CS Pathways
Executive Summary

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Background

CS Pathways is a CMU-based non-profit dedicated to expanding access to computer science and STEM education for underrepresented students. Its two main programs include CS/AI Scholars, free residential pre-college programs for high schoolers nationwide, and STEM Ambassadors, a local initiative that teaches STEM to elementary students with the help of trained teen instructors. With a small, mission-driven team, CS Pathways works to create equitable, empowering pathways into STEM fields..

Project Description

Project Opportunity

CS Pathways faced a surge in national attention, resulting in increased inquiries from students and reputable programs. However, outdated website content made it difficult for prospective students to find the information they needed, leading to an overwhelming volume of emails and diverting staff from strategic work. This project presented an opportunity to revamp the website to provide accurate, accessible, and engaging information, reduce staff burden, and better reflect the organization's growing impact and commitment to equity in computer science education.

Project Vision

The vision for the project was to redesign the CS Pathways website to better communicate the organization's mission and programs, especially to a growing audience beyond the CMU community. By creating a more user-friendly and visually compelling site with up-to-date, accessible content, the team aimed to reduce repetitive inquiries, empower visitors to find information independently, and ease the operational burden on staff—all while continuing to use the Cascade CMS for long-term sustainability.

Project Outcomes

The project delivered several important outcomes that enhanced the CS Pathways website for both users and staff. A new Pre-College Programs page now features detailed descriptions, testimonials, and a video to better inform prospective students, while a dedicated FAQ page addresses common inquiries and helps reduce staff email load. New pages for the STEM Ambassadors program and Meet the Team were also developed for local Pittsburgh initiatives and organizational transparency. The updated site architecture and visual design improve navigation, mobile responsiveness, and

long-term maintainability, aligning the website more closely with CS Pathways' mission and growing reach.

Project Deliverables

The final deliverables include updated and newly created web pages. Such as the Home, Meet the Team, Staff Bios, Pre-College Programs, STEM Ambassadors, and FAQ pages, designed to improve user experience and align with CMU's branding. Supporting materials include wireframes, user testing documentation, and a comprehensive maintenance guide to ensure the site remains user-friendly, up-to-date, and sustainable for the CS Pathways team over time.

Recommendations

To sustain and build on the improvements made to the CS Pathways website, we recommend several next steps. First, implement a feedback mechanism on the FAQ page to track its usefulness and inform updates. Second, add a question submission form to reduce email volume and streamline communication. Third, continue user testing annually to ensure the site evolves with audience needs. Finally, consider integrating the separate STEM Ambassadors curriculum site into the main CS Pathways Cascade environment to improve accessibility and centralize resources.

Student Consulting Team

Caroline Michalow is a senior majoring in Information Systems. After graduation she will be working at Capital One as a Product Manager. During the CS Pathways project, Caroline served as the project manager, focusing on the team as a whole and organizing the processes. She was responsible specifically for the new addition of the FAQ page and pre-college residential page, as well as ensuring timely submissions and an organized team.

Emma Tong is a junior majoring in Information Systems with minors in Computer Science, Software Engineering, and Human-Computer Interaction, graduating in May 2026. She was responsible for designing and developing the STEM Ambassadors page and communicating with the STEM Ambassadors team. She was also in charge of creating meeting notes and quality assurance of deliverables.

Jeffrey Zhang is a senior majoring in Information Systems, graduating in May 2025. Since November 2024, he has been working full-time as a Technology Consultant at Prelim (YC S17) and will continue in this role after graduation. During the CS Pathways project, Jeffrey served as the Client Point of Contact, leading communication and alignment efforts. He was responsible for developing the Home page, Meet Our Team page, and Staff Bio pages, and consistently provided meeting recaps to ensure transparency and continuity across the team