Craigslist Redesign

Link to the prototype:
https://cloud.justinmind.com/usernote/tests/52120480/52121137/52121139/index.html

Link to the implementation code:
https://github.com/fsarshad/WebDev

Link to the Bootstrap Template:
https://startbootstrap.com/template/blog-post

Brief (1-2 paragraph) summary:

For our project, the idea that we settled on was to redesign the Craigslist website's home page, list of posts page, and individual post page. The home screen that was displayed when initially entering the Craigslist website was filled with densely spaced links, making for an overwhelming first impression for any user. The website as a whole looked incredibly outdated, unintuitive, and clunky, resulting in a poor user experience. Starting with the home screen, our project focused on changing the organization of the massive amount of information displayed to the users, in addition to adding a "trending posts" section in order to make the home page more diverse and visually appealing. The redesign of Craigslist's homepage essentially focused on trying to make it feel a lot less "noisy" and more streamlined for the user.

An overwhelming density of text/clickable links is a common theme pertaining to most pages of Craigslist's website. After selecting a category of posts the individual would want to browse, or searching for a specific term, users are met with yet another page of densely "noisy" links. Redesigning this "list of posts" page to include clearer posts, in addition to editing the amount of filtering options located on the left, can make the page feel a lot less overwhelming to users. Once a user selects a specific post, they are taken to the "individual post screen," which was redesigned to have a more modern aesthetic, and utilize more of the space around the screen that was previously left blank.

Summary of user analysis:

When starting the process of developing the user analysis profiles, family members, friends, and peers were interviewed about their personal experiences and the experiences they recalled of other individuals they knew. They were asked about their familiarity with and frequency of usage of Craigslist and other similar buyer-seller applications. From the information gathered from the interviews, several different profiles of Craigslist users were created. Our initial user profiles included:

- Parents selling goods that their child has outgrown: low task-domain expertise, medium expertise with Craigslist or similar apps, low to medium general computer experience, high motivation to learn
- Parents looking to purchase used items for their children: low task-domain expertise, low expertise with Craislist or similar apps, low general computer experience, medium motivation to learn
- Young people looking for work or odd job opportunities: medium task-domain expertise, high expertise with Craigslist or similar apps, high general computer experience, and high motivation to learn
- Teen/young person looking for deals on used items: high task-domain expertise, medium expertise with Craigslist or similar app, high general computer experience, and medium motivation to learn
- Elderly person looking to purchase a specific item: low task-domain expertise, low expertise with Craigslist or similar apps, low general computer experience, low to medium motivation to learn

Since the portions of the Craigslist website we targeted for redesign (the home screen, list of posts screen, and individual post screen) were geared towards users who were looking to buy items/browse posts rather than sell items/create posts, our user analysis profiles did change over time. We removed "Parents selling goods that their child has outgrown," since this type of user would be largely unaffected by our changes to the website. After another round of interviews with different friends and family members, the following user analysis profile was added:

- A young person browsing categories with no specific item in mind, looking for deals: high task-domain expertise, high expertise with Craigslist or similar app, high general computer experience, and medium motivation to learn

The addition of this user analysis profile influenced the addition of the "trending posts" section on the homepage in order to cater to any users that are open to purchasing items they didn't explicitly enter the Craigslist website intending to buy.

Summary of Task Analysis:

Keeping in mind the information we acquired through interviews when creating user analysis profiles, we were also able to come up with several tasks and subtasks that different amounts of users would carry out in various frequencies. The initial list of tasks is as follows:

- User looking for work or odd job opportunities: often by many users
    - Filter by categorical job disciplinaries: often by many users
    - Utilize search filters to specify parameters for the posts shown: often by many users
    - Compare several posts to narrow down who to reach out to: often by many users
    - Share specific job posts with other users via email: seldom by few users
- Researching a type of item before making a purchase: often done by many users
    - Search using broad terms to see what options are available: often by many users

