

# Project 4 Research Report

11/17 - 12/7

CGT 25600

Revision 1

Team 2

Andrew Dobler, Allison Knepp, Tristan Katic

# Table of Contents

<b>Project 4 Research Report</b>	<b>1</b>
<b>Table of Contents</b>	<b>2</b>
<b>Executive Summary</b>	<b>3</b>
<b>Introduction</b>	<b>4</b>
<b>Methodology</b>	<b>5</b>
Working file	5
Protocol	6
Moderator Script	7
<b>Findings</b>	<b>8</b>
<b>Recommendations</b>	<b>13</b>
<b>Conclusion</b>	<b>15</b>
<b>Author/Team Information</b>	<b>16</b>
Team Contributions P4	17
Tristan Katic	17
Allie Knepp	17
Andrew Dobler	17
<b>Appendix</b>	<b>18</b>
Usability Testing Videos	18
Full Script	18

# Executive Summary

An executive summary is an in-depth overview of the entire research report. It highlights key points that help the reader understand the overall process and findings from the study. The sections that would normally cover it are:

- 1) Introduction
- 2) Procedure
- 3) Results
- 4) Recommendations
- 5) Conclusion

# Introduction

For the previous project, we redesigned Craigslist's website to give it the modern revisions it needed to survive with other popular websites like Amazon, eBay, and Facebook Marketplace. According to everyone we tested, the new mockups were a massive visual improvement, but these tests did not consider Craigslist's usability.

This project will focus on evaluating the current website's easy of use and improving it based on our own research and user input. After usability issues are considered, we will match the recommendations with our project 3 mockups to see what changes would need to be made for our vision to be turned into a fully-fledged website. This document reports our methodology, testing results, and recommendations towards Craigslist to make it more effective, efficient, and enjoyable for the user to list an apartment sublease.

Our main goal for the testing is to investigate pain points while performing normal Craigslist tasks. When the website was first made, the internet was not a commonality and most businesses were not using online marketplaces. Currently, Craigslist is struggling to maintain a user base with heavy competition from websites such as Facebook Marketplace. To gauge Craigslist's effectiveness, efficiency, and enjoyability, we will be testing participants' abilities to complete the following processes:

- 1) Create an account
- 2) Create a listing
- 3) Delete a listing
- 4) Browse for apartment subleases

# Methodology

The goal of the usability test is to test Craigslist for user experience issues to compare to our mockup from project 3. Our representative user is Alice Nap. She is a senior at Purdue that is graduating and needs to sublease her apartment via Craigslist. We will be testing other students or recent graduates to stay within our user group. It's important that we're testing people who are new to Craigslist because new users won't give us insights that we could find through people struggling. The equipment required for the usability testing sessions will be a computer with access to Craigslist, audio recording software, and a screen recording software. The moderators will need access to the necessary tools for note taking. The test will take place on Zoom and will occur before Dec. 1st. Times may vary based on student availability. The following list shows the procedure we will use to test. All 3 members will measure if the tasks were completed with or without needing help.



**Alice Nap, 22**  
West Lafayette, IN

## Background

- Senior at Purdue University
- White
- Female
- Studying Business
- Single
- Has a job lined up outside of Indiana

## Ideal experience



I want to sublease my apartment quickly and easily.

## Needs/Motivations

- Wants to find someone that she can lease to quickly to avoid losing money
- Saving money will help her buy a car and commute to work at her new location
- Would like to sublease for 30 dollars cheaper than her contract to attract buyers

## Tasks

- Make an account on Craigslist
- List apartment for subleasing on Craigslist
- Be contacted by a buyer who checks out and will pay on time
- Take down the post after buyer has moved in and has started paying to avoid unnecessary contact

## Fears/Pain Points

- Some of Alice's pain points include:
- Being scammed
  - Someone will contact her and try to haggle the price too low
  - Safety of subleasing to strangers

## add more?

Would rather not share personal information if necessary.

