

# Software Engineering CSC 648 Section 01 Fall 2017

## FriscoHousing

### Team 14, Local

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# 1. Data Definitions V2

## Listings

idListings: int(11)
Thumbnail: blob
Image: mediumblob
AddressLine: char(255)
City: char(45)
State: (14)
ZipCode: (10)
Bedroom: tinyint(2) unsigned
Bathroom: tinyint(2) unsigned
Price: int(11)
idRealtors: int(11) foreign key
primary key: idListings

## Buyers:

idBuyers: int(11)
FirstName: char(45)
LastName: char(45)
Email: char(255)
PhoneNumber: char(10)
ProfilePhoto: mediumblob
primarykey: idBuyers

Favorites:

idFavorites: int(11)
idListings: int(11) foreign key
idBuyers: int(11) foreign key
primarykey: idFavorites

Realtors:

idRealtors: int(11)
FirstName: char(45)
LastName: char(45)
Email: char(255)
PhoneNumber: char(10)
Website: char(255)
ProfilePhoto: mediumblob
primarykey: idRealtors

Admin:

idUser: int(11)
UserName: char(45)
Password: char(45)
idRealtors: int(11) foreign key
idBuyers: int(11) foreign key

## 2. Functional Requirements V2

Grouped by priority

### Priority 1 Objectives

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1. **Users** shall be categorized according to **Unregistered Home Buyer**, **Registered Home Buyer**, **Realtors**, and **System Administrator**.
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2. **Registered Realtor** shall be provided the same privileges as **Unregistered Realtors**.
  3. **Registered Realtor** shall be able to create post listings for house sales.
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4. **System Administrator** shall be able to edit and remove a realtor's post.
  5. **System Administrator** shall be able to access MySql WorkBench.
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6. **Unregistered Home Buyers** shall be able to browse the website.
  7. All **Unregistered Home Buyers** shall be able to sort and filter the listing.
    - After entering information on the search bar, the user will be taken to the search page. There at the top layer of the web page, the user will have the option to sort housing by price, size, number of rooms, and other attributes of the house that a typical home buyer might be interested in.
  8. All **Unregistered Home Buyers** shall be able to signup and register for an account.
    - The sign-in / register page will be located at the top right corner of every page in the website.
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9. **Registered Home Buyers** shall be provided the same privileges as **Unregistered Home Buyers**.
  10. **Registered Home Buyers** shall be able to see contact information for the realtors' listings.
    - Under the contact page, there will be a list of realtors with a data table containing personal information that will allow users to contact a realtor. The table will contain information such as the agent's email address, phone number, home address, and so forth.
  11. **Registered Home Buyers** shall be able to contact the realtor.
    - Under the purchase page and search page, registered home buyers will be able to contact a realtor.

