

Project Name	Heart Screening Management System
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Background:

Who We Play For (WWPF) is a charitable organization that partners with schools across the state of Florida and 6 other states to provide affordable ECG screenings for their students. Their goal has always been to show the country that not only is it imperative, but it is also possible to deliver affordable ECG screenings to every child no matter their level of athletics, socio-economic status, or geographical location. To date, WWPF has screened over 100,000 people in over 300 communities across 7 states. They have identified 76 individuals that needed some level of medical intervention, including heart transplants, and hundreds of others with abnormalities that can now be monitored.

Project Overview:

The goal of this project is to provide WWPF with a scalable cloud-based web application that allows them to efficiently conduct events from start to finish.

Project Features:

The main features of this project can be divided between three types of users (with a user interface for each): participants, directors, and accountants.

Participant UI: Allows event participants to sign up for screenings online or on-site, receive receipt and reminder emails, cancel previous registrations, and automatically register their information to a database that can be used for reference on-site at events.

Director UI: Allows event directors to create, delete, finalize, and edit events. Directors are able to share registration links with participants for private events and can also utilize the link to create a QR code for on-site registration. They can export sign-in and questionnaire spreadsheets for participants as needed.

Accountant UI: Allows accountants to see a daily report and search payments by multiple criteria in order to more efficiently verify payments, issue refunds, or mark participants as no shows. They are also able to download the daily report in the form of an Excel spreadsheet.

Major Challenges:

The main challenge for our team was learning to use the tools that would go on to help us do this project. Those tools included Amazon Web Services (AWS), which our project is heavily based upon, VueJS, a front-end javascript framework, and NodeJS, a backend javascript framework. The majority of the team had little to no experience with these tools going into this project. Another challenge was creating an effective line of communication between the team and those who conduct the screening events in order to better understand what they need from us. This proved to be difficult sometimes, especially when screening workers, for example, may not have understood the technical side of how the implementation of a certain feature works.

Future Work:

We hope to see this project scale up along with WWPF as it looks to expand across the country and reach as many hearts as possible. We believe that this will not be an issue now that they are using an application based

on AWS, famous for its advantages of scalability. The next steps for this project include implementing a long-term storage solution for past events and payments, and improving the user experience for participants by adding an account for them to retain their information, view results, reschedule events, and formally request refunds.



Partner: Who We Play For - Non-Profit Organization