

Food Helpers

Executive Summary

Community Partner

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Student Consulting Team

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Background

Greater Washington County Food Bank, now known as Food Helpers, is an organization that serves Greater Washington county through many initiatives aimed at reducing food insecurity and bettering the overall quality of life. They currently serve around 2,400 individuals/600 households a month through their food distribution efforts. There are no restrictions on who can come to the food bank, allowing it to serve those who are struggling with food insecurity but don't qualify for income-based government aid.

Project Description

Project Opportunity

The primary pain point for the Food Helpers is the fact that it lacks a one-stop shop for its users to easily access information regarding food distribution, especially from their mobile devices. Many people who need food assistance in Washington County do not have consistent access to computers and the internet, but rather rely on their phones and mobile data. And since the Food Helpers website is not specially designed for mobile use, it is even more inconvenient for these people to access the same food distribution information from their phones.

Project Vision

Our vision is to create and deploy a one-stop mobile application that serves as the primary communication portal between the Food Helpers' food bank and its clients, as well as its volunteers and donors eventually. The app would allow people in need of food to easily register themselves as a client, access information regarding upcoming food distribution events, register for those events, and have event information be sent to their calendars. With future development, we envision the app to also include an interactive map to help clients navigate to events, support barcode sign-in at event sites, and deliver push notifications regarding pop-up events and weather delays.

Project Outcomes

The technological outcomes for this project include the mobile application — both a utility for Food Helpers clients and also a base upon which to develop further functions in the future — and the admin tools, a series of desktop applications that simplify use of Firebase for the mobile

application. As an extension of these technological outcomes, our work has allowed for a positive impact on Food Helpers clients by significantly reducing their food distribution registration times and providing convenient and consolidated awareness on the other Food Helpers programs. In addition to these results, we have ensured that Justin, the marketing director at Food Helpers, is sufficiently able to utilize the application and admin tools that we have provided. Moreover, Justin is now able to work with Flutter to make stylistic changes to the mobile application.

Project Deliverables

There were three primary deliverables for this project. First, we provided the codebases to the admin tools and mobile application on GitHub, created under the Food Helpers GitHub organization. Second, we also created a series of documents that outlined relevant portions of the project, from mobile app configuration to use of the admin tools. These were provided within a shared Google Drive folder. Finally, we provided a working Firebase deployment on the Food Helpers Google account, with security rules for the Firestore database access and secure keys linked to the mobile application and admin tools.

Recommendations

While we could not complete app deployment due to the amount of time it takes for app review, we strongly recommend the Food Helpers submit the app for review and deployment so they can achieve tangible benefits through its usage. To assist with this process, we created an app store deployment guide that walks through the step by step process of launching the app on both IOS and Android devices. In addition, due to the technical complexity of adding additional features using Flutter, we recommend the Food Helpers work with another 373 team to develop the nice-to-have or non-essential functionalities we could not get to.

Student Consulting Team

Dee Harris served as project manager. She is a fourth-year student majoring in Information Systems. Following graduation she will be working full time at Microsoft as a Program Manager.

Nina Li served as the business analyst. She is a third-year student in Information Systems with a double major in Business Administration. This summer, she will be interning as a consultant at PwC and looks forward to a career in management consulting.

John Namgung led the technical development on the project. John is a third-year student majoring in Information Systems, and is graduating from CMU to work at SoundHound this fall.