FindYourRoof Housing Search & Infrastructure Scenario

Group 11 - Frank Mensah, David Serrano, Michael Jedziniak, Vibha Navale

The FindYourRoof application will eventually serve as a centralized platform aimed at providing all necessary resources and organizations beneficial to homeless people. The website will address and aim to provide a permanent solution to the homeless issue in America by providing affordable housing options, potential job opportunities, a document storage for all their important documents, etc. Our first scenario will establish and set up our website's UI such as color scheme, components, structure, etc. It will be our skeleton model. Furthermore, we will incorporate our House Searching feature which is a tab where homeless people can search for affordable housing options based on criteria like location and amenities. Listings can be posted by landlords.

At this moment, we aim to focus on the city of Chicago and solely the city of Chicago. APIs might be location specific, so to not spread our resources, we will focus on the city of Chicago.

We have to scaffold our project at first: create the git repo, choose our design system, the colors, use Next.js, React, and setup Supabase. We will only implement the sign up/sign in functionality once we have our features in production. The general flow of the application will be: Open the app to see a beautiful welcome screen with a nav bar that takes you to each of the different functionalities as described in their respective scenarios.

Scenario "Housing Search":

In this scenario, we plan to aim for the user to be able to access the "Housing search" where they can search for affordable housing in or around the location they specify. The user will be able to add filtering options for price range, location (by City, county or zip code), whether they are looking for rental properties or properties to buy.

Upon the results from their search, there will be a grid layout with cards of all possible housing in the surrounding area. It will also display a map view of all the surrounding estates on sale or rent. If the user wishes to see more information about the estate, they are able to click the element to view all relevant information.

In the next phase, there will be an option for users looking to rent out or sell their property. The user can add information about the property such as – Full address, housing type (Apartment, duplex, studio, etc.), price range if negotiable or the exact price, and additional notes.

Note: We aim to create a UI with full housing search functionality. If we can find an API, we will use true housing data in the area. If not, we will use JSON dummy data stored in our database.

Figure 1 - Wireframe Diagram of the Home, Housing Search pages

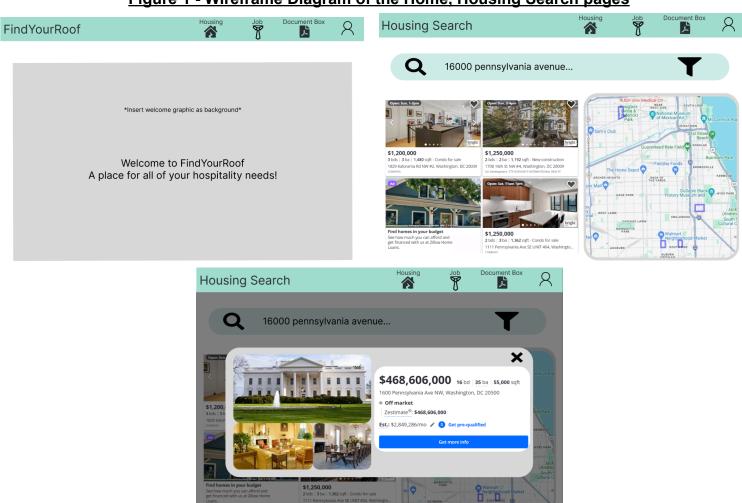


Figure 2 - Use Case Diagram

