Florida Energy Systems Consortium (FESC) - Redesign proposal

Objectives/purpose of the redesign

The current website is large and complex, making it difficult to navigate through and find content.

- Make the website to look relevant and professional via creating consistent style strategy with clean and elegant design to be applied trough all website's pages.
- Improve accessibility, responsiveness and UX.
- Increase online traffic.
- Reorganize content on the website to improve internal and external search engine optimization.

State of the current site

Accessibility audit

- No option to resize the font for users with visual difficulties. Low contrast between text and background (currently the main navigation bar is red text on dark blue background) which makes it not accessible for people who cannot differentiate between colors.
- Some of the text is not a "live text" but an image which makes it impossible for screen readers to see it. Currently, this important text is not accessible to blind users.
- When viewed on smaller screens, only portion of the page is visible and to see the rest of it, the user needs to scroll the page from side to side. This way, some users might lose contextual information.

Mobile friendliness

- No flexible grid website does not respond to smaller devices rather than desktop.
- Images need to be resized according to different screen sizes. Logos, buttons and gradient background need to be replaced with SVG or CSS code, instead of current JPG formats.
- Need more efficient usage of the page. Now it has two white side columns plus one white row above the footer.

Performance (how quickly does it load?)

Overall website performance is good and fast enough. It does not contain lots of heavy images, video source linking to YouTube (absolute path) which reduces loading time, significantly. Most of the website made of text, which helps it to load faster but makes it less attractive to users.

Load time: 2.48s

• Performance grade: B 83

Page size: 1.2 MB

Functionality (does it work?) and ease of use (is it pleasant to use?)

- Two menus (top & side) very confusing need to group some categories and narrow menu options.
- Need to create a consistent color pallet for all pages (up to 3 main colors) to focus the visitor eye on the important sections of the page.
- The text shows up as one block with long lines and no indentation, which makes it
 hard to read. The solution might be breaking it to columns (news paper / magazine
 style). Another option might be hiding portions of the text so the user could reveal it
 only if they want to get more information.

User research

| Who are expected users? | What do they want to accomplish? |
|---|---|
| The Florida Energy Systems Consortium members | To research and develop innovative energy systems that lead to alternative energy strategies, improve energy efficiencies, and expand economic development for the state. |
| Energy experts (engineers and students) at 12 supported universities | To share energy-related expertise. |
| Florida State Government, who founded FESC | To promote collaboration among the energy experts. |
| Florida Legislature, Executive Office of the Governor, and the Florida's Office of Energy housed in the Florida Department of Agriculture and Consumer Services | To accept guidance per need, from the Consortium reports. |

Device support necessary

Need to be adapted to smartphones (mobile first) and tablets, including vertical &
horizontal views. Website should be redesigned accordingly to a flexible grid. The
new website should be tested on most popular android and Apple devices as well as,
old smartphone versions, such as Nokia and Blackberry.

Recommendations

Deliverables- each with description & acceptance terms

- Updating the site map. Reorganizing existing content under 4-6 categories to be accessible from the top menu navigation bar.
- Creating a flexible responsive grid to be easily accessed from wide range of devices.
 This includes, converting logos to SVG format and resizing JPG images to be uploaded according to the size of user's screen.
- Making the website more accessible to different user's difficulties. This involves: making the entire text readable for screen readers, adding more color contrast and using proper HTML semantics.
- Modernizing UI and UX to achieve consistent, attractive and clear design. Adding more images to every page to make the website more interesting for the viewer.

- Reduce the amount of the text by adding "For more information click here" buttons which will reveal more text per user choice to read more.
- Making more efficient use of white apace, changing proportions of different elements on the page to focus the viewer's eye on important sections such us menu and header.
- Reviewing competitor / similar websites to compile effective keywords and searchengine optimization (SEO).