

# Project 6

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**Abstract—Our model is a website design concept that allows users to rate and evaluate realtors for real estate transactions. This evaluation plan will identify how easy it is for users to evaluate and find Realtors**

## I. ANALYTICAL EVALUATION

For the analytical evaluation, we decided to use a heuristic evaluation. Using the heuristic evaluation, we hope to uncover as many usability problems as possible. We will need to evaluate two tasks finding a review and leaving a review. We need to evaluate both of these tasks because they will be the main tasks our users will come to our website to do. The reason we chose to do a heuristic evaluation is because our website will likely be used more than once, but not regularly. Because of this, GOMS models and cognitive walkthroughs are not likely to be as useful as a heuristic evaluation.

The four of us will be the experts who will perform the evaluation. Two of us will perform the task of writing a review and two of us will perform the task of finding a review. Because our project is a website, we plan to use heuristics that were specifically designed for websites, namely the heuristics developed by Budd (2007) from our textbook. Specifically, we will ask the following questions:

- 1) Clarity:
  - Is the language clear and not technical?
  - Are labels and icons meaningful?
- 2) Minimize unnecessary complexity and cognitive load:
  - Is there visual clutter?
  - Are complicated processes broken down sufficiently?
  - Is size, shape, color, alignment, and proximity used appropriately?
- 3) Provide users with context:
  - Is the site name and purpose clear?
  - Is the current section of the navigation highlighted?
  - Is there a breadcrumb trail?
  - Are feedback messages appropriate?
  - Are there visual cues to help reduce perceptions of latency (e.g., progress bar)?
- 4) Promote a pleasurable and positive user experience
  - Is the design attractive?
  - Are goals easily attained?

- Are there rewards for usage and progression?

Our plan is to perform the analytical evaluation before the empirical evaluation. The reason we will do the analytical evaluation first is so we can find some usability problems before we bring our website to a user. If time permits, we can fix any problems we found in the heuristic evaluation before beginning the empirical study. Even if we do not have time to change the prototype, we can at least be aware of possible issues before the empirical study begins.

## II. EMPIRICAL EVALUATION

For the empirical evaluation, we are also hoping to discover usability problems that did not come out during the heuristic evaluation. We will need to have at least two participants, since there are two main tasks to do at our website. The first type of user we need to evaluate is one who is using the website to search for realtor reviews. This would be the type of user who would use our website for information gathering, very likely someone who will be buying a house and has never used a realtor before. (Our research found that people who have used a realtor before usually use the same one and would not use our website to gather information). The second type of user would be someone who has already used a realtor to either buy or sell a house and would like to leave a review for that realtor.

During the sessions, we will use our paper prototype and ask users to perform their task. The future buyer will be asked to show how they would go about finding and reading reviews about a realtor. The user who has already bought or sold a house with a realtor will be asked to find and leave a review for a realtor. We will use the wizard-of-oz approach with our paper prototype and ask the users to think aloud during the process. After they are finished, we will also perform a short interview in order to give them a chance to clarify anything that happened during the session.

The data about what the user does during the session will hopefully help us find usability problems relating to learnability. The information from the interview will hopefully help us find other possible usability issues that might not have come out during the task.

The session will be broken down into parts:

#### WARM-UP AND INTRODUCTION

- Thank you for agreeing to help me today. I have a really early version of a website I am going to show you in a few minutes. I am interested in finding out how people might use it. Its just a rough sketch, but should still give you enough information to understand basically how it might work. If you dont mind, I am going to record you just so I dont miss anything. Is that okay?
- After they answer, say I also wanted to let you know that there is no wrong way to do the task I am going to ask you to do. This is not a test of you or your abilities, its just a test of the website.
- I also wanted to ask that you speak aloud your thoughts as you are going through the website. This would help me understand what kinds of things other users might be thinking about as they go through the website. Now its kind of unnatural to think out loud, so we are going to practice it. Im not recording this or anything its just to get you used to thinking out loud. I would like you to add 234 and 456 in your head.
- If they need more practice, ask them to talk about how many windows are in their parents house

#### SESSION

- Once they are comfortable thinking out loud, we will say, Okay it is time to start. I am going to start recording, okay?
- When they agree, we will start recording, present the prototype of the home page and say, This is the homepage of the website. Your task is to leave a review for a realtor/find a realtor and read a review (as appropriate). Pretend that it is a touch screen, and go ahead and put your finger on any area you would touch.
- We will then act as the computer and present the next appropriate screen
- During the session, we will write down any appropriate notes (e.g., if we see a problem or the user says something particularly poignant, etc.)
- If the user is not talking, we will ask, Why did you just do..?
- If the user asks for help, we will just say Just do what you think you should do remember we are testing the website not you!
- If the user makes a comment, we will respond appropriately (e.g., Is that what you expected to happen? This is helpful., etc.)