Moving to Chicago

# Working file

The team split the workload amongst all of the group members and organized the tasks chronologically as to when they were due. The working file can be accessed here: [Google sheets](#)

## Protocol

- A. Materials necessary for testing
  - a. Participant consent
  - b. Solid internet connection
  - c. Meeting software such as Zoom or Skype
  - d. Microphone
  - e. Recording software
- B. Data Collection
  - Metrics/Measurements - Recorded on each task
    - a. Performance
      - i. Completion level: C - Complete | F - Failed |
      - ii. Time taken: seconds
      - iii. Mistakes: Number of errors made during the task
    - b. Observational
      - i. Comments: Reactions made based on the task and difficulty
      - ii. Mouse movement: Proximity to the next target
    - c. Self-Reported
      - i. Pre-task confidence: Scale - EASY (1) ----- (5) DIFFICULT
      - ii. Post-task effort: Scale - EASY (1) ----- (5) DIFFICULT
      - iii. Previous experience with Craigslist: Open-ended
      - iv. Struggles with task: Open-ended
      - v. User's Judgment: Open-ended
- C. Analysis

Even if a user has never used a website before, it should be intuitive to use based on visual clues and heuristics brought over from industry-leading websites. The amount of time it takes for each participant to complete the tasks will be compared to a benchmark time measured from an experienced user. The gap between the participant's and the expert's time will give an indication on how intuitive and learnable the website is. Any task that is failed is a major red flag considering these tasks aren't niche to the website. Anything that is failed will require a massive usability overhaul. While numeric measurements are good to record for tasks like these, it's also important to gather the participant's feelings and comments along the way. Even if a task is completed quickly, it may have been frustrating to solve because a few buttons weren't where the user expected them to be. Efficiency is one of the qualities we're testing that can be based on numbers alone, but we're also trying to make the site enjoyable to use. Pure speed on

completion of a task is important to measure, but it's also important to remove all frustrations a user has in the process to make the user more likely to use the site again.

## Moderator Script

The script was a way to standardize the process in gathering data about the current functionality of Craigslist. By following a script, a moderator has less room for error and allows the data to remain consistent. The team developed the script to highlight the user's preconceived notions about task difficulty and how difficult the task actually was once performed. The script is formatted by color and font to denote the differences between setup notes for the moderator, questions to be asked, statements to be said aloud, and the correct answers for each task. The full script can be viewed at this [link](#).

# Findings

## Participant #1

**Link to interview:** [Here](#)

**Name:** Participant #1

**Age:** 23

**Craigslist use:** None

**Other platform use:** Multiple times daily

### Task 1

**Pre task rating:** 3

**Post task rating:** 1 after button was found, at first it felt like a 4

**Notes:** The task was first perceived as difficult when he went to use the site. After confusion faded after he found what he was looking for.

**Time taken:** 4s

### Task 2

**Pre task rating:** 1.79

**Post task rating:** 1

**Notes:** During the process he selected the wrong sub category and listed the item in the wrong category. He made a comment about how the site could use a facelift, but still functions okay.

**Time taken:** 4m 6s

### Task 3

**Pre task rating:** 2.5

**Post task rating:** 1

**Notes:** He thought that based on the previous tasks this one would be over complicated. When he discovered that the task was overly simple, he misclicked and accidentally undid the delete that he had just completed.

**Time taken:** 16s

### Task 4

**Pre task rating:** 2

**Post task rating:** 2

**Notes:** There was much struggle with this task. When selecting a location, craigslist inserted his current location into the search when he had typed in a different zip code. The site was searching for listings in the listed zip code within his current location, therefore there were no results being displayed. If he was not participating in a research study he said, "at this point I would have just quit and gone to Apartments.com".

**Time taken:** 6m 2s

## Participant #2



Link to interview: [Here](#)

**Name:** Participant #2

**Age:** 21

**Craigslist use:** None

**Other platform use:** Multiple times monthly

#### **Task 1**

**Pre task rating:** 2

**Post task rating:** 1

**Notes:** We went through the entire process to make an account that was ready to be used. The option to go passwordless on the account made the process much easier and the visibility of the buttons was okay for this task.

**Time taken:** 14s

#### **Task 2**

**Pre task rating:** 4

**Post task rating:** 3

**Notes:** It was okay functionally, but the location of the buttons and design of the process was ugly and unrefined. To summarize, the lack of design updates to the site makes the tasks feel very tedious and excessive.

**Time taken:** 4m 3s

#### **Task 3**

**Pre task rating:** 2

**Post task rating:** 2

**Notes:** Users have to finalize their post to delete it because drafts cannot be deleted. It was difficult because the task only shows up when you click your account and it is not on the home page.

**Time taken:** 5s

#### **Task 4**

**Pre task rating:** 1

**Post task rating:** 2.5

**Notes:** She had lots of trouble finding the filters while searching for listings because it is not apparent on how to choose them and the feature is generally hidden. I also had the user move throughout several listings to get a general sense of how browsing sales works on Craigslist. The font for the descriptions on the listings is too small and there are no photos on the homepage that help a user to find the section that they are looking for. There's too much unnecessary text on the screen that the user reads to find what they are looking for.

