

Cave Research Foundation Website Redesign

Design Document

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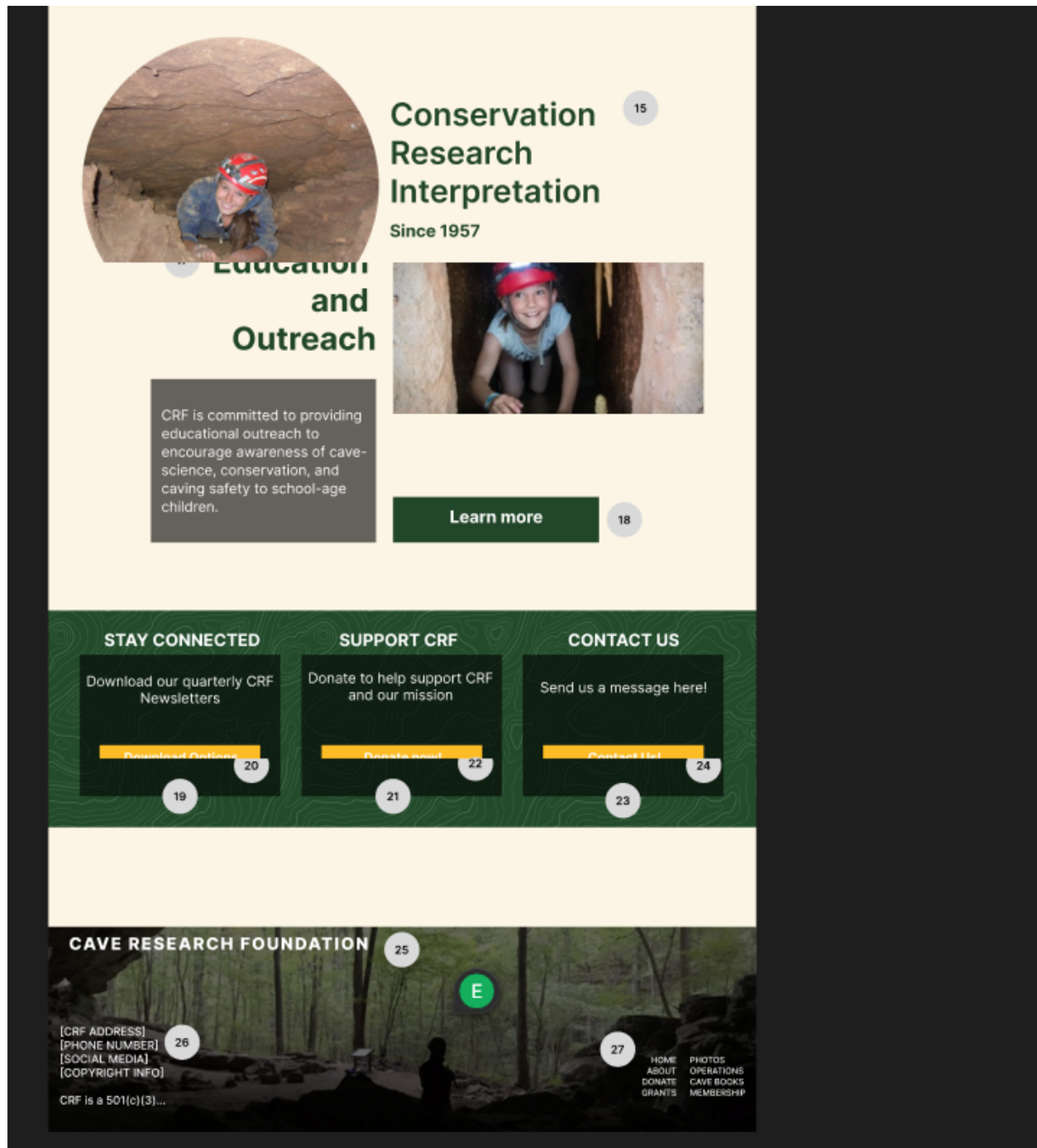
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I. CRF Website Mockup



Upper half of the homepage (index.html)



Lower half of the homepage (index.html)

Note: the gray-space is **not** a part of the website. That is merely the background of the design-space.

To view the design in *Figma*, [click here](#).

II. CRF Website Mockup Key

1	Navbar- Home link: Leads to homepage <i>index.html</i>
2	Navbar- Get Involved link: Currently <i>home/membership/index.html</i>
3	Navbar- About CRF link: Currently <i>home/about/index.html</i>
4	Navbar- Donate link: Currently <i>home/paypal/index.html</i>
5	Navbar- “Hamburger”- displays drop-down menu (indicated by label 6)
6	Navbar- Drop-down menu - reveals more links to pages
7	Navbar- Grants link: Currently <i>home/grants/index.html</i>
8	Navbar- Officers link: Currently <i>home/officers/index.html</i>
9	Navbar- Business link: Currently <i>home/business/index.html</i>
10	Navbar- Operations link: Currently <i>home/ops/index.html</i>
11	Navbar- Photos link: Currently <i>home/photos/index.html</i>
12	Navbar- Cave Books link: <i>cavebooks.com</i>
13	“Our Mission” Panel: Describes CRF’s mission
14	“Announcements” Panel: Mocked up with the 2023 CRF Annual Meeting
15	“Learn about CRF” Panel
16	“Learn about CRF” Button: Will lead to a page describing CRF (similar to current <i>home/about/index.html</i>)
17	“Education and Outreach” Panel
18	“Learn more” Button: Leads to a page describing education and outreach for kids. *Will include link to <i>cavesim.com</i>
19	“Stay Connected” Panel: Advertises quarterly CRF Newsletters
20	“Download Options” Button: Provides options for downloading newsletters
21	“Support CRF” Panel: Donation panel
22	“Donate now!” Button: links to donation page. Currently <i>home/paypal/index.html</i>
23	“Contact Us” Panel: Methods to contact CRF
24	“Contact Us!” Button: Sends users to means to contact CRF

25	Footer: Houses CRF label, contact information, and nav-links to pages
26	CRF Contact and address information
27	Footer Navlinks

III. Write-up

A. Goals

This mock-up was designed with the intention of modernizing the *Cave Research Foundation's* website. The goal of this project is to clean the front-end (presentation, user-interface, information, etc.) of the site and also update the back-end (code, framework, efficiency). The mock-up currently only represents the homepage of the website, though that should be sufficient to represent the style and design of the future pages.