    - Browse results to compare different post's availability, price, variations of the item, locations, etc: often by many users
    - Save posts to reference later: somewhat often by some users
    - Looking for a type of item by limiting results via category: seldom by few users
    - Contact owner of specific post to ask question about product: seldom by some users
- Browsing Craigslist looking for deals in general (without specific item in mind): somewhat often by some users
    - Selecting certain category of item to browse: somewhat often by some users
        - Manipulating search parameters within category to filter out unwanted posts: somewhat often by some users
    - Searching for general/broad terms (ie. kids toy): seldom by few users
        - Manipulating search parameters within search results to filter out unwanted posts: somewhat often by some users
- User looking to buy an already known specific model/product: often by some users
    - Searching for specific item: often done by some users
        - Manipulating search parameters to filter out unwanted posts: often done by some users
        - If multiple options are available, compare several posts to narrow down who to reach out to: often by some users
        - Contact owner of specific post to ask question about product: seldom by some users
- User looking to post items for sale: often by many users
    - Searching for similar items to determine market, ie. price range, demand, etc: somewhat often by some users
    - Posting item for sale with price, photo(s), description (ie. meetup preferences, contact preferences, item condition, etc.): often by many users

The list of tasks and subtasks from our initial task analysis did not change much as we completed more of the project. The only noteworthy change was the fact that we decided to omit "user looking to post items for sale" from consideration during our redesign, since the portion of Craigslist we were remaking in our prototype was mainly geared toward "buyers" rather than "sellers."

Summary of Conceptual Analysis (Objects, Attributes, operations):

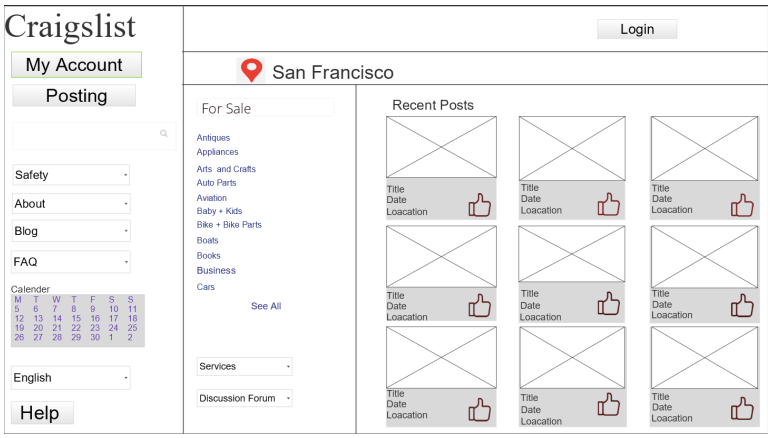
After initially conducting conceptual analysis and deciding on the objects, attributes, and operations to be included, very little about our conceptual analysis was changed throughout the duration of the project. The only two changes that were made were moving settings/security from being listed as objects to being listed as attributes and clarifying/staying consistent with vocabulary in terms of calling posts "posts" (rather than listings). The updated table of objects, attributes, and operations is as follows:

Objects	Attributes	Operations
Post	Price, location, date of posting, photo, condition, favorite, flag, hide	change/add price, location, photo(s), condition; view date posted, edit posts, favorite post, report post, hide post
Buyer	Account, criterion, location, and contact info	Change criterion, change account details
Seller	posts, account, email/contact info, location,	Update/edit contact information; change location; delete post
Account/profile	List of posts by the account, Name, location, language, age, email/contact, purchase history, info, account age, number of purchases, settings/security	update/edit: name, location preference, language preference, age range, email/contact info, security questions, password; delete account, create new account/profile, add post, delete post, view history
Search Result list	Sorting Mechanisms: "Sort by" dropdown menu, category, distance, price, brand, model, post parameters, condition, language, reset, update, and search.	Update preference for: category, distance, price range, brand preference, model preference, post parameters, condition preference, language preference

