional website.

ACKNOWLEDGMENTS

The members of the project team wish to extend our appreciation to the leadership team for the Sisters of the Academy for allowing us to "experiment" with their site. We thank those who provided the tools and materials needed to perform a complete re-design for the SOTA website. Lastly, we wish to extend our appreciation to the Principal Manager, Dr. Cheryl Seals.

REFERENCES

1. "First Principles of Interaction Design" 


   http://www.developer.com/design/article.php/10925_1545991_1

   http://www.useit.com/alertbox/20040503.html


   http://www.digital-web.com/articles/user_interface_design_for_web_applications/