

FindYourRoof Final Report Summary

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“FindYourRoof” is a comprehensive application developed to address homelessness in the Chicagoland area, offering solutions beyond temporary housing. The platform facilitates housing and job searches, document storage, and mentorship connections, aiming at the rehabilitation and reintegration of homeless individuals into society.

Project Implementation

This project is based on “FindYourRoof”, *an application designed to help homeless individuals rebuild and thrive* by the members of group 16 in Fall 2023: Revathi Dhotre, Rimsha Rizvi, Shehriar Burney, and Neel Patel. We have closely followed the initial project outline, successfully implementing major features, with the addition of a mobile view for enhanced accessibility.

Features Implemented

The following are the features that we have implemented. Firstly, we implemented a housing and a job search: The application provides a user-friendly interface for individuals to search for suitable housing and job opportunities in the Chicagoland Area. It utilizes the US Real Estate for housing data and JSearch for job data for APIs. We also incorporated document storage in our application. Secondly, A secure cloud-based repository enables users to store critical personal documents, ensuring easy access and confidentiality. Lastly, we included a login feature. Users are able to sign up for our app and use our application. This allows users to save potential jobs. Although not implemented as of now, in the future, organizations would be able to make postings for jobs, housing, and mentorship opportunities.

Releases

For the first release, we implemented a home page, housing search, and initial application setup. For the second release, we introduced the job search functionality, user authentication, and addressed bugs from the housing page. Lastly, for the third release, we implemented mobile view, document storage (Archives), and local non-profit viewer, with focus on bug fixes and improvements. For the cherry on top, we deployed the web application onto Netlify. Refer to Figure 1 to see the final implementation of FindYourRoof.

The Tech Stack

Our tech stack consisted of Supabase, NextJS, React and vanilla CSS. We found this tech stack to be the right choice for our group as it did all of the heavy lifting. Supabase handles document storage, has a Postgres database, and it gracefully handles user authentication. React made it easy to create reactivity in the frontend and NextJS provided a delightful user experience with its file-system based routing.

Waiting Room & Open Issues

As for the future and as detailed by the project outline, the mentorship platform remains to be implemented. We also missed out on using a unified component library like shadcn or MUI. With that, we could have used accordion components and drawers to enhance user experience. These can be utilized in the Housing and Job pages where the user is viewing more of a detailed segment where closing some sections would be beneficial.

Retrospective

Overall, the project successfully leveraged technologies like Supabase and React components, alongside effective software engineering methodologies, to deliver a functional and scalable solution for addressing homelessness. We worked very well as a team as we met every week from 2-3 pm on Tuesdays. We had weekly sprint meetings in which we discussed any obstacles we were faced with and had effective communication about the designs of the web pages, code reviews, etc. We sat down, went over the work we accomplished, and set our goals for the next week. In other words, we got in, and we got out. We are all very proud of the work we did.

Figure 1 - FindYourRoof Application