**Time taken:** 1m 29s

Participant #3

**Name:** Participant #3

**Age:** 20

**Craigslist use:** None    **Other platform use:** Amazon once a month

**Task 1**

**Pre task rating: 2**

**Post task rating: 2**

**Notes:** The participant filled out his information in the "Log In" section before realizing he was putting it in the wrong place. He put his new password in as if he was going to use it, not trying to log into an existing account with that info. When going back to the home page, he pressed the back button on the browser multiple times instead of pressing the CL Logo.

**Time Taken:** 37s

**Task 2**

**Pre task rating: 2**

**Post task rating: 2**

**Notes:** User had a hard time figuring out to press the "housing offered" button in the first part and also got confused with having "apartments/housing for rent" instead of "sublets & temporary". He liked that all the information that needed to be listed was laid out.

**Time Taken:** 3m 40s

**Task 3**

**Pre task rating: 1**

**Post task rating: 3**

**Notes:** It took a long time for him to find out he needed to press the "My Account" button. After that, it took a while to navigate to the "active" tab as he was searching on the default page.

**Time Taken:** 1m 50s

**Task 4**

**Pre task rating: 2**

**Post task rating: 1**

**Notes:** There was a tiny bit of confusion with the min-max feature. It also took a little bit of time to find the zip code feature. Was easy after locating the side bar.

**Time Taken:** 1m

**Mean Task Ratings**

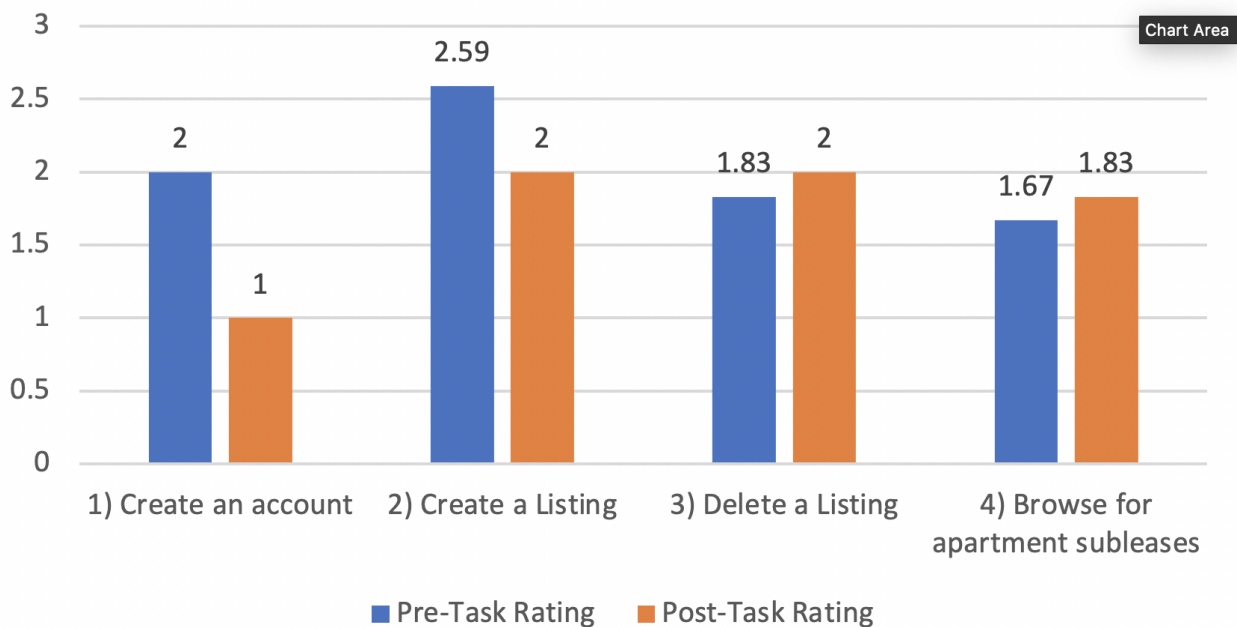
Task #	Pre-Task Rating	Post-Task Rating
1) Create an account	2	1

2) Create a Listing	2.59	2
3) Delete a Listing	1.83	2
4) Browse for apartment subleases	1.67	1.83

