

Milestone 2: Low-Fidelity Prototypes

CPG - 26

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Part A: Project Direction

Our project's topic is a contractor library implemented as a website. Having access to a collection of contractors and highlighting the details of the contractors within listings would be valuable for users that aim to research multiple contractors in their area. By browsing and sorting contractors, users can narrow their search depending on the type of work needed, their budget and their location. Compared to a Google search, this website provides more information and organization of contractors such that it is specific to a user's interests when looking for a contractor; interests like: specific services, reviews, pricing, and location.

This type of website would support homeowners, property managers, contractors, and renters by giving them access to a multitude of contractor information on one website to foster the success of a project. As such, they fit into the niches of home improvement and the contractor community.

We have observed that existing implementations, specifically from the Trusted Pros website (TrustedPros Inc.) have shortcomings, such as confusing and selective auto complete in the search bar, limited search and sort options, and lack of explicit pricing. Additionally, we have found that there are strengths in having reviews for users to evaluate contractors and service categories for users to narrow their search. With this in mind, we can shape our design to make these accommodations.

Part B: Ideation

Dollhouse

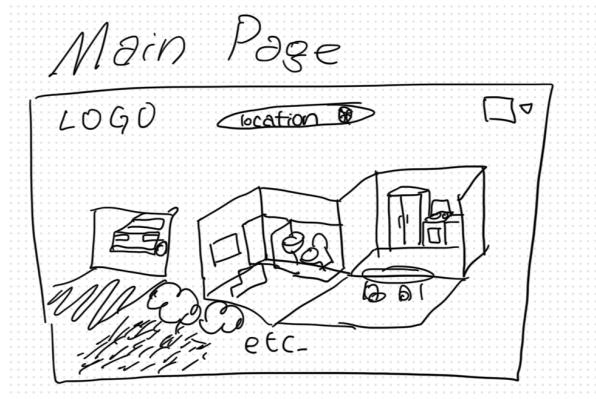


Figure 1: Toran's Dollhouse Sketch

This idea is for browsing services. A user sees a room or space they are looking to service and, once selected, contractors that focus on those services appear on a list. We liked this idea because it is visual and easy to understand. Thinking of those that are not fluent in English, this could be a way to accommodate them in finding a contractor. Additionally, it is helpful for those who may not be familiar with what kinds of services are offered for whatever work they are looking to do. This was also a common idea among group members.

Map

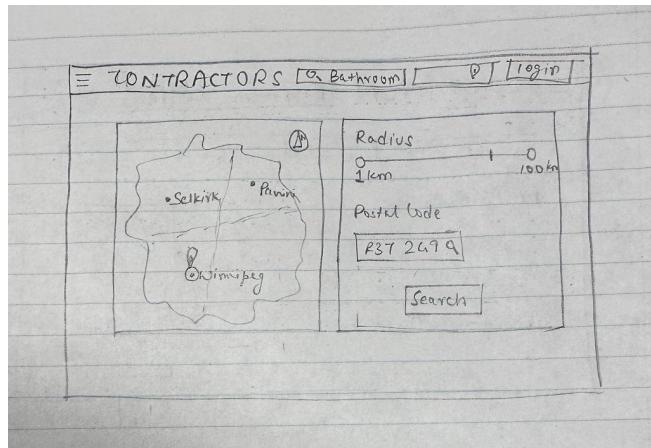


Figure 2: Pritha's Map Sketch

This idea is to use a map to find a contractor in a specific area. We liked this idea because in our investigation, our participants noted that they would prefer more options for searching for a contractor in a specific area. This idea would achieve that functionality by allowing users to filter by postal code and radius. The visual aspect is also appealing and intuitive.

