Solar Heliospheric Research Group Web Proposal

Description

This project is aimed at refreshing the general look, feel and functionality of the Solar Heliospheric Research Group's (SHRG) website. Generally speaking, the goal is to update the design and markup to reflect current web standards as well as draw public interest to the SHRG. We will discuss the possible use of CoE templates as one design option, though brand elements can be included in a ground-up approach as well. Back-end tools will also be created to help manage various internal and external data points.

I would like to work closely with the group to make this design as clean, modern, and compelling as possible. The SHRG is doing some amazing work that deserves attention!

Quick Links

My portfolio
Some of my work with Michigan Engineering

Various selected work

Gaming for the Greater Good
A Laboratory on Mars
Peering into the Black Box of Tuberculosis

Front-end design (two options)

A. Utilizing current CoE templates. Using a pre-existing template will save a bit of time, but also be more constraining on the design possibilities. The two ends of this spectrum should certainly be discussed. However, simply having a template won't eliminate the need for some level of design work, as your SHRG logo and identity will have to be carefully integrated into the existing framework. Here, time will be spent on the following:

- Working to integrate your look and feel into the existing template
- Revising a front-page mockup based on feedback from the group
- Working with the template to make sure everything is accessible with regard to the AA WCAG standards
- Careful consideration of good user interface (UI) design
- Designing an intuitive navigation system
- Integration of social media (including parsing news stories onto the homepage)
- Designing all sub-pages (mission pages, personnel, technology and science)

B. Designing a site from the ground-up. This option will give you more flexibility with regard to design. Working from the ground up provides more options. We can still bring in design elements from the general CoE brand, as I've done across all the Digital Multimedia Experience pages I've designed. This option comes with a bit more time investment, as I will begin with photoshop to mock up several different design options. The final design will then need to be cut up into HTML5/CSS. With this option, time is spent on the following:

- Mocking up several possible designs with Photoshop
- Selecting a design
- Revising the selected design
- Cutting up the final mockup into its graphic elements
- Coding the HTML, writing the CSS
- Working to ensure accessibility with regard to the AA WCAG standards
- Careful consideration of good UI design
- Designing an intuitive navigation system
- Integration of social media (including parsing news stories onto the homepage)
- Designing all sub-pages (mission pages, personnel, technology and science)

Option A: **$2,805**
Option B: **$4,250**

Back-end design

The back-end for this site will include a tool for administering the alumni data, as well as certain internal tools for viewing and traversing measured data. The instrument data pages will be delivered over HTTPS with a commercial SSL certificate. Time will be spent on the following:

- Designing a back-end "landing" page that the user will arrive at upon authentication
- Ensuring the content is all delivered properly and securely (via HTTPS, authenticated with cosign, forbidden from port 80)
- Creating a page that will allow data to be viewed. Carefully ensuring the accuracy of the database queries to return the appropriate data
- Integrating a Google calendar into a "student schedule" page
- Working out a system to allow new protected pages to be created by a user with administrative privileges

- Creating a shared server space to allow the upload of documents. This will probably also involve the design and coding of a simple upload page
- Creating an interface to administer the personnel/alumni data
- Testing will be done to ensure the security of all web forms. Data will be properly sanitized upon input and output to protect against common threats such as MySQL injection and XSS attacks (even though this is behind kerberos and HTTPS, this step is still important)

$4,335

Totals

With design option A: **$7,140**
With design option B: **$8,585**

Let me know if you have any questions. Thanks!

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