### Mean Time-Taken and Benchmark Time

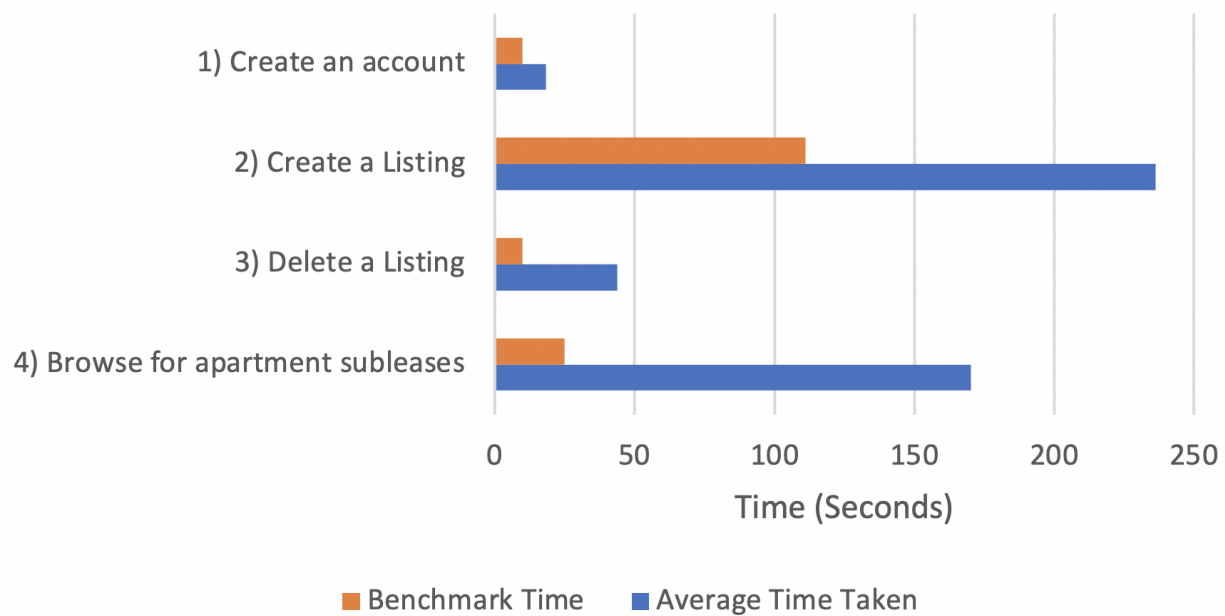
Task #	Average Time Taken	Benchmark Time
1) Create an account	18.3s	10s
2) Create a Listing	236.3s	111s
3) Delete a Listing	43.67s	10s
4) Browse for apartment subleases	170.3s	25s

### Participants' Average Task Ratings



This chart displays the mean task ratings for each task. They are color coded based on if it is a “Pre-Task Rating” or a “Post-Task Rating”. It is apparent that as the users worked through the tasks, their confidence in their ability to complete the tasks easily diminished.

## Mean Time-Taken and Benchmark Time



This chart depicts the mean time taken for each of the tasks and graphs them over time. The time is labeled as seconds and the orange chart depicts “Benchmark Time” and blue depicts “Average Time Taken.” The benchmark time is how long it took the team members to complete the task on average, while the average time taken is the mean of the participants time taken on each task. Visualizing the data vividly displays how time-consuming task two and four were for participants and how badly they need improvements made.

# Recommendations

Observing the responses from participants, it is easy to conclude that Craigslist is unintuitive and desperately in need of usability updates. But which tasks were the hardest to complete and need the most attention in fixing? The team analyzed the data to provide insights into the data and help in creating recommendations for Craigslist. After testing, the team decided to lay out separate recommendations for each task that was completed and ranked based on severity.

