**Proposal**

**Team Members:**

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**Project Title**: Online Realtor

**Name for the Website:** REALedIn

**Project Description:** This is a website where customers can look at different homes for sale based on criteria that they input and decide whether they want to buy the home(s). Buyers will be able see a history of the houses they have favorited and/or bought. In addition, sellers can create accounts and sell homes.

* Assumptions:
  + Assume every buyer user is looking to buy a house.
  + Assume that each seller should get their house/account approved in order to sell their house with a “Verified” sticker.
  + Assume there is a separate “Admin” who approves sellers/properties

**Functionalities to be implemented:**

* User Signup
  + The user provides:
    - email (as the username)
      * Check the database to see if the provided email has already been used. Only allow new emails to be signed up.
    - password
      * Check the strength of passwords with the following criteria:
        + Length (should be at least 8 characters)
        + Has to contain lowercase and uppercase characters
        + Has to contain at least 1 special character from the set:

!@#$%^&\*\_-.,?;:’~`

* + - * + Has to contain at least 1 number.
    - date of birth
      * User must be at least 18
  + Buyer
    - A potential home buyer can create an account.
    - In the second page of the user signup process, the user fills out basic criteria for the types of homes that they are looking for, including:
      * Location
      * Size (SqFt, # of bedrooms/bathrooms)
      * Type (Condo, House, Townhouse, etc.)
      * Price Range
    - The user can select “Skip for now” on the second page and search for homes without filling out the criteria, or can just fill out some of the fields. Later, the user can go back and change any criteria at any time while logged into the system.
  + Seller/Agent (Admin-Level user)
    - Name
    - Phone number(s)
    - Address
    - Property address(s)
    - If an agent, then they put in the Real Estate Agency they are affiliated with
* User Login
  + User should enter his/her email address and password. There is also a “Forgot Password” option where the user can enter his/her email address, and a password reset email is sent to him/her.
  + A user must be logged in only to make purchases or connect with realtors, but anyone can search for houses without being logged in.
  + If a user is an seller/agent, then he/she can login to the system the same way, but will have different features.
* Administrator
  + The admin completes the seller verification process.
  + There is a separate login page for the admin
    - ourwebsite.com/admin
  + When a property/seller is verified by an admin, then a verified icon pops up next to the property.
* Searching
  + Putting in search information:
    - The user can do a quick search based on location
    - The user can do an advanced search by filling out any of the following:
      * Location
      * Price (Low and High)
      * Number of Beds/Baths
      * Home type
      * Square Feet (Min and Max)
      * Lot Size
      * Year built
      * Days on market
  + Search results:
    - Can filter by:
      * Price (High/Low)
      * Days on Market
      * Size
    - A search result has the following information:
      * Address
      * Picture (if available)
      * Price
      * Size
      * Number of days on market
    - The user clicks on the picture or address to view more information and the user is taken to a new page in a new tab to view the property in greater detail.
* Property Information Page
  + Upon clicking on the picture of address, the user will be taken to a new tab. Here the more detailed information will be listed:
    - Address
    - Description
    - Picture slide show
    - Price
    - Size
    - Number of days on market
    - Realtor/seller contact information (only if logged in)
  + Buyer view:
    - A buyer can “Favorite” the property.
      * If they are logged in, it automatically adds to their favorites list
      * If they are not logged in, it prompts the user to login or create an account.
  + Seller/Agent/Admin view:
    - If this is a property in the seller’s list, then they have an option to “Edit” the listing.
* Buyer Pages:
  + Favorites Page
    - The user, while logged in, can view the list of homes that he/she has favorited. This list of homes will look like the list of search results, and each picture or address can be clicked to go to detailed views.
    - The user can remove a property from their favorites
  + Manage Account Page
    - Buyer can put in more details about properties they are looking for.
* Seller/Agent Pages:
  + Upload/edit property:
    - Can edit the following:
      * Address
      * Description
      * Picture slide show
      * Price
      * Size
      * Number of days on market
      * Realtor/seller contact information (only if logged in)
      * Sold/Not sold
    - Can only edit property information for which they are authorized to do so.
  + Seller History/Information page
    - Lists out the properties the seller has for sale, or has sold.
    - Has an option to add a new property.

**Database Design:**

* PROPERTY
  + INT Pid : Primary key
  + VARCHAR Addr
  + VARCHAR Desc
  + INT Sold
  + DOUBLE Price
  + VARCHAR HomeSize
  + VARCHAR LotSize
  + VARCHAR Type: foreign key to PROPERTY\_TYPE
  + INT SellerId: foreign key to SELLER
  + INT Days
* PROPERTY\_TYPE
  + INT Tid: Primary Key
  + VARCHAR Name
* BUYER
  + INT Bid: Primary Key
  + VARCHAR Name
  + VARCHAR Email
  + VARCHAR Password
  + VARCHAR Phone
* FAVORITE
  + INT Bid: foreign key to BUYER
  + INT Pid: foreign key to PROPERTY
* SELLER
  + INT Sid: Primary Key
  + VARCHAR Name
  + VARCHAR Email
  + VARCHAR Password
  + VARCHAR Phone
  + VARCHAR Addr
  + VARCHAR Agency
  + INT Approved
* PICTURE
  + BLOB Picture
  + INT Pid: foreign key to PROPERTY
  + INT isPrimary

**Language you will use for implementation:**

* Backend: PHP
* Frontend: JavaScript/JQuery, HTML, CSS
  + Bootstrap.js
* Database: MySQL