Big Brothers Big Sisters

Executive Summary

Community Partner
Jason Dix
Student Consulting Team
Aditya Ganesh
Bonnie Guo
Elizabeth Lee

Background

Big Brothers Big Sisters of Greater Pittsburgh (BBBSPGH) is an independent 501(c)(3) nonprofit and local chapter of the national organization, Big Brothers Big Sisters of America, serving Allegheny, Greene, and Washington counties. The organization's mission focuses on fostering one-to-one mentoring relationships to empower youth, with around 30 employees managing a $3 million budget. BBBSPGH offers diverse mentoring programs, including Community-Based, Site-Based, and Big Futures. They target various interests to effectively pair mentors ("Bigs") with mentees ("Littles"), especially during strategic times like before the school year.

Project Description

Project Opportunity

We saw an opportunity to improve mentor applicant retention, addressing issues within the current mentor application process. Currently, the application process is lengthy (taking two to three months) and involves steps like obtaining personal references and clearances, which often delay progression and lead to high dropout rates among potential mentors. Applicants could not easily check their status in the application process, which required direct communication with BBBSPGH and contributed to applicant frustration and disengagement. Streamlining this process is seen as critical to increasing mentor engagement and thereby expanding the organization’s capacity to positively impact children.

Project Vision

Our vision entailed creating a web-based applicant tracking application for BBBSPGH, utilizing the Django framework to enhance usability and efficiency on BBBSPGH's website. By integrating a user interface that displays applicants' current status and required actions, the application would improve communication between customer service representatives and applicants, making the process more transparent and user-friendly. The project primarily targeted customer service specialists and mentor applicants, aligning with BBBSPGH’s mission to increase mentor engagement and successful pairings

with "Littles." Alternative solutions like automated communications were considered but deemed potentially intrusive, while a separate mobile application was avoided to reduce barriers for applicants. Interviews confirmed a web-based tracking system as the best approach, emphasizing efficiency and accessibility.

Project Outcomes

This semester, we successfully implemented a new applicant tracking system for BBBSPGH using a Django-based web platform and a Postgres database. Initially facing challenges with the existing Matchforce API, we adapted by allowing staff to upload spreadsheet data directly to the new system. This solution facilitated clearer information access for applicants and improved data management practices within BBBSPGH. We developed distinct user interfaces for applicants and administrators, enhancing the functionality and user experience of the system. Although the project is not yet live, BBBSPGH's has already demonstrated readiness for implementation. Staff have participated in training and testing, thus preparing them to utilize the system effectively upon deployment.

Project Deliverables

Our final deliverables include a comprehensive GitHub repository containing application code, high-fidelity wireframes, and extensive documentation on user and technical aspects. The Github repository has been transferred to our community partner. It features development and production branches with a README.md that provides an overview and links to additional documents such as a detailed codebase explanation, an administrative procedure manual, and development and deployment guides. These resources equip the community partner with all necessary tools for effective application management and deployment, ensuring they maintain full control and security of the project.

Recommendations

We recommend that BBBSPGH enhance its new applicant tracking system by improving data keeping practices through staff training, memos, and regular monitoring; scheduling consistent spreadsheet uploads with designated personnel and reminders; and promoting the application tracker in outreach communications by including links in emails and signatures. These measures aim to ensure accurate data, maintain system reliability, and increase applicant engagement, thereby supporting the organization's mission of expanding mentorship and improving the likelihood of successful mentor matches.

Student Consulting Team

Aditya Ganesh served as a backend engineer and deployment lead. He is a third-year student majoring in Information Systems with minors in Computer Science and Global Systems and Management. He will be interning as a Business Tech Solutions Associate at a management consulting firm this summer.

Elizabeth Lee served as the design lead and front-end engineer. She is a fourth-year student majoring in Information Systems with a minor in Human-Computer Interaction. She will be working as a product manager at a software company post-graduation.

Bonnie Guo served as a full-stack engineer. She is a fourth-year student majoring in Information Systems with minors in Artificial Intelligence and Business Administration. She will be working as a software engineer at a commercial bank post-graduation.