

412Connect

Executive Summary

Community Partners

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Student Consulting Team

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Background

Grief to Action, a nonprofit from the University of Pittsburgh, developed a web platform called 412Connect to connect local students (from the University of Pittsburgh and Carnegie Mellon University) with organizations from marginalized communities. The team consists of 16 employees, which includes advisors, a management team, a community engagement team, a technology team, and a platform design team.

Project Description

Project Opportunity

412Connect aims to showcase organizations from marginalized communities to local university students through an online scavenger hunt built with Django, HTML, CSS, and JavaScript. We identified several issues across the platform, the first of which was the login process, which used an email verification system from SendGrid that was costly yet unreliable. Even after users completed the login process, their engagement with the platform was short-lived. Our client expressed interest in improving the user experience by building an interactive map, but they did not have the time to act upon these ideas.

Project Vision

We primarily worked on addressing these pain points by redesigning the user dashboard, revamping the user authentication process, and remodeling user feedback collection. These changes created a more intuitive user experience that helps the platform better retain students down the line.

Project Outcomes

We improved the user dashboard by moving the scavenger hunt to an interactive Google Map. This map has pop-up boxes allowing users to read about and get directions for each business. We improved the user authentication process by logging users in via popular email services (from Google and Microsoft). We also improved the collection of feedback by integrating Google Forms into pop-ups on the website.

All implementations align with the coding style of the client repository. We added documentation and comments that should make it easy for novice programmers to make changes to our code down the line. We also documented our design process so that our work should still come in handy even if our client decides to move the platform to WordPress or Squarespace.

Project Deliverables

For each feature, there are polished designs, code, and documentation. We also wrote unit and integration tests to improve the modularity and reliability of the site. The design documents for each feature include a discussion of all design solutions, alternatives, and recommendations, as well as links to the prototypes and instructions for getting API keys. All code changes were made on the client's GitHub repository (in the 'cmu-dev' branch).

Recommendations

We provided the client with many recommendations about the user dashboard, user authentication, user feedback, and general design. In terms of the user dashboard, the team suggests making better use of the white space and creating a more responsive design for pop-up windows. To improve user authentication, more social media login options can be provided, and error messages can be more detailed. To improve feedback, the survey pop-up can be more responsive and cheat-proof. Lastly, text fonts and indentation levels should be more consistent across the website, and users should be able to personalize their profiles with custom photos.

Student Consulting Team

Danagul Azimzhanova served as the designer. She is majoring in Information Systems with a concentration in Data Science. She will be interning as a consultant at Ammachi's Organic Farm in Palakkad, India this summer and is looking forward to a career in data science and consulting.

Kevin Lin served as the project manager. He is a senior majoring in Information Systems with a minor in Computer Science. He will be joining Radix Trading full-time in New York City and is looking forward to a career in software engineering.

Jacky He served as one of the developers. He is a junior majoring in Information Systems and Computer Science with a minor in Human-Computer Interaction. He will be interning as a developer at Amazon in Boston this summer and hopes to pursue a career in software engineering.

Eric Rohrer served as one of the developers. He is a junior majoring in Information Systems and Statistics. He will be a summer analyst at Nomura in New York City this summer and wishes to pursue a career in data science upon graduation.