

The Identification and Aid of Organizations Through Web Presence

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## **Abstract**

Among a culture wherein a user-friendly and widely accessible web presence is tantamount to a successful organization, this project sought to identify local organizations who needed to develop or otherwise improve their presence online through a functional website. The project selected an organization based on its level of project-to-client communication ease and connection to the community. The website created for the organization was crafted specifically according to the explicitly stated current and potential future needs of the organization to improve their communication efficiency. The project performed research to identify the most novel and functional HTML elements, CSS standards, and client-side experiences available. These aspects contributed to an extremely accessible, device- and browser-independent, visually appealing website for the user. By improving their web presence, the organization augmented their professional appeal and the effectiveness of their communication with the community. The methods from this project can provide valuable insight for future replications of itself as well as parallel lessons to other fields through its reasoning during production.

## **Introduction**

### *Field Research*

Today's climate demands a web presence from organizations in order to communicate with members, the public, and/or potential consumers. It can also be instrumental in establishing a professional legitimacy in the face of users (Ward). When it comes to attracting a customer base, 97% of Americans use the internet to find local businesses, making online a notably valuable location to grow an audience ("97% Of Consumers"). In addition to an online presence, mobile compatibility is essential; more than 4 in 5 Americans have a smartphone and will use it for an average of 99 minutes per day. In spite of this, nearly half of small businesses in the

United States don't have a website (Ward), many times due to hesitation over cost or relevance to their industry. However, of those without a website, as many as one third would consider or like to get one in the future (Moody and Bolden-Barrett).

While small businesses make for a great model of similar scale and are more accessible for studies, student organizations tend to face similar lacking web presence. This is less crucial for a consumer base but can lead to a limited communication pathway between the organization and its members and the public. The University of Illinois at Chicago provides free basic web templates for the 442 student organizations who have requested such space on the locally built web app OrgSync. The service also allows organization leaders to send out certified emails to member list-servs ("UIC Connection"), but another issue that arises is emails blending into the noise for users and a lack of diversification. Another avenue for these organizations could potentially be an independent web presence. These issues were among the most mentioned in communication with the project's selected client organization, The French Club at UIC. This organization demonstrated thorough need for a communication improvement with their members yet could simultaneously provide quick feedback to the project due to their availability.

#### *Available Resources*

There is no shortage of methods to create a website and then deliver capabilities to the client to update information on that same website. A simple form of this could be the software as a service (SaaS) provided through third party websites such as Google Sites or Square Space. However, these websites may charge the client, limit the client's design and functionality options, and fail to require the knowledge and skills this project's objective sets about providing. After advising with this project's supervisor, the target organization would be hosted using GitHub, a platform as a service (PaaS), allowing the project and therefore the client to have

nearly full freedoms regarding the application and data, while still providing the middleware, server space, and other requirements virtually around the globe.

## **Project Decisions**

### *Introduction*

This project made a myriad of deliberate choices along its duration in order to maximize the effectiveness of the end-product for the client and the user alike. These decisions were made following thorough investigation online of documentation, official and well-referenced discussion boards, as well as consultation with the project's supervisor, supplying advice from years of industry experience and relevant teaching.

### *Client Interface*

One of the primary obstacles to this project's sustainability and value to the client is the ease and availability to the client to make changes to their website. This is a direct property of the project's purpose and was made clear during the initial communication with the client. As previously stated, GitHub would be our hosting service, but the application data had to be sourced from the client. Among the methods considered was Markdown compilers, which would convert relatively simple text into more structured Markup for the HTML of the static website. Similarly, the HTML could be constructed entirely with emptied "div" elements, and a call from the JavaScript library jQuery could fill in the information from more familiar programs such as Notepad or even Microsoft Word. Both of these were ignored, however, in an attempt to eliminate usage of JavaScript in the user's browser for the website's functionality.

In lieu of these JS-dependent options, this project selected HTML templating for the client's interface. A thorough documentation was synthesized personally for the client. This documentation included small segments of HTML that the client substitutes parts of with their

own information, with included screenshots of how each segment will appear on the website to the user. This gave the client freedom without sacrificing user accessibility.

### *User Compatibility*

While to a business, users coming from all over is typically a beneficial status, for a front-end web developer, this diversity raises the importance and difficulty of cross-browser compatibility. Today, users are accessing the internet on over 3000 types of web-enabled devices (Agarwal). Cross-browser compatibility, then; or a website, web app, or other online service, with similar functionality across various devices and browsers; is growing in value for websites around the world.

Some strategies used by this project to maximize cross-browser compatibility include the utilization of Flexbox, updated CSS prefixes and suffixes, dynamically sized elements, and limiting JavaScript, the latter of which was explained previously. The former three, however, are all decisions made in the website's Cascading Style Sheet (CSS), which collectively improve support across multiple browsers and a large range of device screen sizes without sacrificing functionality or aesthetics.

## **Closing Remarks**

### *Final Product*

The project's client's website is live at [frenchclubuic.com](http://frenchclubuic.com), where it can be viewed by anyone of the public. The HTML, CSS, and JS the website uses are equally available open source through the previously mentioned GitHub. The French Club at UIC board members have an account through which they, uniquely, can push updates on their own agenda, and the project has a preserved copy of the website for professional presentation and as a bug-free back up in the event the client creates or encounters an error.

*Field Contributions*

The initiative taken on by this project is not only motivational in nature to other groups but may serve as a model for the simplicity and efficiency possible when building up community communication through improved web presence among that community's organizations. The HTML templating and subsequent documentation provided is available for free to the public, allowing for any developer to adopt the cross-browser and -device compatible designs for their own products or services. Since the page is extremely adaptive and accessible for users from all devices, browsers, and disabilities due to its thoughtful construction, the files and tools created during this project can hopefully be replicated elsewhere to spread this accessibility.

*Conclusions*

This project has drawn upon a diverse set of skills from multiple curricula and relevant activities practiced and studied across the time spent at the University of Illinois at Chicago. The communication techniques used when interacting with the client was a terrific representation of the skills developed through extra-curricular activities such as the Speech Team as well as the professionalism of email-based correspondence with professors. Clearly, the most significant contribution, however, was borrowed from the computer science skills accumulated in both technical coursework on campus and recreational education practices on services like LinkedIn Learning. The wonderful resources made available during the undergraduate career at UIC has created the environment through which the project's contributor was able to grow academically and professionally.

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