

CECH Site Migration


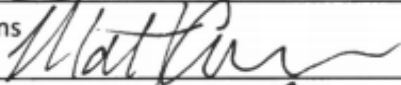


by

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Abstract

The CECH domain houses more than 2000 web pages; each containing information vital to the success of each student enrolled in the college. Despite that, more than 75% of unique users, most of which are using a mobile device, leave the domain before ever navigating beyond the CECH home page (bounce rate). The original layout, as it stands, is not optimized for mobile platforms nor is it optimized for the sensory impaired as per ADA guidelines. This, in conjunction with outdated SEO standards is the cause of the high bounce rate. The current CECH pages will be remapped and merged with a new, streamlined mobile responsive web layout using AEM, while optimizing the SEO (Search Engine Optimization) to make the site more discoverable by various popular search engines, and Google analytics will be used to track stat sites and measure the effectiveness of changes and updates.

Introduction

The College of Education, Criminal Justice, and Human Services, located in Cincinnati Ohio, is a sub college of the University of Cincinnati. The current users of the CECH domain consist of current college students, faculty and staff, and mainly by incoming students and their parents. The users should have an easy time, first finding the actual CECH domain, and secondly, the users should also be able to easily navigate the domain to find whatever information or links for which they are looking. Most of the users are accessing the site via mobile platforms. These users should be directed to a mobile friendly version of the domain.

Project Description

We will migrate the 2000+ pages in the CECH domain to a more responsive and mobile friendly platform. While doing so, we will implement Google Analytics (GA) to help optimize the site further. The information gathered from GA will then help us improve the search engine optimization (SEO) metadata that currently exists making the website more searchable. Our solution would provide students, parents, and faculty alike to easily access CECH domain, while providing data to further improve upon the implemented design.

Problem

The main problem plaguing the CECH domain is that the current layout has started to become outdated, it does not translate well to a mobile platform, and roughly 84% of the people accessing the site are doing so on a mobile platform. Of those mobile users, 86% leave the domain after only visiting one page. Beyond that its SEO metadata needs to be updated to

make it more searchable on search engines. A potential user trying to access CECH on their phone or tablet is not only going to have trouble finding the site but will also have trouble even using it.

Design Objectives

The site and its relevant pages must be searchable and easily found from search engine queries.

The site must have a mobile friendly design and must be able to be easily used by mobile users on any mobile device.

The site must have analytics features to provide valuable feedback for future updates.

Methodology

We will be using an upgraded CMS to do the work for this project. After the new CECH site goes live, we will begin to use AEM (Adobe Experience Manager) to begin migrating the new pages to mobile friendly layouts and applying CSS changes as needed. As we migrate each page, we will implement Google Analytics to track various statistics across the pages. This data will be used to make layout and functionality improvements. On top of implementing GA we will also be editing the metadata of the pages to make them more accessible from searches.

User Profile

Amongst the potential users that will be using the CECH website are current CECH students, professors and incoming students to one of the programs (Education, Criminal Justice,

Human Services, and IT). Users will have a new layout that is more mobile friendly and also more easily searchable. The new layout will help provide users with clear and relevant data along with cleaning up any unused or dead pages that have been forgotten through previous development. The users will have a less stressful environment to be able to find their designated web page, program information, and or miscellaneous destination. The following figure provides more user details.

Potential Users:	Current CECH Students Incoming CECH Students Professors of the Respective Colleges
Software and Interface Experience:	Current students and Professors will have a great deal of knowledge of how to interact with the website. Incoming students should have a moderate to high knowledge base with interacting with the website.
Task Experience:	Users will be more comfortable navigating the website with the new layout and be able to find webpages more easily using a search engine.
Frequency of Use:	The CECH URL will be heavily used by both students and professors at all hours of the day.

Table 1 - User Profile

Use Case Diagram

The following is a use case diagram to demonstrate the various interactions with the CECH domain.