Initial Design and Prototype:

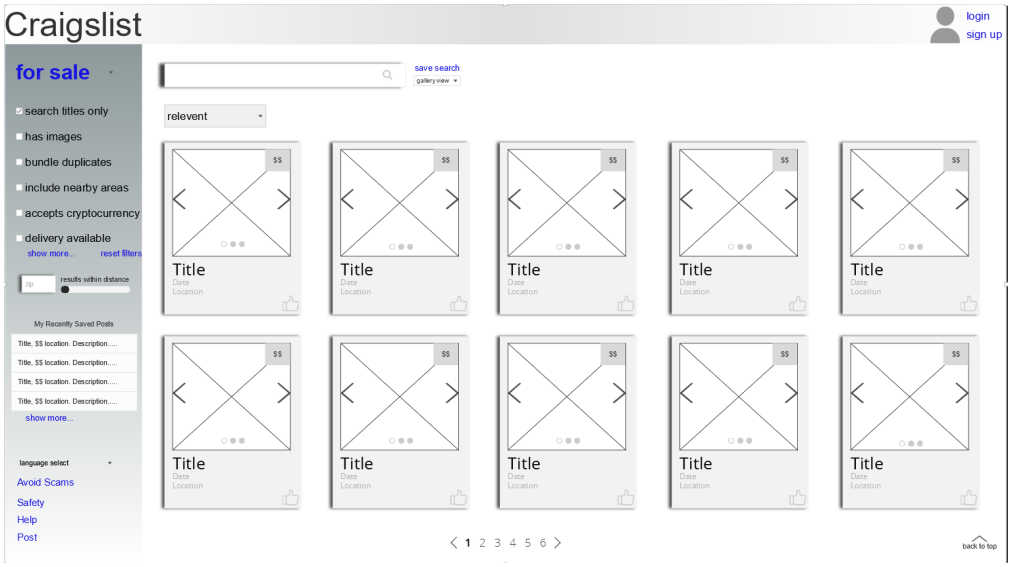
The team initially planned on using Figma to collaborate on the prototype, since we figured it was one of the easiest ways we could both edit in real time. It took quite a while for us to even figure out how to make very simple elements in our design, so we decided to look for a different tool instead. Eventually, our team decided to switch over to Justinmind, since it made it much easier to use premade elements in our design. We initially struggled with sharing updates to the prototype with each other, but we eventually figured out how to save and send Justinmind files. The free trial premium version of the Justinmind tool also expired before the completion of this project, resulting in us losing several capabilities that were available only in the paid version.

In terms of the design, our team felt that Craigslist's website was messy and unintuitive. Starting with the home screen, a lot of unnecessary details were shown to users, making it feel cluttered, overwhelming, and overall difficult to find the relevant information being looked for. We wanted to limit the information overload of the homescreen in order to make it easier for users to accomplish their specific task. Overall, making the home screen look more inviting compared to how it was before Our initial redesign for the home screen featured much less text/links compared to the original Craigslist website and also included a new section where Craigslist's most recent posts could be seen in order to potentially pique user interest. Our initial redesign of the home screen can be seen in Figure 1.



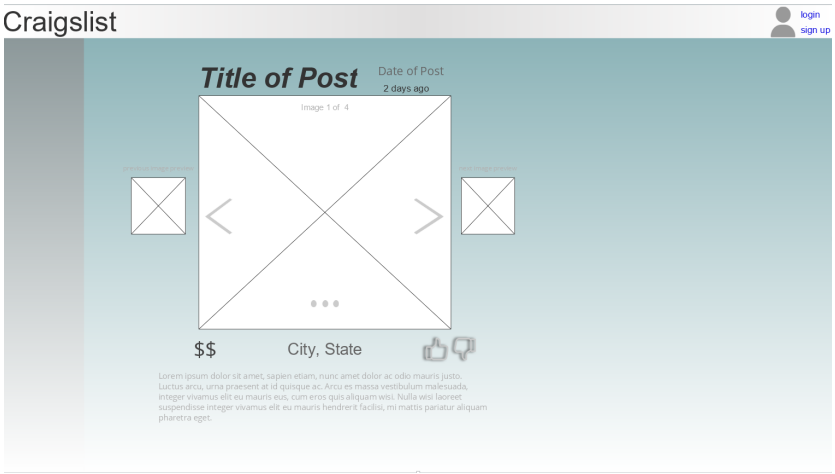
(Figure 1, old home screen)