Severity	Task #	Recommendation & Rationale
High	4 - Browse listings	Task 4 was the most difficult to complete. There were issues in testing regarding the ability to search outside of your current location. When allowing Craigslist to know your location, the user is redirected to a location specific URL (ex: tampa.craigslist.com). While on a location specific URL, the user is unable to search for listings outside of their location based on “filter by Zip code”. The team recommends that this be adjusted on the backend to allow users to search outside of their current location. Outside of this unfortunate road block, the filters themselves are effective and do the job well when searching for a specific type listing.
Mid	2 - Create a listing	The amount of time taken to create a listing could be reduced if the radio buttons to select a category and a subcategory were reorganized in a way that enables a user to scan the options rather than reading each one in full detail. It also would be beneficial to rename the category “sublet” to “sublease” and split the “wanted” and “offered” into separate categories. Another improvement would be to reformat the calendar to incorporate the open house dates. The form to complete creating a listing is already in a good position where no immediate updates are necessary.
Low	1 - Create an account	It is recommended that the “My Account” button is moved into a more intuitive area such as the top right corner of the page. It would also be beneficial to display an option to create an account on the home page.
Low	3 - Delete a listing	Deleting a listing proved to be the simplest of the tasks performed. However to reduce possible error, Craigslist should place the “Undelete listing” button in an area that would reduce accidental interaction. Another suggestion would be to display all of a user’s listings when they first view their “My Account” page. Overall, the action of deleting a listing is easy and intuitive.

These recommendations also align with the team's work that was completed on Project 3. An overview of the Project 3 documentation can be viewed [here](#).

## Conclusion

While the current Craigslist is fully functional and still attracts millions of users every year, there are many improvements that the site could undertake based on key learnings from usability testing.

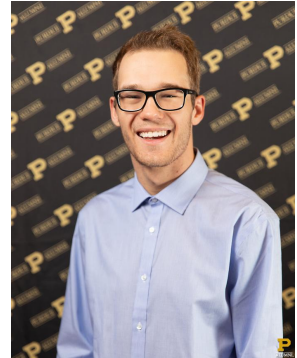
The team discovered that users of Craigslist and sites similar are able to complete semi challenging tasks with minor stumbles along the way. Some of the issues encountered hinder the ability to use the site, while others are simply cosmetic. The team also learned that some users could completely turn away from using Craigslist if their first experience is negative. This is an important consideration to acknowledge while testing for issues because Craaigslist has lots of competitors with easier navigation.

If the team were to approach the project again, it would be beneficial to search for a larger group of participants to test a more diverse user group. More specifically, users that have little to no experience with Craigslist or sites that are similar.

For next steps, the team would move onto the implementation of changes into a live website. Using the mockups from project 3, the team could reach out to other teams and begin working on a proposal to Craigslist to incorporate changes into their website. It is also important to plan more usability testing with a larger, more diverse group of participants in different stages of the future product.

## Author/Team Information

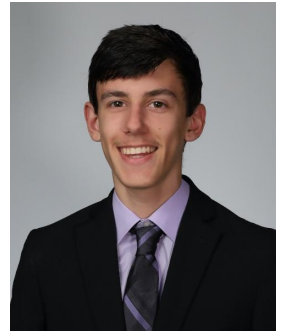
Tristan Katic is a junior in Polytechnic at Purdue University majoring in Web Programming and Data Visualization. His main interest is data analysis and identifying trends in data, but he also enjoys full stack development. Tristan can be reached at [tkatic@purdue.edu](mailto:tkatic@purdue.edu).



Allie Knepp is a senior in Web Programming & Design. She spends most of her time working on her internship and senior design projects. She is interested in working in both frontend and backend development. Allie can be reached at [aknepp@purdue.edu](mailto:aknepp@purdue.edu).



Andrew Dobler is a sophomore studying UX Design in Purdue University's Polytechnic program. His main hobbies include Rocket League, soccer, and (sim)racing. Andrew can be reached at [adobler@purdue.edu](mailto:adobler@purdue.edu)





# Team Contributions P4

## Tristan Katic

- Interviewed participant #2
- Created persona
- Identified recruitment criteria for testing
- Created graphs using testing data

## Allie Knepp

- Interviewed participant #1
- Structured and wrote the interview script
- Wrote descriptions and summaries
- Organized recommendations section

## Andrew Dobler

- Interview participant #3
- Formatted final document
- Introduction
- Methodology testing process & analysis

# Appendix

## Project 3 Documentation

The complete document for Project 3 referenced throughout the report can be found [here](#).

## Full Script

### Legend:

Moderator statements

*Setup notes*

*Questions [correct answer]*

**Tasks and Instructions**

### Welcome

- *[welcome]* “Hello, thank you so much for participating in our research study.”
- *[Introduction]* “I am a student at Purdue University and our team’s goal is to put Craigslist through a series of tests to determine the usability of the product.”
- *[testing the site, not the user]* “We want to make sure you know that we are testing Craigslist and not you. During the testing process, please feel free to ask questions and share your likes and dislikes as we go.”
- *[Consent]* “Before we begin, I want to make sure you feel comfortable going into this. You will need to share your screen so we can monitor your progress. Both your voice and screen will be recorded so we can look back on it later if we need to. If at any point you feel uncomfortable with continuing, feel free to stop. Is that ok?”
- *[Instruct them through setup]* “As said earlier, we will be working with Craigslist today. Go ahead and navigate to the home page, and I’ll give you further instruction.”

