

HomeFinder - Find your next home!

Problem Statement

Develop a web application that lets users buy, sell or rent homes

(Something like Zillow.com – it is recommended you visit one of these sites to get familiar with the problem space and terminology)

Consider the following personas/roles in the system:

1. Administrator - the administrator
2. User (Renter, Landlord, Buyer, Seller) – Renter and Landlord are specific to rental listings; Buyer and Seller are specific to Home Sale listings
3. Realtor – a real-estate agent who can act on behalf of any type of User

High Level Use-cases

1. **Register/Login:** Available for all roles
2. **Approve/Remove users:** The administrator can approve, reject or remove any users if the need arises.
3. **Search:** All types of roles can search for Sale or rental listings - based on zip code or street address, and/or other attributes – price range, sqft., #bedrooms, #bathrooms, carpet vs wooden flooring, home type (apartment/townhome/attached Single Family Home or Detached Single), open/closed parking, other amenities, Year built etc.
4. **Save as Favorites:** Users are able to save Favorite searches and Favorite Homes
5. **Sell:** (Realtor or Seller)
 - Upload details of home to be listed
 - You could list multiple homes if you are a realtor(acting on behalf of multiple sellers)
 - Update status or other details of listing(s)
 - Schedule open houses
 - Review buyers' applications and approve/reject
 - Remove listing
6. **Buy:** (Buyer or Realtor)
 - Submit an application with an offer for the home –an email sent to the Seller/seller's realtor
7. **Rent out** (Realtor or Landlord): Add new listing, Upload details of home, Update lease terms, Availability date, Security deposit, schedule visits, Review renter's applications and approve/reject, update listing details, remove listing
8. **Rent** (Renter): Submit an application for the lease, including credit score, employment information - an email sent to the Landlord/landlord's realtor
9. **Browser requirement:** The application must be accessible from Google chrome browser on a laptop or mobile device. Mobile App is not expected.
10. The system should provide secure multi-user access, assuring correct concurrent behavior. The system should maintain suitable authorization information and validate access. User authentication should be implemented (by checking user id and password).
11. The system must have an easy-to-use user interface (UI) with screens designed for each part of the system's functionality and suitable for different roles (Admin, User, Realtor)
12. The system should use a persistent data store (Relational or non-relational or both)