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## Priority 2 Objectives

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1. **Registered Home Buyer** shall be able to contact the realtor via WWW site.
    - Registered home buyers can contact a realtor under the contact page, and search page and purchase page. There the user will have the option to input information in text fields and click a button which will then be saved under a data base.
  2. **Registered Home Buyer** shall not be able to contact the realtor using email.
    - Registered home buyers can contact a realtor under the contact page which will provide the user with a table of information such as realtor's phone number, email address, and home address.
  3. **Registered Home Buyer** shall be able to save and remove houses from his/her personal list.
  4. **Registered Home Buyer** shall be provided a "dashboard" to manage contacts.
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5. **Registered Realtor** shall be provided a "dashboard" to manage sales and messaging.
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6. **System Administrator** shall be able to ban any users.
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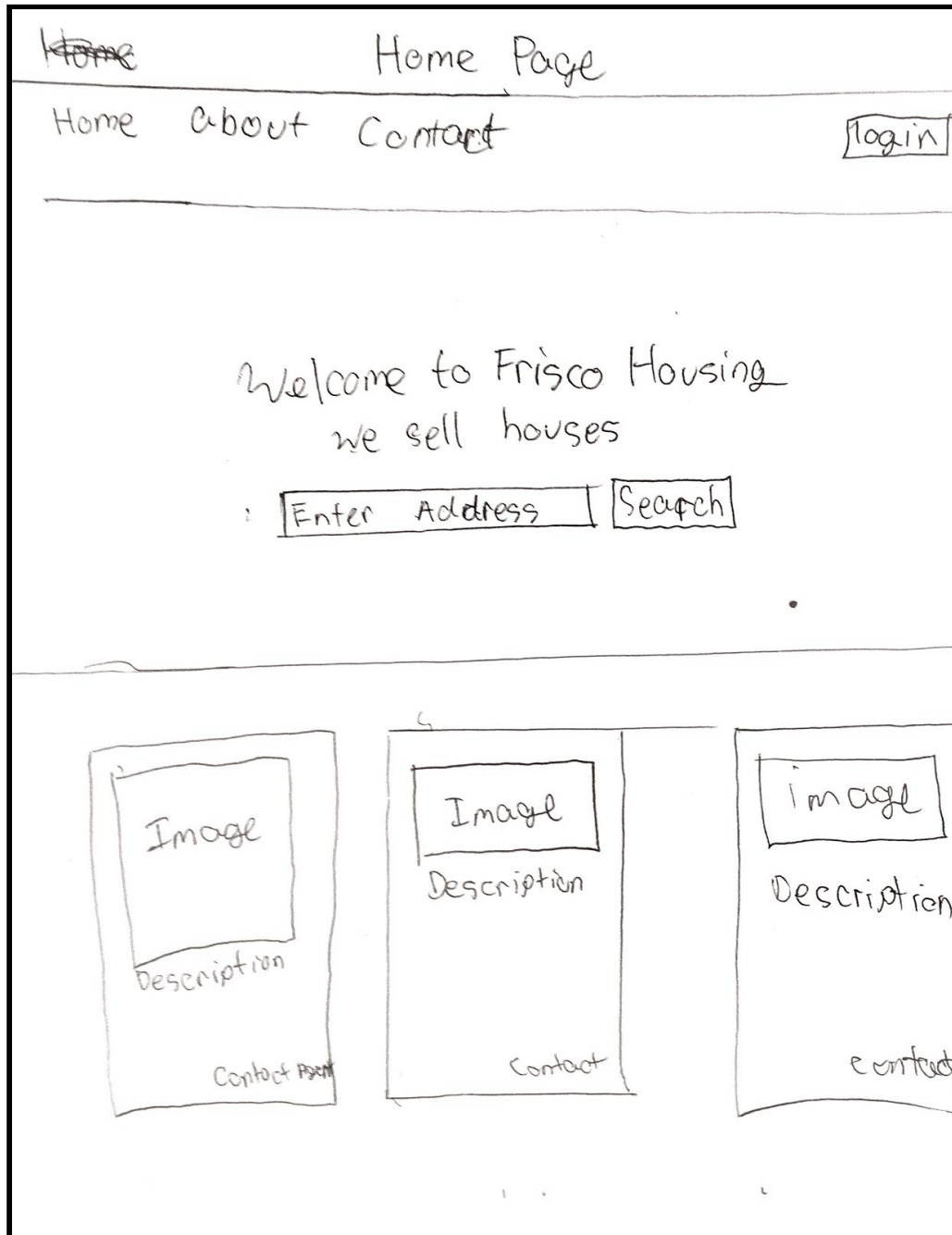
## Priority 3 Objectives

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1. **Registered Home Buyer** shall be able to edit and store the personal information such as email and phone number.
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1. **Registered Realtor** shall be able to see which **Registered Home Buyer** have saved his/her listings.
  2. **Registered Realtor** shall be able to contact the registered home buyers who have saved his/her listings.
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### 3. UI Mockups and Storyboards (high level only)

#### **Home Page**



### Layout

- **Top Layer:** Contains the clickable “functions”, “home”, “buy”, “sell”, “contact” and “login”
- **Middle Layer:** A simple panel that shows the company name, “Frisco Housing” and contains below it, a search bar where the user can enter an address to search for available housing.