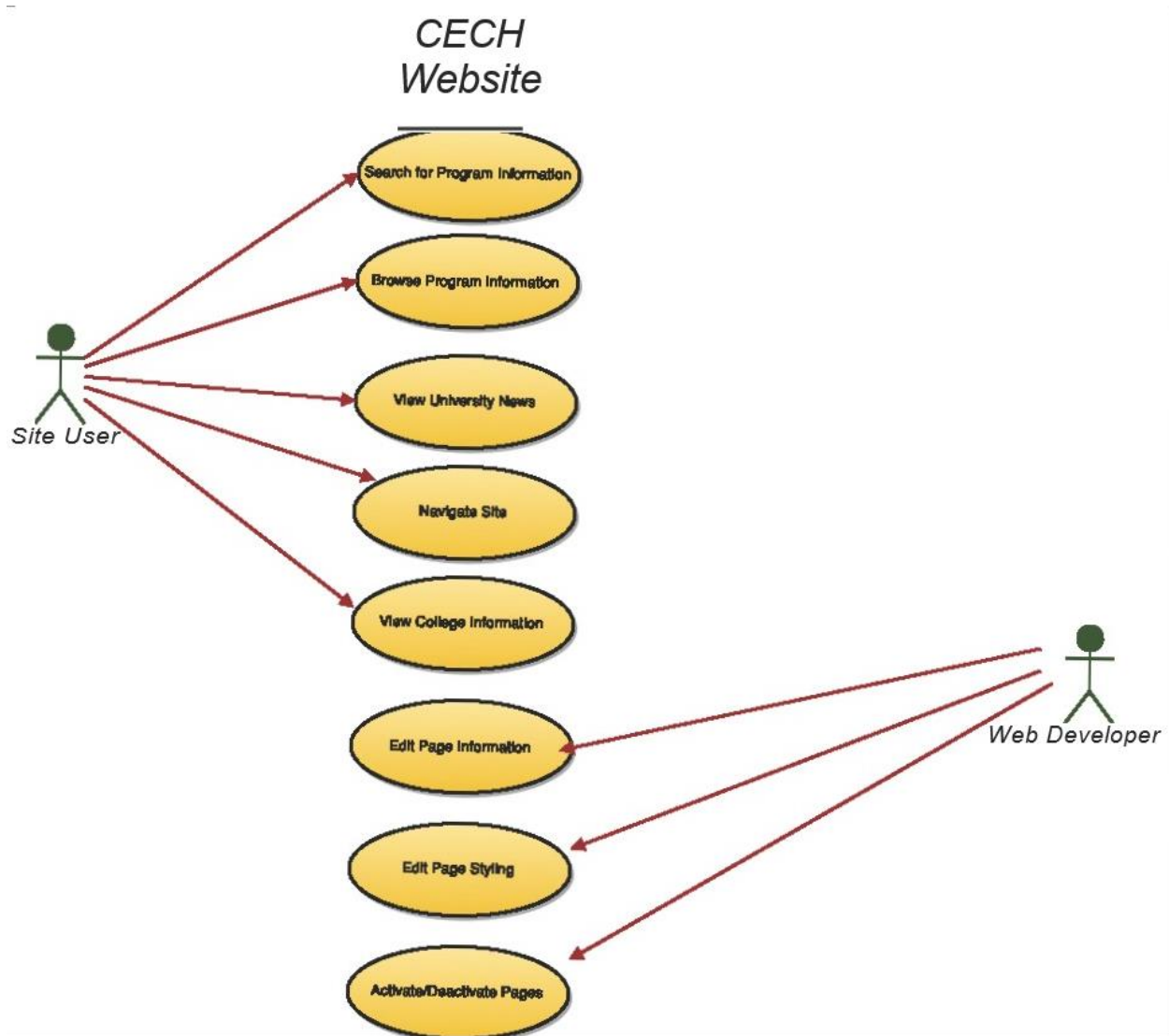


Figure 1 - Use Case Diagram

Task Experience

A user must have a base knowledge of how to use a computer and a web browser. The user must know how to search for or navigate to, the CECH domain. They then must be able to use the domain.

Frequency of Use

Anytime a user accesses the site. Faculty or staff would be accessing it every day for various reasons. Students and parents would also be accessing it for various reasons, like applying to the college or trying to find degree information.

Technical Elements

Software

The CECH domain runs on Adobe Experience Manager. The team will be using it to edit and publish files and will interface with the database through it as well.

Google Analytics

Google analytics will be implemented into the site migration to track and record various events and activities. This data will be used to improve upon the design of the site. Some things that could be recorded are: frequency of clicks on links, time it takes for a user to click a link once a page loads, number of page visits, among many other things. It can also be used as a tool to measure the effectiveness of any changes or updates made.

Firewall/VPN

Administrators must be connected to UC's network to access the author site to edit and publish changes. Off-campus access can be gained by using ssl vpn.

Backup

AEM has its own built-in backup protocols to secure the site.