Once a user either selects a category of item they want to browse or types a word into the search bar, they are met with the "list of posts page," which is a page that displays relevant posts of items for sale or jobs that can be completed. The biggest issue with this page is the overcomplication of filtering options located on the far left. There are many specific filters that are displayed yet would very seldomly be used, while others are in drop down menus even though they would see frequent usage. Our redesign changed the filtering options to be more intuitive and user friendly, in addition to hiding many of the rarely used filtering options behind a "see more" button, as can be seen on the far left of Figure 2. The "list of posts page" also had a new element called "my recently saved posts," which can be seen on the lower left side of figure 2. This new element would allow users to quickly compare the most important details (such as title, price, location, and description) from posts that they chose to save.



(Figure 2, old list of posts screen)

Once a user selects a specific post, they are brought to the “individual post page.” The original individual post page actually seemed to do a really good job of including all the details that one would care about, but it does so in a way that is aesthetically outdated and unpleasant to look at. We updated the layout and look of our redesigned “individual post page" while maintaining the same amount of information presented. In our redesign of this screen, we also included smaller photos to the left and right of the main photo being displayed for the post in order to give a sort of “preview” of what the next photo looks like when cycling through the carousel, which can be seen in figure 3.



(Figure 3, old individual post page)

Brief description of first user test:

Our first round of user testing consisted of 3 participants. The first participant was a 56 year old male currently working in the technology space, the second participant was a 21 year old male college student who frequently uses web interfaces of buyer-seller services, and the third participant was a 22 year old female college student who was very familiar with the internet, but rarely uses buyer-seller websites or applications.

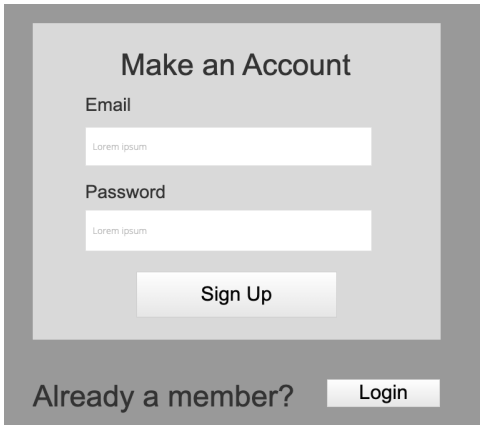
The informal interview method was chosen over carrying out a quasi-formal or formal test due to the fact that our prototype at the time was static and not dynamic. Because of this, many buttons, links, and functionalities in our prototype were not operational and instead served to act as placeholders. In order to see if our initial prototype suffered from any major issues unnoticed by us, when conducting the interviews, a greater focus was put on assessing conceptual aspects of the prototype (ie. does button placement make sense? Are there any blaring issues with the choice of features to display? Does it feel like there are buttons/links missing in certain areas? etc.) rather than specific/nit-picky criticism (such as the lack of dynamic interactions, the use of image placeholders instead of actual images, etc).