- **Bottom layer:** Shows the three most recent houses listed for sale. Includes an image of the house, a brief description and a link that allows the user to contact an agent if they are interested in purchasing the house. If the user clicks on the image, the user will also be taken to that specific house's purchase page.

### Functions

- **Home:** Returns user to the home page, which is the image shown above.
- **Buy:** Takes the user to the most recent listing of houses.
- **Sell:** Takes the user to a page where he or she can input information to sell their house.
- **Contact:** Takes the user to an "about us" page that shows information of team 14 (Ivan, Jonah, Prakash, John and Eric).
- **Search:** When the user enters an address or a city and clicks on the search button, it will generate an event that will take the user to a new web page.

## ***Purchase Page***



Purchase Page		
Home about contact		
Photo	photo	Photo
Address #rooms info1 info2 ... infoN  Description  ~~~~~  ~~~~~  ~~~~~		Contact Agent  <input type="text" value="enter email"/>  <input type="text" value="enter phone"/>  <input type="text" value="Enter name"/>  <input type="text" value="Enter text"/>  <input type="button" value="contact"/>

**Layout:**

- **Top Layer:** Shows photos of the house for sale at different angles, as well its interior design.

- **Middle Left Panel:** A panel that contains the address of the house, its price range, as well as miscellaneous information, such as the number of rooms, size of the house, age of the house, a brief description of the house, and so forth.
- **Bottom Right Panel:** A listing of the agents available. Contains a photo to the left of the agent, the agent's name and their overall rating.
- **Middle Right Panel:** A panel that allows the user to contact an agent by inputting their contact information and hitting the contact button. The information will then be stored in a database, which an agent will be able to access to contact the customer.
- **Bottom Left Panel:** Contains facts and features of the house. For example, what type of wood was used to construct the house, whether or not it has a swimming pool and so forth.

### **Functions:**

- **Enter Email:** Allows user to input their email information and has the restriction that it must contain an @ symbol, followed by a string.
- **Enter Phone #:** Allows User to enter their phone information and has the restriction that it must be a string of at least length 10. Dashes and parentheses will be ignored when parsing the string. For example (415)-555-5555 and 5555555555 will be valid strings.
- **Enter Name:** Allows the user to enter the name. This particular string will have no restrictions.
- **Enter Text:** Allows the user to write a brief message to further clarify their interest in the house.
- **Agent Name:** When a user clicks on the agent name an event is generated, and it will take the user to a new page containing the agent's contact information.

## **Search Page**

Search Page

Sort by Newest ▼

Show 1-5 of 25

image	Address Price	+ -	
	<span style="border: 1px solid black; padding: 2px;">contact</span>		Map
Image	Address price <span style="border: 1px solid black; padding: 2px;">contact</span>		
Image	Address Price <span style="border: 1px solid black; padding: 2px;">contact</span>		
Image	Address Price <span style="border: 1px solid black; padding: 2px;">contact</span>		
Image	Address Price <span style="border: 1px solid black; padding: 2px;">contact</span>		

Page  
1 2 3 4 5 ... n

### Layout

- **Top Panel:** Contains filters that allows the user to modify the list based off of preferences, such as "Most expensive", "Least Expensive", "Largest House", "smallest house" and so forth.
- **Left Panel:** The left panel contains the list of houses, with the address next to it, and a "save" button that allows the user add the interested house to a list which

he can access at a later time. When the user clicks on the house or the address it will take him to the purchase page, which contains the information of the house.

- **Right panel:** Contains a map of the listed houses.

