

Wesley Family Services

Executive Summary

Community Partner

Aaron Richards

Student Consulting Team

Abhi Maddineni

Christopher May

Eugene Choi

Background

With over 1,100 employees serving over 30,000 people in Western PA, the Wesley Family Services has aided in numerous spaces in behavioral health and offers a variety of services ranging from Aging Services and Autism Care to Justice & Child Welfare. The variety of programs that they offer feed into their mission statement of providing all children, adults, and families in need with transformational care. Technology is at the core of Wesley's operation as it serves as a conduit to coordinate the many different services that Wesley provides to their various clients.

Project Description

Project Opportunity

We had an opportunity this semester to perform a ground-up redesign of what was essentially Wesley Family Services' CRM system. The old system had been plagued by normalization issues and a hard to use front end system, so we were tasked with building a better system out from scratch. The solution that we arrived at was to make a web-based Microsoft .NET CORE application, which can create a seamless UI that simply calls data and writes to the database eliminating both the database and front end issues that had previously plagued Wesley Family Services.

Project Vision

Our primary goal in building out this application was to simplify and shorten the process that call-center staff members currently go through to onboard new clients. We wanted to create a clean, well designed solution that would allow the employees to spend more time on helping new clients instead of wrangling with their existing application. In order to accomplish our goal, our team met with the end users of our solution throughout the lifetime of our project and used their insights and commentary in order to identify their pain points. We settled on building a .NET CORE solution that would provide the call center with a lightweight, easy-to-use application that would go a long way towards simplifying their job.

Project Outcomes

We are extremely proud to say that we were able to deliver a working web application to Wesley Family Services. Our app is easy to use and was able to capture the necessary core

functionalities of the previous app and improve them. Additionally, we were able to solve the database normalization issues that had previously plagued the call center employees while also preserving their previous data through migrations. Our client contact, Aaron Richards, was an integral part in helping us accomplish our goal. Aaron went above and beyond in communicating with us weekly and connecting us with the call center staff at Wesley Family Services. He served as a great point of contact for our technical and design based questions, and none of this would have been possible without his help.

Project Deliverables

At the end of our project we are turning over a couple of things to Aaron:

1. Deployed web application
2. Github repository for web application
3. Database migration scripts
4. Documentation on how to use the app

Recommendations

In order for Wesley Family Services to properly maintain and use this application, there are a couple of things that they need to do. The main emphasis should be on ensuring the integrity of the database going forward. The previous system was plagued by data duplication and haphazard data entry methods. If the call center staff adheres to our database validations, there should be no issue here. The second thing is to ensure that the software is constantly being monitored and tested. As we all know, no software product is perfect and as a result it is important for Aaron and his development team to maintain and update the software that we've written.

Student Consulting Team

Abhinav Maddineni (Class of 2021): Served as the QA and Database Engineer. He was the lead on data transfer and migration, and was heavily involved with system architecture design. He is a third-year student studying I.S and Economics. Over the summer, he will be interning at Capital One.

Eugene Choi (Class of 2021): Served as the Project Manager and Client Relationship manager and was involved in full stack development, mainly UI development. He is a third-year studying Information Systems with minors in Business and Computer Science.

CJ May (Class of 2021): Served as the Devops Engineer and was significantly involved in authentication, authorization, deployment operations, and full stack development. He is a third-year student majoring in Information Systems with a minor in Film and Media Studies. Over the summer, he will be joining Apple as a Security Intern.