#### AFTER TASK IS COMPLETED

- After the task is completed, we will ask the user the following questions:
  - On a scale of 1 to 10 how easy was the task? (1 being very easy and 10 being very difficult)
  - What could have made the task easier?
  - What was the hardest thing about the task?
  - How would you fix that?
  - Is there anything else you would like to add?

#### FOLLOW UP QUESTIONS

- On a scale of 1 to 10 how easy was the task? (1 being very easy and 10 being very difficult)
- What could have made the task easier?
- What was the hardest thing about the task?
- How would you fix that?
- Is there anything else you would like to add?

### III. MATERIALS FOR EMPIRICAL EVALUATION



Fig. 1. Home Page

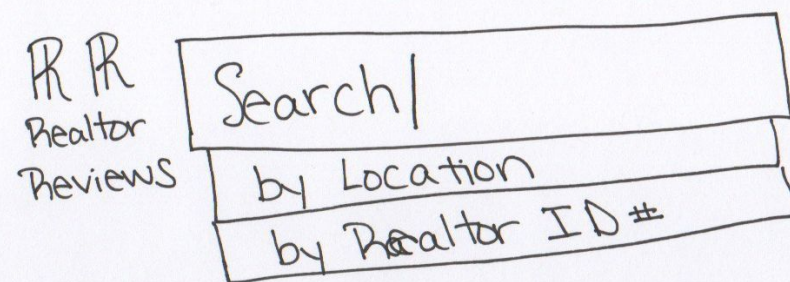


Fig. 2. When user hovers over search bar, they see that they can also search by location or realtor ID #



## Search by Location

Zip Code:  \*

Search Radius

0m ▾
5mi
10mi
15mi
20mi

} appears when  
dropdown arrow  
is clicked

Realtor Name:  (optional)

\* Indicates a required field

SEARCH

Fig. 3. If user decides to search by location, they need to enter a zip code and a search radius (choices appear when the dropdown arrow is clicked). Optionally, they can enter a realtors name. They will then click the search button.

Search by ID number:  
Realtor ID #:  \*

SEARCH

Fig. 4. If user decides to search by realtor ID number, they would just enter it in and click the search button.



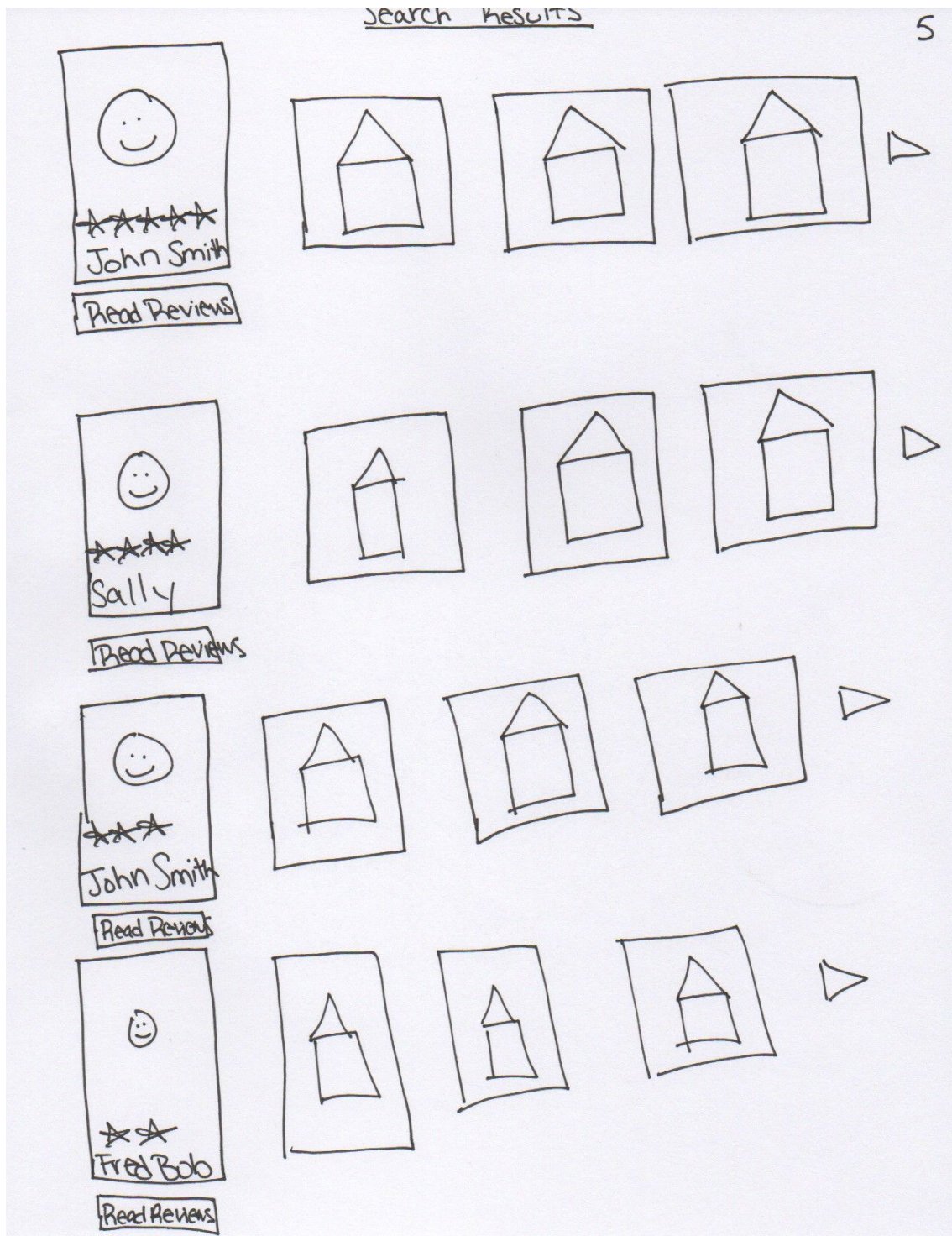
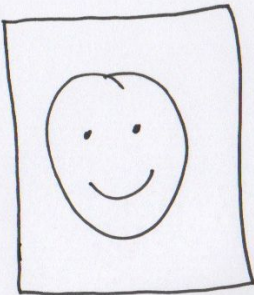


