**FLORIDA ENERGY SYSTEMS CONSORTIUM**

**REDESIGN OBJECTIVE**

To evaluate the Florida Energy Systems Consortium website (FESC) and make sure that it corresponds to their mission statement and ideas. The goal is to propose a design that meets the current standard for an intuitive, accessible, and versatile website. ­­­

**FESC TEST EVALUATION**

**ACCESSIBILITY**

This test is based on the Web Content Accessibility Guidelines (WCAG) 2.0 for meeting the minimum requirement of accessibility. The browsers used for testing are Chrome and Firefox with wave.webaim.org as the testing tool.

* Chrome testing results - [wave.webaim.org](http://wave.webaim.org/report#/http://floridaenergy.ufl.edu/energy-research/by-research-area/thrust-4-solar/)
* Firefox testing results – [wave.webaim.org](http://wave.webaim.org/report#/http://floridaenergy.ufl.edu/)

**MOBILE RESPONSIVENESS**

Evaluated using [Google Mobile Friendly Test](https://search.google.com/test/mobile-friendly). The full result of the test also includes source code and recommendations from Google Mobile Friendly Test: [FESC MOBILE TEST](https://search.google.com/test/mobile-friendly?id=XdPfUF_1OjD3kwX3hFrdrQ)

**PERFORMANCE**

The current FESC website have optimization and speed issues based on PageSpeedInsight and

KeyCDN.com testing.

* KeyCDN.com results: <https://tools.keycdn.com/speed?h=5b4bb8e297803268007877e2>
* PageSpeedInsights results for both mobile and desktop: <https://developers.google.com/speed/pagespeed/insights/?url=http%3A%2F%2Ffloridaenergy.ufl.edu&tab=mobile>

Recommendation for improvement:

* Evaluate server response time within different environment (consider internet speed of consumers).
* Eliminate render-blocking JavaScript and CSS in above-the-fold content (Optimization).
* Optimize images (try using lower dpi images or less png files unless it is necessary).

**INTUITIVENESS AND FUNCTIONALITY**

My recommendation is to test this in different platforms and browsers. The site is not very responsive especially in Firefox.

On mobile devices, some of the images and design elements do not resize to the device in use. There are also alignment issues and their pages are very busy, making navigation difficult.

HTML W3C VALIDATOR yields 34 errors and 25 warnings just in the Homepage.

**USER EXPERIENCE**

The goals of User Experience (UX) is to provide additional information on how consumers react and use the information in front of them when interacting with the FESC website on different devices and platforms.

**DEVICE AND PLATFORM**

* Many consumers prefer to access the website using their mobile device. Other consumers are more inclined to use wider monitors while accessing the information for research or educational purposes.
* With the current state of technological advancement, the public consumers will have a higher rate of accessing the FESC website using mobile devices. Professional consumers are more inclined to use wider monitors due to the research and educational nature of the information.

**BROWSER**

* Different browsers affect the usability of the FESC website. Having a clearer understanding of which is used more often can help mitigate some issues related to how responsive their website is. This website can provide statistic information [www.statista.com](https://www.statista.com/statistics/268299/most-popular-internet-browsers/).
* Different types of browser can also affect the usability and accessibility of the FESC website. Understanding which is the most used can help mitigate some issues of responsiveness. This website can provide statistic information [www.statista.com](https://www.statista.com/statistics/268299/most-popular-internet-browsers/).

**CONNECTIVITY**

* Considering the variety of different ISP providers and internet speeds could help when creating a updated more responsible design.
* Consumers have different ISP providers and internet speed. Taking this into consideration can also help when creating a responsive design for website.

**ACCESSIBILITY**

* Based on the evaluation above, this is A MUST have for the FESC website to have a responsive design that accommodate different consumers.

**HUMAN INTERACTION**

* The FESC website can benefit from understanding their core consumer. By creating a simple prototype of their website (one or three pages), a developer can test and create reports on how their consumer is responding to some of the functionality and design information that their user is consuming. This will provide some insights into how to design the final product to improve the ease of use.

**RECOMMENDATIONS**

To anticipate the usage of both the general public and professional consumer, the following recommendations are provided for a responsive design:

* Redesign the logo to strengthen the brand and identity of FESC.
* Redesign the page layout and organize the information provided to meet the requirements for responsive design. This will ensure both the general public and professional consumers to have ease of use when interacting with the FESC website.
* Streamline the information written for easier reading and analysis.
* Create a cohesive design by conveying a specific theme and tone to make the website appealing and in line with their visual identity.
* Create the website to respond better for multiple devices and platforms.
* Continue to perform analysis on User Experience testing to improve accessibility, functionality, performance and intuitiveness of the website.

This method is more efficient because you are not separating the user base and accidentally creating two different designs.

**PROPOSED DESIGN**

Keywords:

* Modern
* Renewable Energy
* Sustainability
* Research and Development
* Educational