NewERA412

Executive Summary

Community Partner
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Student Consulting Team
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Background

Our community partner is Taili Thompson, who represents the client, NewERA412. The organization is a violence prevention initiative created by Operation Better Block (OBB), a larger, non-profit organization with the goal of helping returning citizens reintegrate into society. *NewERA412's mission is to increase the political equity and social capital of individuals who have experienced the Criminal Justice System through an inclusive and diversified process of reintegration assistance and opportunities in Allegheny County.*

Project Description

Project Opportunity

NewERA412 currently has a web application that centralizes resources to help returning citizens reenter society. However, there are much needed practical improvements for the application to make processes more efficient and effective. Firstly, many key processes, such as creating external forms and timesheets, are still done manually despite potential for automation. Next, there is a lack of accountability with the current system. In other words, since all input is manual, there is no guarantee that the information is accurate. Finally, many of the online forms that Thompson must fill out have restrictive fields, making inputting information difficult and inefficient. There is an opportunity to clean up all parts of the current system to make NewERA412 more productive and reliable.

Project Vision

Our team has decided to improve the current Django application with three goals in mind: 1) Increase user confidence in the system, 2) Better align to the workflows by coordinators and SOWs, and 3) Collect and provide flexible reporting information to stakeholders. This includes revamping the current system for resources, making use of the application for SOWs and admins more convenient, and allowing for more details in data exports.

Project Outcomes

As we mainly improved upon the previous teams web application, our project outcomes consisted of several different additional features or adjustments. Each goal in our project vision was being specifically targeted by these features. Our most important features were improving resource and case metadata, integrating forms on the web app, and allowing greater flexibility in data export.

The improvements to the metadata made the creation and tracking of each resource and case more convenient for the user. We embedded many of the content types for resources to make them more visually appealing and changed some model information for both resources and cases to match the

intention of the web app better. The integration of forms effectively centralized much of the manual work that needed to be filled out by both SOWs and admins. This made the responses easy to find and allowed the team to automate some information based on each user. Additionally, we allowed the data on cases and referrals to be viewed on a map and exported, giving stakeholders reliable information and statistics.

These outcomes were the result of several iterations of adjustments and user testing for both the SOWs and admins. Many models were either altered or created to accomplish these outcomes and better suit the needs of our client.

Project Deliverables

Our team's final deliverable for this project was through the NewERA412 Django web application, which is being maintained by WorkHardPGH. The main function of this application is to provide returning citizens with a centralized hub of resources aimed to aid them in reintegrating into today's society. Additionally, SOWs use this application to collect contact information and keep note of returning citizens they have met in the form of a case load. The SOWs can use the app to send specific resources that they deem helpful for their cases through a referral. The web app also contains all the critical forms that SOWs and admins need to fill out, automating responses based on their caseload and recording all responses in the app's database. Information and statistics about these responses can then be exported in the form of a spreadsheet and easily reported to stakeholders such as the city of Pittsburgh.

Recommendations

For future development, we recommend improvements to the user experience, further automation of manual work and more comprehensive unit and stress testing. More specifically, making the referral process more intuitive and minimizing the number of pages and steps involved would improve the time efficiency of the whole process, allowing SOWs to focus their attention on a larger number of cases. Additionally, instead of just exporting the raw data, we recommend implementing a built in system that generates summary statistics that could be used directly in a monthly report. This would help admins keep SOW teams accountable for their work and save time and effort when reporting to the City. Lastly, creating a more comprehensive framework for producing a robust set of test data and running unit tests with high levels of code coverage will help ensure the app is bug free. Along with a formal stress test, this will greatly improve NewERA412's scalability and save money in the long term by minimizing technical debt.

Student Consulting Team

Darren Kopa was the client relationship manager. He is a third year Information Systems major with an additional major in Statistics and Machine Learning, and will be graduating in May 2022. He will be interning at EY-Parthenon this summer as part of their Software Strategy Group.

Noah Yeo was the QA lead. He is a fourth year Information Systems major with a minor in Computer Science and will be graduating in May 2021. He will start working full time as a Solutions Engineer for Deloitte in the fall.

Ron Chew served as the project manager. He is a third year Information Systems major with an additional major in Human-Computer Interaction and a minor in Game Design and will be graduating in May 2022. He will be interning with Adobe Inc. as a software engineer this summer.