Testing

Functional Requirements

The domain should be complete and functional with no illegal pages (i.e., pages with broken links, old eProfessional pages, old eCurriculum pages, blank pages, pages with outdated JotForms).

1. The domain should be responsive to the user's device.
2. The domain should have improved SEO, meaning pages can be easily found based on the content they contain.
3. The domain should be accessible according to Title IX standards.

Testing of Functional Requirements

1. The domain should be complete and functional with no illegal pages
 - a. JotForms should be updated to the new color scheme.
 - b. Pages must have no broken links
 - c. Links must navigate to correct destination.
 - d. Pages cannot contain old eProfessional or eCurriculum pages.
 - e. Pages must have content (e.g., page cannot be blank).

- f. Pages without enough content to standalone must be merged.
2. The domain should be responsive to user’s device.
 - a. Ease-of-use should not change based on user’s device.
 3. The domain should have improved SEO
 - a. Pages should be easily found based on the content they contain.
 - b. Relevant page should be found within one or two searches.
 4. The domain should be accessible according to Title IX standards.
 - a. Pages should be compatible with Screen Readers.
 - b. Pages cannot contain “Click Here” links.

Project Schedule

First Semester (Fall)		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Task:											
Applying for CQ Access		Planned									
Google Analytics account access			Planned	Planned							
Uc responsive layout implementation*					Estimation	Estimation	Estimation				
Run Google analytics on domain						Planned	Planned				
Organize what needs to be removed and kept							Planned	Planned			
Continue analyzing and start planning for presentations								Planned	Planned	Planned	Planned
Final First semester Presentation Wrap up										Planned	Planned
Determine bottom 30% of Domain										Planned	Planned
		Planned									
		Estimation									

Figure 2 - First Semester Gantt Chart

Second Semester (Spring)	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
Task:															
Finish Removing Bottom 30% of Domain	Planned														
Discuss Migration Schedule with 6D		Planned													
School of Ed Migration\Testing			Estimation	Estimation	Estimation										
School of Criminal Justice Migration\Testing						Estimation	Estimation	Estimation							
School of Human Services Migration\Testomg								Estimation	Estimation						
School of IT Migration\Testing										Estimation	Estimation	Estimation			
Final Check and Tech Expo Prep													Estimation	Estimation	Estimation
Tech Expo															Planned
		Planned													
		Estimation													

Figure 3 - Second Semester Gantt Chart

Cost

	Expected Cost	Actual Cost
Actual Wages	\$0.00	\$0.00
Simulated Wages	\$37,440 (@ 20hrs a week for 24 weeks)	\$0.00
Total	\$37,440	\$0.00

Table 2 – Cost

Expected cost is based off the projected cost of hiring three individuals to complete the migration. The actual cost reflects how much was spent in paying us to do the site migration.

Conclusion

The CECH domain is not responsive to mobile devices nor search-engine optimized which creates problems for both current students and, more importantly than that, perspective students and their parents. Without a change, CECH could fall behind the competition in terms of enrollment. Therefore, to contend with these problems, the CECH domain will be moved to a responsive design and a new layout which will increase SEO while making the site generally easier for all users, especially those using a mobile platform.

References

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3. Cass Johnson, CECH Site Migration Team, TDC Conference Room 430, November 15, 2016.
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CECH Site Migration

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Problem



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- Original layout was unresponsive
 - Mobile users exit site before visiting more than one page
 - Ease-of-use on mobile devices
- Failed to adhere to current ADA (American Disability Act) standards
- Many pages needed to be updated
 - ~150+ authors caused inconsistencies in the design
 - Dead, obsolete, and redundant
 - Inconsistent URL pattern
- SEO (Search Engine Optimization) for all pages was non-existent

Solution



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- Six Dimensions provided a mobile template
 - Improved visual aesthetics to adhere to ADA
 - Allowed uniform layout for all pages
- We identified, analyzed, and categorized each of the 2000+ pages
 - Identified dead and redundant pages for deletion
 - Analyzed which pages could be merged and moved
 - Categorized pages into sub-template types
- Updated page content to be consistent, recent, and relevant
- Updated the SEO for all migrated pages



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Demo

(old) cech.uc.edu/it/expo

(new) cech.uc.edu/it/expo-0

Expected Results



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- Reduce the overall bounce rate for each page in the domain
 - Mobile Users
- Solidify adherence to current ADA standards
- Reduce the total number of pages within the CECH domain to a more manageable number
- Increase successful organic search targets within the CECH domain

Conclusion



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Without our project the CECH domain would still suffer from the flaws present in the old template