Hello Neighbor

Executive Summary

Community Partner
Aubrey Parke
Student Consulting Team
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Background

Hello Neighbor is a non-profit organization that aims to improve the lives of recently resettled refugees and immigrant families in the Pittsburgh area by matching them with dedicated neighbors to guide and support them in their new lives. Hello Neighbor aspires to see communities where everyone is valued for their diverse perspectives and are empowered to rebuild their lives with dignity and respect. One way that Hello Neighbor achieves these goals is by aiding in furnishing of new homes and providing necessary items like furniture, linens, kitchen items, and cleaning supplies.

Project Description

Project Opportunity

The current system of donation inventory management at Hello Neighbor involves a cumbersome and redundant process of working with three different spreadsheets of information: donation check-ins, item check-outs, and the true inventory quantities. This process is done completely by hand and is often neglected because of how daunting and time consuming the task of updating inventory quantities can be. The three issues to be addressed are the high likelihood of error, the difficulty of use, and the overall time consuming nature.

Project Vision

Our project vision was to create a relational database-like management system to help Hello Neighbor better store and process their donation inventory by using connected tables to automatically calculate inventory counts, track transactions easily, and receive automatically generated monthly reports. We hope that by using a single system to process donation inflow and outflow, Aubrey and other staff will be able to clearly dedicate more time to working directly with clients.

Project Outcomes

Our primary project outcome was the creation of a new inventory management system in Airtable. This system is equipped with a variety of technical features, including connected tables with various views and aggregated inventory counts, multiple forms for checking items in and out of the system, and automated monthly reports. These features make the maintenance and record keeping of donation inventory easier and more efficient by decreasing manual updating,

ensuring more robust data, and integrating everything into one system. With this system, our community partner will be more aware of which items are readily available to furnish a new home and will be able to spend more time with volunteers and their clients. Additionally, we provide guidance for a future transition to Salesforce based on detailed data documentation and suggestions for a seamless data transfer experience.

Project Deliverables

The team handed off a Google Drive folder and Airtable workspace. The main deliverables include the Hello Neighbor Inventory Management System in Airtable, the Inventory interface, the written documentation, and training videos. Written documentation includes documentation for the Data Model, a Guide to Airtable, and a Transition to Salesforce. Additional deliverables include the finalized Data Model, which includes the Entity Relationship Diagram (ERD) and Data Dictionary, the monthly reporting automation set up in Airtable, and the bulk check-in/check-out template in Google Sheets.

Recommendations

We recommend that Hello Neighbor trains each staff member on how to check-in and check-out items using the new system. In addition, we recommend that QR codes are placed at each storage location to ensure that employees have easy access to the forms that are required to interact with the system. The combination of these two recommendations will ensure that the system is properly maintained, will reduce the workload of the system administrator, and will ensure that financial reporting is accurate. It is essential that future IS teams who work on this project understand the data model and data dictionary that we built. By doing so, they will be able to transition the system to a platform that is more robust than Airtable in the future.

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Student Consulting Team

Julia Graham was the quality assurance lead. She is a third year student majoring in Information Systems and minoring in Human Computer Interaction and Software Engineering. This summer, she will be interning at Red Hat as a Software Quality Engineer and will be graduating in Spring 2024.

Miles Maltbia was the client liaison and documentation lead. He is a third year student majoring in Information Systems, concentrating in Data Analytics, with a minor in Information Security. This summer he will be interning at J.P. Morgan Chase as an Artificial Intelligence and Data Engineer and will be graduating in Spring 2024.

Maddie Thai-Tang was the project manager. She is a third year student majoring in Information Systems with minors in Design for Learning and Decision Science. This summer, she will be interning at Procter & Gamble as a Research and Development intern and will be graduating in Spring 2024.

Zach Van Bennekum was the technical lead. He is a third year student majoring in Information Systems and minoring in Human Computer Interaction. This summer, he will be interning at Blue Cross Blue Shield as a Data Engineer and will be graduating in Spring 2024.