WorldByMe Role-Based System

NAU NORTHERN ARIZONA UNIVERSITY
School of Informatics, Computing, and Cyber Systems

Team: Elizabeth Knight, Joey Banaszak, Jessica Maldonado, Samantha Madderom

Client: Kevin Daily, President, EKA Labs

Team Mentor: Brian Donnelly

What is the Problem?

In recent years, especially considering the infamous 2020 pandemic, chronic homelessness has become a significant issue in local Arizonian communities. Despite local non-profits providing services that focus on helping those who are facing homelessness, privatized communication silos within nonprofits and the local governments reduce the overall impact.

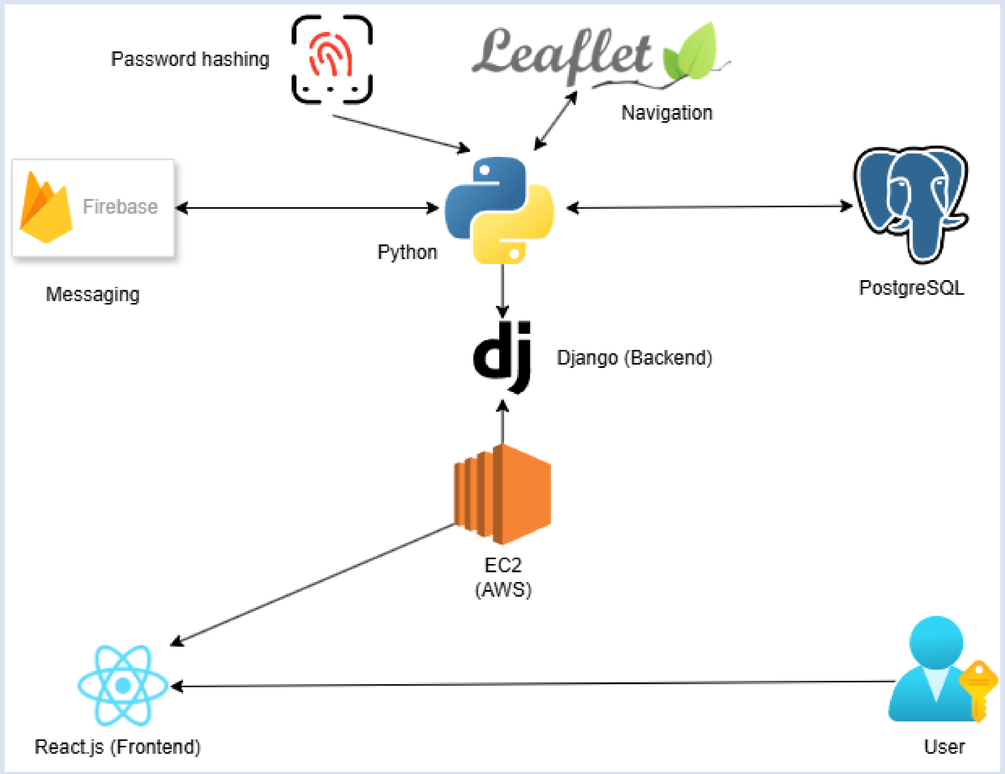
- Navigators connect individuals to resources, but outdated/fragmented data complicates the process.
- A secure, centralized system is needed to improve collaboration and positively impact people's lives.

Plans, Goals/Stretch Goals

These plans and goals are aimed to enhance communication, improve accuracy, and support effective resource allocation:

- **Document local encampments** to create an accurate records of homelessness hotspots.
- **Create full mobile app** for the Navigators to streamline the assistance process.
- **Develop a descriptive dashboard** to visually show data collected.

Our Proposed Solution



Solution Overview

Our project aims to resolve the cascading effects of siloed communication between the local governments and non-profit organizations through a centralized role-based access database system for Navigators. Our shared database access approach will allow:

- Navigators to receive real-time information on available services
- Non-profit organizations to advertise their services for each Navigator to see

Feasibility

It was found that multiple technologies must be integrated with a server when implementing real-time messaging, role-based access control, and cross-platform compatibility for our application.

AWS EC2 - Can unify the components within the overall design but has concerns with learning curve.

Azure - Offers scalability and security but the limits of those features could reach easily with our application.

Heroku - Works well with our deployment process but has specific features for Ruby on Rails applications.

Google Cloud - Has a unified security dashboard but is very pricey.

Technologies Planned