

A Footbridge

Executive Summary

Community Partner

Kimberly Eckel

Student Consulting Team

Jonathan Fung

Ru Jia

Wilson Yu

Background

A Footbridge is a nonprofit service program that aims to connect the parents/guardians (caregivers) of children 18 and under who are experiencing financial stress with others in the community willing to provide short-term financial help. Along with facilitating donations to families in need, the program also aims to help families and caregivers develop important life skills such as financial literacy and creating healthy parent-child relationships. As a startup, *A Footbridge* only consists of founder Kimberly Eckel and a committee of 13 advisors from the Department of Human Services.

Project Description

Project Opportunity

A Footbridge is currently a new idea under development. The client envisioned building a digital portal from scratch to matching financial resources between caregivers of children under 18 and potential donors in the community. The key deliverable would be a functioning prototype that the client will use as a Proof of Concept to engage stakeholders and parties of interest to expand the impact of the organization's initiatives.

Project Vision

The solution is a digital platform built on WordPress with customized features to support the community partner's mission in better involving the community in helping families in need. The technical component of the prototype will also lay down the foundation for the platform's future development and serve as a reference. The proposed portal will allow new caregivers to post financial requests for aid, social service providers to verify the requests and authorize the posts, and donors to donate to such causes, and help our community partner keep track of the portal's usage for analysis.

Project Outcomes

We started with user research, by designing and distributing technology accessibility surveys to caregivers to gain a better understanding of their access to digital devices. Then we researched for an optimal platform choice given our community partner's current technology and budget constraints, with final decision on WordPress. Our iterative design process with wireframes and theme customization fleshed out the site look. Our backend development

produced 14 pages in total, meeting three key user groups' core use cases, including donation, posting and verifying requests, monitoring site use, log in/sign up, etc. Finally, we recorded our progress and research findings along the way and produced separate user guides for developers, social service providers, and site administrators to provide guidance and future reference for a sustainable solution.

Project Deliverables

We delivered an initial version of the site itself (<https://afootbridge.org>), user guides for the key user groups (developers, social service providers, site administrators), recommendations to the community partner regarding future development, a Git repository with our code base, along with all research findings we have recorded along the way (user understanding, plugins information, etc.)

Recommendations

We recommend that the client hire developers or IS students for a more robust technology stack to fully implement advanced features. Our choice of WordPress as the framework to build the platform on was evaluated to be the best solution given the organization's current limited capacity. It allows for quicker prototyping via plugins for our project's objective of proof of concept. However, it is much harder to customize those plugins to make the site work in the exact way that the client wants it to. Modifying plugins is generally discouraged because those changes have to be redone every time plugins are updated, and when changing code, one could unintentionally break functionality in the plugin.

Therefore, for sustainability reasons, we recommend that the client hire an engineer to maintain and iteratively add features to the website. Future developers should use our prototype and designs as a model to code a more custom and polished website for official release using a tech stack that allows for more customizability.

Student Consulting Team

Jonathan Fung served as the quality assurance manager and lead developer. He is a third-year student majoring in Information Systems. He will be interning at a startup as a software engineer this summer.

Ru Jia served as the client relationship manager and lead designer. She is a third-year student majoring in Information Systems with minors in Statistics, Business, Politics and Public Policy. She will be interning at Morgan Stanley as a risk management analyst in New York.

Wilson Yu served as the project manager and lead developer. He is a third-year student majoring in Information Systems and minoring in Human-Computer Interaction and Statistics. He will be interning at Capital One this summer as a software engineer.