For 2 of the informal interviews, our Craigslist redesign prototype was opened in Justinmind on either Wesley's or Faaz's computers. The 3rd interview was conducted remotely over Zoom, with Wesley sharing his screen and taking verbal direction for what the user wanted to do. For all interviews, the "simulate prototype" feature of Justinmind was utilized, which resulted in the prototype being displayed on a web browser, closely imitating how it would look if the prototype were a standalone website. Because an informal interview was being conducted, there were no test tasks presented to the users. Furthermore, the only pre-planned scripts used covered a basic greeting and introduction, where the static nature of the prototype was explained. If the user expressed a desire to click an element that would not lead anywhere on our prototype, then we would let them know. If the user expressed a desire to click an element that would lead to a different screen on our prototype, then we would manually switch the display to whichever screen was appropriate.

Once the users were given the freedom to explore the prototype (through "verbally clicking" elements), data collection began. Wesley and Faaz noted any positive and negative comments that were made by each user during their time exploring the prototype, in addition to directly asking for user's opinions and positive or negative feedback at the end of the test. The resulting feedback is as follows:

- There was no place to "make a post" other than on the home screen, which is unintuitive
- There was no place to leave ratings or reviews on the individual post screen
- The category links under "For Sale" on the home page (Figure 1) only included categories starting with a, b, and c which was arbitrary
- The "gallery view" dropdown menu to the right of the search bar (Figure 2) wasn't wide enough, so it displayed "gallery v…"
- The "my recently saved posts" section on the left of Figure 2 caused confusion
    - A different user noted that they thought the "my recently saved posts" element was a nifty feature
- The individual post page (Figure 3) had too much empty space, and lacked a map

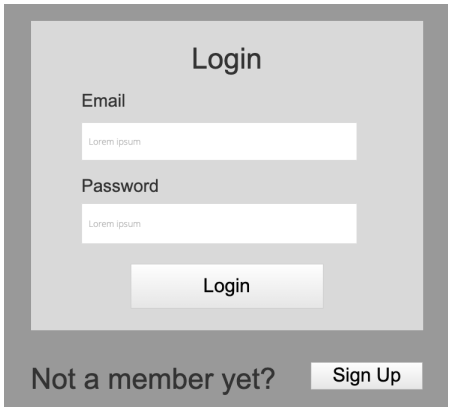
Describe changes:



(Figure 4, Make an account page)

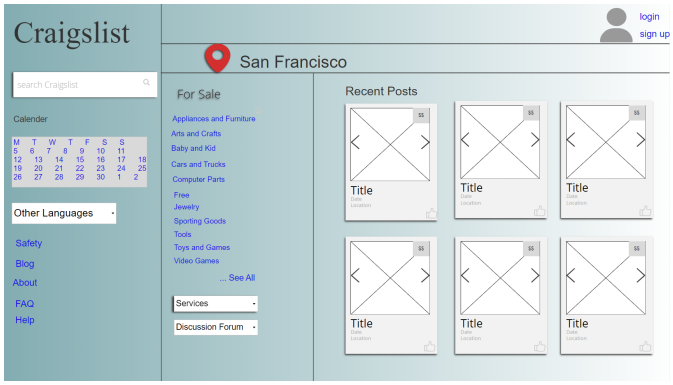
Originally, our prototype was static and consisted of only 3 pages (Figures 1, 2, and 3). After our first usability test, our team not only incorporated the changes and suggestions made by the users, but we made the prototype dynamic as well. Our newly dynamic prototype allows users to navigate between all the pages of our updated prototype (Figures 4, 5, 6, 7, and 9) by clicking on various elements located on each page.

Our team also noticed that our original prototype lacked login and sign up options. As can be seen in (Figure 4) and (Figure 5). Therefore, we developed the "Make an account page," for users without a Craigslist account who would like to make one. A "Login page" (Figure 5) was also made so pre existing members had a place to login to their account. The "Make an account" page and "Login" page can be accessed by either clicking the "login" or "sign up" buttons in the top right corner of the home screen (Figure 6), or by clicking the "sign up" or "login" buttons at the bottom of (Figure 5) or (Figure 4) respectively.