### Screening questions

- “Before we begin the tasks, I will be asking some simple questions
  - “First off, how old are you? [we need them to be 18-24]
  - How often do you use Craigslist?
  - How often do you use platforms similar to Craigslist such as Ebay, Amazon, or Facebook Marketplace?
  - Any questions before we begin? Any clarification I can provide?” [no right or wrong answer]

## Tasks

### TASK ONE - Create an account

#### [PRE-TASK]

- “Let’s start on the home page.”
- “For the first task you will be navigating craigslist to attempt to create an account. I will stop you when you complete the task.”
- “But first, how difficult do you think this task will be on a scale from 1 to 5 with 1 being easy and 5 very difficult?”

#### [TASK]

- **“Please take whatever steps necessary to create an account.”**  
[1. Click “my account” 2. Enter email in the create an account field. 3. Stop the user, they do not have to navigate to their email to confirm their account.]

#### [POST-TASK]

- “How difficult was the task actually on a scale of 1 as easy and 5 as very difficult
- “What did you perceive as easy or difficult about the task?”

### TASK TWO - Create a listing

#### [PRE-TASK]

- “Let’s start back on the home page again. Any questions?”
- “For this task you will be creating a listing with the information I will give you in a moment.”
- “How difficult do you think this task will be on a scale of 1 as easy and 5 as very difficult?”

#### [TASK]

- **“Please take whatever steps you determine necessary to create a listing on craigslist.”** *Give the user the list of information* [1. Click “create a posting” 2. Choose “housing offered” 3. Choose “sublet and temporary” 4. Fill out fields with information that is provided 5. Click “continue” 6. Confirm area “continue” 7. Confirm region “region” 8. Add images 9. “Done with images” 10. Confirm information about listing. 11. Stop the user]
- [Information to give to user]
  - Posting Title: Apartment sublease 600sqft 1 bathroom 1 bedroom
  - Postal Code: 23462
  - Rent: \$800
  - Sqft: 600
  - Bedrooms: 1
  - Private Room: room not private

- Bathrooms: 1
- Private bath: no private bath
- Laundry: laundry on site
- Parking: street parking
- Available on: December 17
- Open House dates: December 10 and december 14
- Email address: randomemail@gmail.com
- Location: 12345 Main Street, West Lafayette, IN

[POST-TASK]

- “How difficult was the taks actually on a scale of 1 as easy and 5 as very difficult
- “What did you perceive as easy or difficult about the task?”

**TASK THREE - Delete a listing**

[PRE-TASK]

- “Let’s start on the home page”
- “You will be deleting the listing you just created.”
- “How difficult do you think this task will be on a scale of 1 as easy and 5 as very difficult?”

[TASK]

- **“Please take whatever steps necessary to delete the active listing on this account.”** [1. Click “my account” 2. Click “active” 3. Click “delete”]

[POST-TASK]

- “How difficult was the taks actually on a scale of 1 as easy and 5 as very difficult
- “What did you perceive as easy or difficult about the task?”

**TASK FOUR - Browse listings**

[PRE-TASK]

- “Let’s look at the home page again.”
- “For this task you will be browsing listings and finding a lease or sublease based on a certain criteria that I will provide to you.”
- “How difficult do you think this task will be on a scale of 1 as easy and 5 as very difficult?”

[TASK]

- **“Please take whatever steps you determine necessary to browse and find a listing that meets this criteria”** [1. Locate the housing category 2. Select “sublets/temporary 3. Enter criteria into the filter section 4. Select a listing that meets criteria. 5. Stop user there]

- [Information to give to user]
  - Zip code: 47906
  - 1 bedroom
  - 1 bathroom
  - Under \$750 a month
  - Dogs ok

[POST-TASK]

- “How difficult was the task actually on a scale of 1 as easy and 5 as very difficult
- “What did you perceive as easy or difficult about the task?”

*Closing*

[closing]“Alright, that is all the tasks we have for you. Thank you again for participating in our research study. We appreciate you and your time.”