B. Features and Design

a. Colors

The colors of the website should reflect the organization and what it does. The primary color (**HEX FCF5E5**) is intended to be an easy-to-the-eye off-white color that reminds the user of a map and is also easy to display information on. The secondary color (**HEX 224629**) is representative of a topographic map and is a color that contrasts nicely with the primary color. Further colors, such as the yellow-gold (**HEX FDBB26**) and blue (**HEX 002763**) are taken from the Cave Research Foundation badge and will be accent colors for buttons and similar features.

b. Website Components

i. Navigation Bar (Navbar)

The navbar consists of 7 components: the CRF Badge, 4 links, the hamburger, and a member login button. We included on the navbar itself only the links we thought would be utilized most frequently. The *Get Involved* link will be an easy-to-find and one-click way for new users to find information about getting involved with CRF. *About CRF* provides a similarly easy method for users to find information pertaining to the organization. *Donate* leads users to ways they can support CRF. The *hamburger* (three stacked horizontal lines) serves to hide the other links to keep the navbar clean. These links were deemed to be less important for

the general public but are meant to still be easily accessible. Clicking on the hamburger will display the other links such as *Grants, Officers, Photos, etc.*

ii. Banner

We wanted a picture on the banner that kept the primary color (green) while also representing what the CRF does. The image on the mock-up is subject to change. The CRF logo is purposefully placed front and center for all to see as soon as they load the website.

iii. Our Mission Panel

An organization's mission statement is one of the most important things for visitors to see. The mission tells them what the organization does, stands for, and is involved with. Placing the panel as the top-most panel on the homepage allows users to immediately see what the *Cave Research Foundation* does and is about.

iv. Announcements panel

CRF announcements need to be easy to find and see and are among the most important aspects to the website. The mock-up displays the 2023 annual meeting in Carlsbad, New Mexico, however this will change as needed. The announcements panel can be changed to always show an upcoming event/announcement or can be removed if there is not an announcement to be given. If removed, the panels below will be shifted up.

v. Conservation/Research/Interpretation

A factor that drives people to a website is to learn. This panel gives visitors a fast and easy way to view information about the CRF. "*Conservation, research, interpretation*" were chosen as labels due to the words' significance to the CRF and their presence on the Badge.

vi. Education and Outreach

The page that the button links to will include information about education and outreach (particularly with kids) and will also include information about the cavesim.

vii. Information panel

A panel divided into three informing visitors how to stay connected with, support, and contact the CRF along with buttons linking the respective information. We are still unsure how the *Stay Connected* panel will allow visitors to download newsletters. Our current idea, however, involves radio buttons to select which edition(s) to download.

viii. Footer

Every website needs a footer that displays contact information for the organization (social media, phone numbers, emails, etc.) while also providing easy navigation to other sub-pages.

C. Technical Details

This section of the writeup will detail the technical aspect of the website redesign, specifically the languages, framework, documentation, and remote repositories involved.

a. Languages

This website will be coded using HyperText Markup Language (HTML), Cascading Style Sheets (CSS) and potentially Javascript. HTML provides the basic structure of the website, CSS “stylizes” it, while Javascript will be implemented for any user interaction. The code editor being used will be VSCode.

b. Framework/Library

The live website is currently built using vanilla HTML and CSS. However, as part of the redesign, we will be implementing a framework. A framework is essentially a foundation for developing websites and are more or less templates. Developers will add code and functionality to a framework and personalize it for their specific purpose. Frameworks are helpful to use in the development process because they save time, provide an outline to follow, provide clean code, and are overall much more efficient than vanilla programming. The framework that we have chosen for the *Cave Research Foundation*’s website is React.js. While React is not *technically* a framework (it aligns more with a library), its functionality is similar enough. React is very simple to learn (great for website upkeep) and implement and is good for projects of all sizes. It is relatively lightweight and runs smoothly and quickly. React also has

extensive support and documentation, both of which are important for whoever will regularly access and maintain the backend of the website.

c. Website Documentation

The website redesign will also include extensive documentation. The documentation will serve to teach and walk the reader through any changes, updates, or maintenance needed to the source code of the website.

d. Repository

I will be hosting the website redesign source code and files on a **private** Github repository. Hosting on Github will allow for version control, remote backups, and also provides an easy access method for people to review the source code.

IV. Delivery

The website redesign as of writing this design document is in the early stages of development. As a student, I may not be able to work on the project as often as I would like (though I graduate Dec. 2023). Once the semester is over, however, I aim to make quick and substantial progress on the website. Current time estimate and goals are:

- Dec.2023: Complete design, begin implementation
- Feb. 2024: Substantial implementation
- March-May 2024: Completion of implementation
- May 2024: Completion of documentation

I hope to have the website live by the completion of documentation.

These are, however, only estimates, and implementation can take less or more time. I aim to keep Dr. Kayla Sapkota updated on the progress.

V. Conclusion

I hope this design document for the remodeling and revamping of the *Cave Research Foundation's* website has provided sufficient information and insight into the process and vision for the final product. If there are any questions, concerns, requests, or clarifications, please contact me and I will be happy to oblige.