RedChairPGH Executive Summary

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Background
RedChairPGH is a non-profit organization and network of technology professionals based in Pittsburgh, Pennsylvania, dedicated to creating gender diversity in the Pittsburgh technology industry. RedChairPGH was founded in 2014 as part of the #SitWithMe campaign launched by the National Center for Women & Information Technology (NCWIT).

Their mission statement is: RedChairPGH is a network of women and men who are committed to creating gender balance in the Pittsburgh technology professions. We believe diverse teams increase innovation, opportunity and organizational results. As a non-profit organization, RedChairPGH consists of a board and employs the help of a handful of volunteers. They maintain a mailing list of approximately 475 community members.

Project Description

Project Opportunity
RedChairPGH aims to reduce the number of mid-career women leaving the technology industry by facilitating and engaging a network of mid-career women. RedChairPGH does not have systems in place for members to make these connections: members cannot interact with other RedChairPGH members. A mentorship program can be implemented to increase networking opportunities for Pittsburgh women in tech therefore increasing their support system.

Project Vision
Our vision for this project was to generate engagement within RedChairPGH’s community and with local Pittsburgh companies to promote gender balance in Pittsburgh technology workplaces through the mentorship platform. Mentees/mentors would be paired together based on similarity of their career goals, backgrounds, and expectations of the program. The primary function of the platform would be to introduce and form new connections between members.
Project Outcomes

Our project enables RedChairPGH to form mentorships in an online forum. In the early stages of the project, we worked to establish RedChairPGH expectations of the mentorship application. We evaluated multiple third-party mentorship and created a decision matrix to narrow down the best solution in terms of cost, low barrier-to-entry, feasibility, and compatibility with requirements. We designed, built and delivered a mentorship application built with Ruby on Rails and the Materialize CSS framework, and deployed on AWS BeanStalk. Key features of the application include:

- The LinkedIn authorization API was implemented in the app to verify user identities
- The CanCan authorization gem was implemented to manage permissions in the app
- A matching algorithm was developed to pair mentees with appropriate mentors
- A Ruby on Rails Service object was created to implement matches for mentees
- 31 pages of content were created for the mentorship application. These were divided into eight sections: About, Privacy, Home, My Account, Mentorships, Mentors, Mentees, Users

Project Deliverables

Our main deliverable is a Github repository containing the code for the Ruby on Rails mentorship application. Included with the application is documentation on how to manage the deployed application on AWS, change admin account username and password, and instruct users on setting up anonymous posting in Slack. We also included the ERD, user stories, and wireframes for the mentorship application and research and analysis on buy vs. build options.

Recommendations

We recommend that RedChairPGH continues user testing to gather feedback on features, workflow, accuracy/effectiveness of mentorship matches. By sending out a Google form in their monthly newsletter, they can directly gather user feedback regarding the mentorship platform. They would then be able to consolidate this information and revise the application accordingly to best fit the evolving needs of their users. They should also contact an individual who is technically proficient in Ruby on Rails to implement improvements and/or oversee any changes to the app. They can either find a new volunteer or train a current volunteer.

Student Consulting Team

Nupur Maheshwari served as the project manager. She is a junior double majoring in Information Systems and Human-Computer Interaction with a minor in BA. She will be interning at Deloitte this summer.

Sruthi Surapaneni served as designer. She is a junior Information Systems student minoring in Human-Computer Interaction and BA. She will be interning at MUFG as a BIG Data Analyst this summer.

Jenny Zhu served as lead developer. She is a junior in Information Systems and Statistics and Machine Learning. She is interning at Spotify this summer to pursue her interests in music, data, and tech.