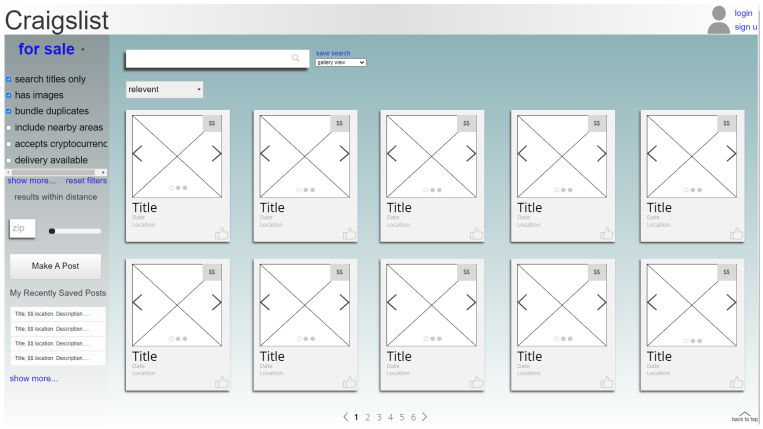


(Figure 5, login page)

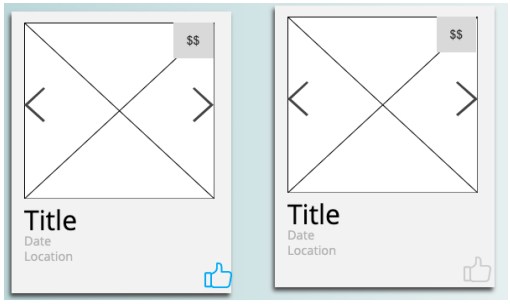
The search bar and blue links on the home page (Figure 6) are all dynamically functionalized, and redirects the user to the list of posting pages (Figure 7). The user can also click on any of the posts shown on the right of (Figure 6) to be redirected to the individual post page shown in (Figure 9). Similarly, each post on the "list of posts" screen (Figure 7) also redirects the user to the "individual post" screen (Figure 9). Clicking on the "Craigslist" text in the top left of any page also brings users to the home page (Figure 6). Furthermore, we incorporated a like/save button on each post shown in (Figure 8).



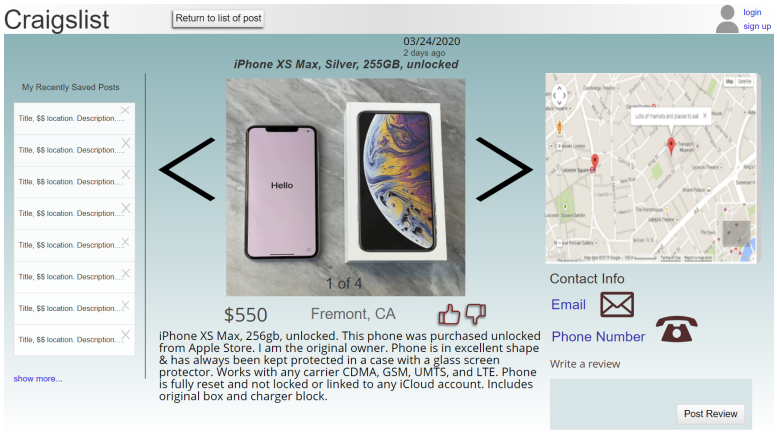
(Figure 6, New home screen)



(Figure 7, New list of posts page)

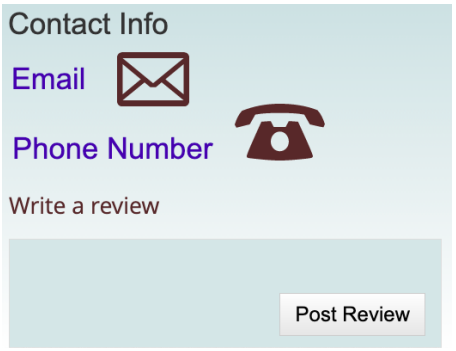


(Figure 8, New like/save feature highlighted in blue)



(Figure 9, New individual post page)

Updates were made to the formatting and sizing of elements on the “individual post page” (Figure 9). The capability to contact the seller/poster through email or phone, in addition to writing reviews, was added, as can be seen in the bottom right of Figure 9 (or Figure 10). Additionally, a map was added to the right side, and a new “my recently saved posts” section was added to the left side of the “individual post page” (Figure 9).