### **Functions**

- **Save:** Saves the house in the user's list of interested houses, which the user can access through their account at a later date.
- **Filter:** Allows the user to modify order of the presented list of houses by specifying "By Price", "By size" and so forth.
- **Address/house:** When the user clicks on an address or the image of a house, they will be taken to that house's purchase page.

**Log in Page:**

Login

Email ✖

Enter Email

Password

Enter Password

Forgot password?

Cancel Login

Last modified: 5:33 PM

Layout:

- **Top Layer:** contains the navigation bar. On the top-right corner, there will be two buttons; one button will be sign-up and the other one will be sign. After a user clicks the button, a pop up will be shown where users can type in their login credentials.
- **Middle Layer :** contains the pop up view to type in the login credentials. The popup contains login credentials such as email, password, and two buttons to either confirm the login or cancel the whole process. In addition, the pop up shall have a link to reset the password.
- **Bottom Layer:** contains the bottom navigation bar.

## **Registration Page:**

# Register Page

[Home](#) [Buy](#) [sell](#) [About](#)

Login or Signup

Signup

Email

Enter Email \*

Password

Enter Password \*

Repeat Password

Repeat Password \*

select

By creating an account, you agree to our Terms & privacy.

Cancel

Signup

drop down selector

red

Green

person

select

I'm a seller

I'm a buyer

Dropdown menu

Layout:



- **Top Layer:** contains the navigation bar. On the top-right corner, there will be two buttons; one button will be sign-up and the other one will be sign. After a user clicks the sign up button , a pop up will be shown where users can type in their account information.
- **Middle layer:** contains the pop up view to type in the personal account information such as email, password, and types of user. The popup contains login credentials such as email, password, repeat password, drop down menu to specify user types, and two buttons to either confirm the login or cancel the whole process. In addition, the pop up shall have a link to view the terms and condition page.
- **Bottom layer:** contains the bottom navigation bar.

#### 4. High level Architecture, Database Organization

The Buyers and Realtors table both contain basic information about them such as their name, email address, phone number, profile picture, and website url for realtors. As for the Listings table, it holds informations about the actual listings like the images, addresses, the number of bedrooms and bathrooms, the price, and a foreign key that connects each listing to a specific realtor. Our Favorites table includes 2 foreign keys to connect with the Buyers and Listings table that will allow us to keep track of which listings a specific buyer has their eye on. The Admin table stores the username and password of every realtors and buyers with their respective foreign keys associated with them.

Database Items:

**Listings:** idListings, DateAdded, Thumbnail, Image, AddressLine, City, State, ZipCode, Bedroom, Bathroom, Price, idRealtors