Fig. 5. The search results are then displayed with the name of the realtor, their picture, their average number of stars, a link to their page, and links to their houses that are currently for sale.

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★★★★★

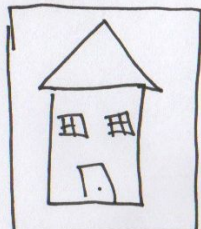
John Smith

Ralf Sells Houses Inc.

Bio:

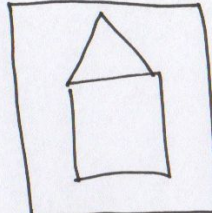
10 houses sold last year in the Lake Washington area.

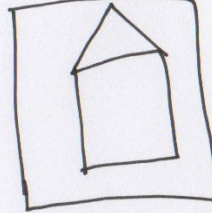
Worked for 10 years

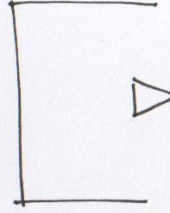


1209 Cherry Dr.  
Seattle, WA 98104

Sold 4/3/2015  
for 1.2 million







Reviews

Sort by Date High to low Low to high

★★★★★ Review by Susy S.

"I loved having John Smith as our realtor..."

Fig. 6. Each realtor has a page that includes their name, picture, contact information, average number of stars, reviews that are sortable by date or number of stars, and links to houses that have been sold or are currently for sale.



## Reviews

Leave a Review

★★★★★ Review by Susy S.

"I loved having John Smith as our realtor..."

Communication ★★★★★

Ability to Listen ★★★★★

"John wanted our price range higher than it was. It took him awhile to listen to my requests for a cheaper place."

Knowledge of Area ★★★★★

"He's been selling here forever!"

Price range looking for \$200,000 - 300,000

Price range Purchased \$350,000

★★★★★ Review by John

"

scroll  
down for  
more

Fig. 7. Each realtor has a page with detailed reviews that include a rating of their communication, ability to listen, and knowledge of the area (as well as comments and an overall rating). There is also a button to leave a review.

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Name:

★ ★ ★ ★ ★

Communication ★ ★ ★ ★ ★

comments:

Ability to Listen ★ ★ ★ ★ ★

comments:

Knowledge of Area ★ ★ ★ ★ ★

comments:

Additional Comments: 250 word max

scroll down ▼

If you bought a house from this realtor:

Price range looking for  - .

Price range purchased  - .

Submit Review

Fig. 8. This is the page that pops up when a user wants to leave a review. It includes places to leave stars for overall ratings, communication, ability to listen, and knowledge of the area. It also includes places to leave comments and the price you wanted to buy/sell for and the price you ended up with.