(Figure 10, New contact section of the individual post page)

Final Usability Test:

For the final usability test we used a different set of participants. The first participant was a 17 year old male, the second participant was a 54 year old female, and the third participant was a 20 year old female. For this usability test, we gave each participant tasks to complete, including: try to create a new post, try to login to your account, create a new Craigslist account, search for an iphone for sale, change the language of posts shown, after searching for nike shoes sort the results by price from lowest to highest, save an individual post on the individual post screen, try and contact the seller through email or phone.

Similarly to the previous user tests, the "simulate prototype" function of Justinmind was used on Wesley's and Faaz's computers. All 3 tests took place in person, and control of the computer was given to each user during the test. Wesley and Faaz took note of any positive or negative comments made during the test, asked for feedback at the end of the test, and kept track of how many assists were needed as users completed each assigned task. A summary of results is as follows:

- Login and signup pages worked well; users had no issue logging in/ creating an account
- Some users had difficulty creating a post; it was mentioned that the location of the create a post button was odd
- One user required assistance when attempting to sort the list of posts by price from lowest to highest
- 2 users required assists when attempting to save a post from the individual post screen→ The thumbs up button functioning as a save button was said to be unintuitive
- One user was confused about the function/how to use the distance from zip code filter on the left of the "list of posts screen" (Figure 7)
- All users mentioned that only the bottom portion of posts on the home and list of posts screen (Figures 6, 7) were dynamic, instead of the entire area of the post

Front-end Implementation:

Faaz chose to do the implementation for the individual post page as none of the other members had any prior knowledge of coding. Originally, I planned on developing the website

using ReactJS, HTML, CSS, and JavaScript. However, we noticed that this was a bit complicated because we only had two members and a limited amount of time. Therefore, I chose to use Bootstrap and HTML. Using Bootstrap was a more efficient tool compared to ReactJS. Bootstrap also provides you with pre existing templates and components that you can use for your website. Due to the lack of time, I used a bootstrap template, which is listed at the top of this document, individualized it, and added some cool components to make it look like my prototype (individual post page). The parts of our prototype that were not implemented included: the login page, the sign up page, the home screen page, and the list of postings page. Only the individual post page was implemented.

Assessment:

The changes made from what was learned from usability testing, in addition to changes made when transitioning the prototype from static to dynamic function, greatly improve our design. The user can now navigate through various pages with a click of a button, in addition to liking and saving posts. Additionally, various components that were added, such as the write a review post section and the "my recently saved posts" section, can greatly add to a user's experience.

To change the prototype in the event of making a real product, Faaz would have to implement more components and features of our current prototype onto a front-end platform, likely having to use JavaScript, ReactJs, HTML, and CSS to implement the front end and back end of the prototype. I would add a chat box feature for tech support or implement an algorithm where the individual is able to filter out their posts in the list of postings when searching for an item through the search toolbar and not from the filters on the left side of that screen. When searching for an item, generally, recommendations based on common searches would appear as a drop down menu. It could be beneficial to also try and implement a feature where, by clicking that word, underneath the word you're typing, the website and that component will take you to the specific item. Those would not only save time by not having to complete words in the search tool but also provide a user with more specific recommendations. So, while typing "Iphone," if you type "Iph" in that, underneath the word in the dropped down list, it will say, "Iphone x," "Iphone case," "Iphone screen protector," etc. Some other beneficial changes that could be made to the design include clarifying the function of the like/save button or perhaps even implementing a standalone save button in order to decrease potential confusion.