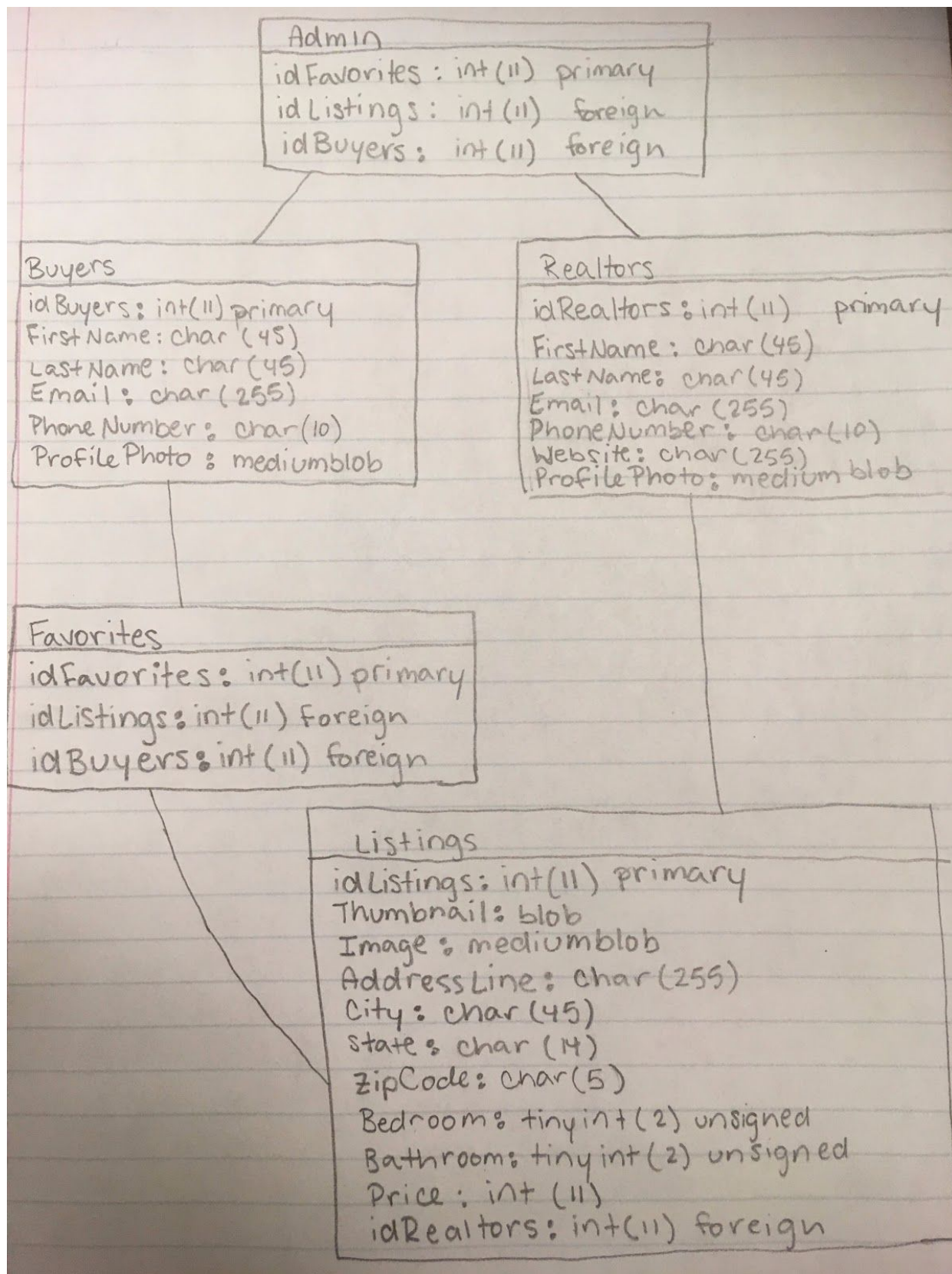
**Buyers:** idBuyers, FirstName, LastName, Email, PhoneNumber, ProfilePhoto

**Favorites:** idFavorites, idListings, idBuyers

**Realtors:** idRealtors, FirstName, LastName, Email, PhoneNumber, Website, ProfilePhoto

**Admin:** idUser, UserName, Password, idRealtors, idBuyers

## 5. High Level UML Diagrams



## 6. Identify actual key risks for your project at this time

**Skills risks:** No single team member is a master of his technology stack. We periodically encounter challenges that require unfamiliar implementations of technology to solve.

These risks are resolved by acquiring new skill sets to overcome challenges, suggested by those who have encountered similar problems in the past. We will also ask those who are familiar with our vertical prototype to provide guidance and instruction on how to add to it.

**Schedule risks:** There's only a single full-day per week that all members of my team can meet on.

We are efficient with our time, and active on slack. We can take advantage of emergency meetings prior to class on a case-by-case basis. We will also keep the scope of our work to a necessary minimum.

**Technical risks:** We are currently unsure of how to unify the front end and back end components of our application. EDIT: As of our freezing of this document, this is no longer the case.

We will examine proven methods for unifying the two layers of our application, and work as a team to connect unattached ports to one another to create a functional platform.

**Teamwork risks:** We are not currently experiencing any teamwork issues.

**Legal/content:** We do not appear to have any legal/content issues.