Project Sharing

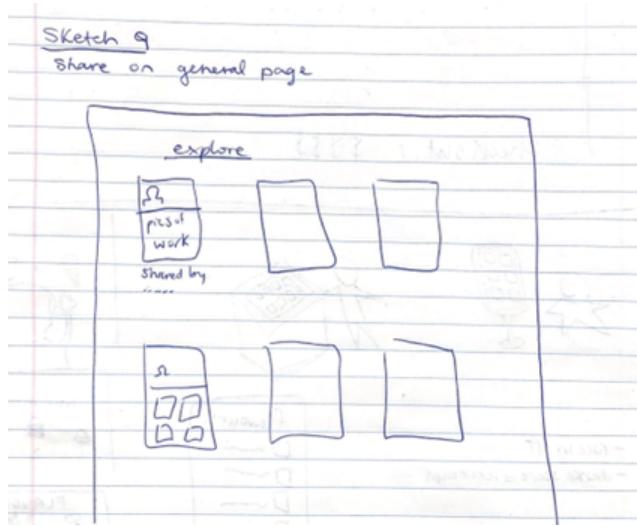


Figure 3: Melanie's Project Posting Sketch

This idea is a way for finished work to be shared and featured on a website. We liked this idea because users can see the quality of work a contractor delivers, while getting more details from the user's description for their opinion and review of the contractor.

Tape Measure

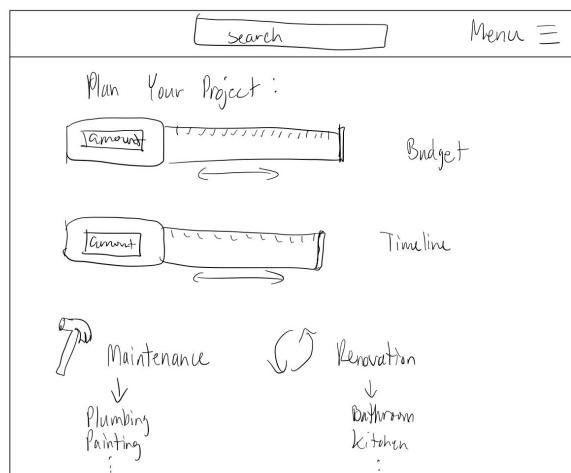


Figure 4: Ginelle's Tape Measure Sketch

This idea uses a sliding scale configured as a measuring tape for the user to adjust fields. We liked this idea because it is interesting, visual and would stand out from other websites.

Calendar

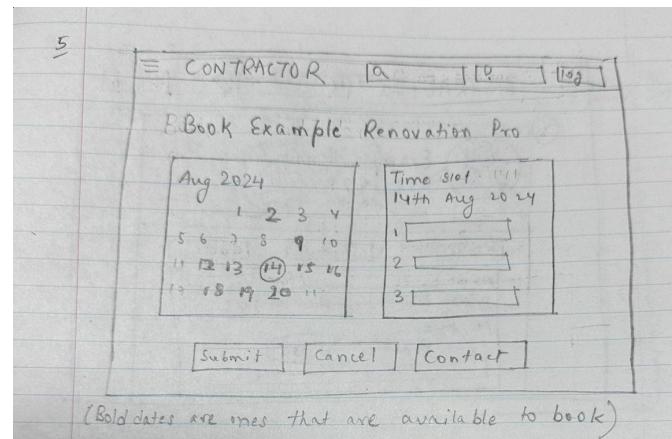


Figure 5: Pritha's Calendar Sketch

This idea uses a calendar for users to select a date and time to schedule an appointment with a contractor. We liked this idea because the calendar is intuitive such that you click a date to see the available time slots, versus having to input the date with a specific format. It allows flexibility for users to book appointments at their own pace and to coordinate with the contractors' schedules.

Part C: Idea Proposal

The following are sketches of the main page, and a browse page for the proposed contractor search website idea. The website's main purpose is to hold a collection of contractors with the function of sorting, filtering, organizing and browsing the contractors to complete a search.



Figure 6: Landing page

click on
arrows to
scroll feed

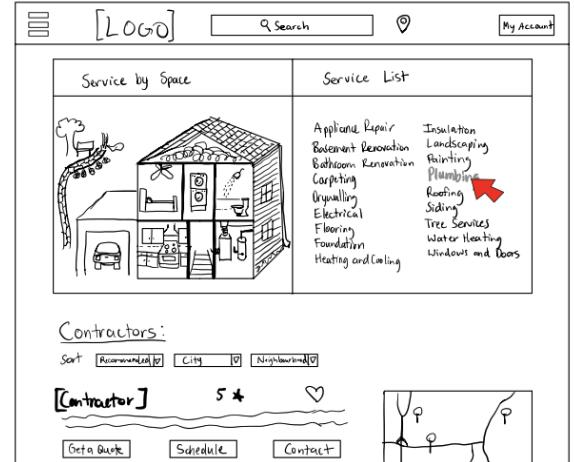


Figure 7: Browse page

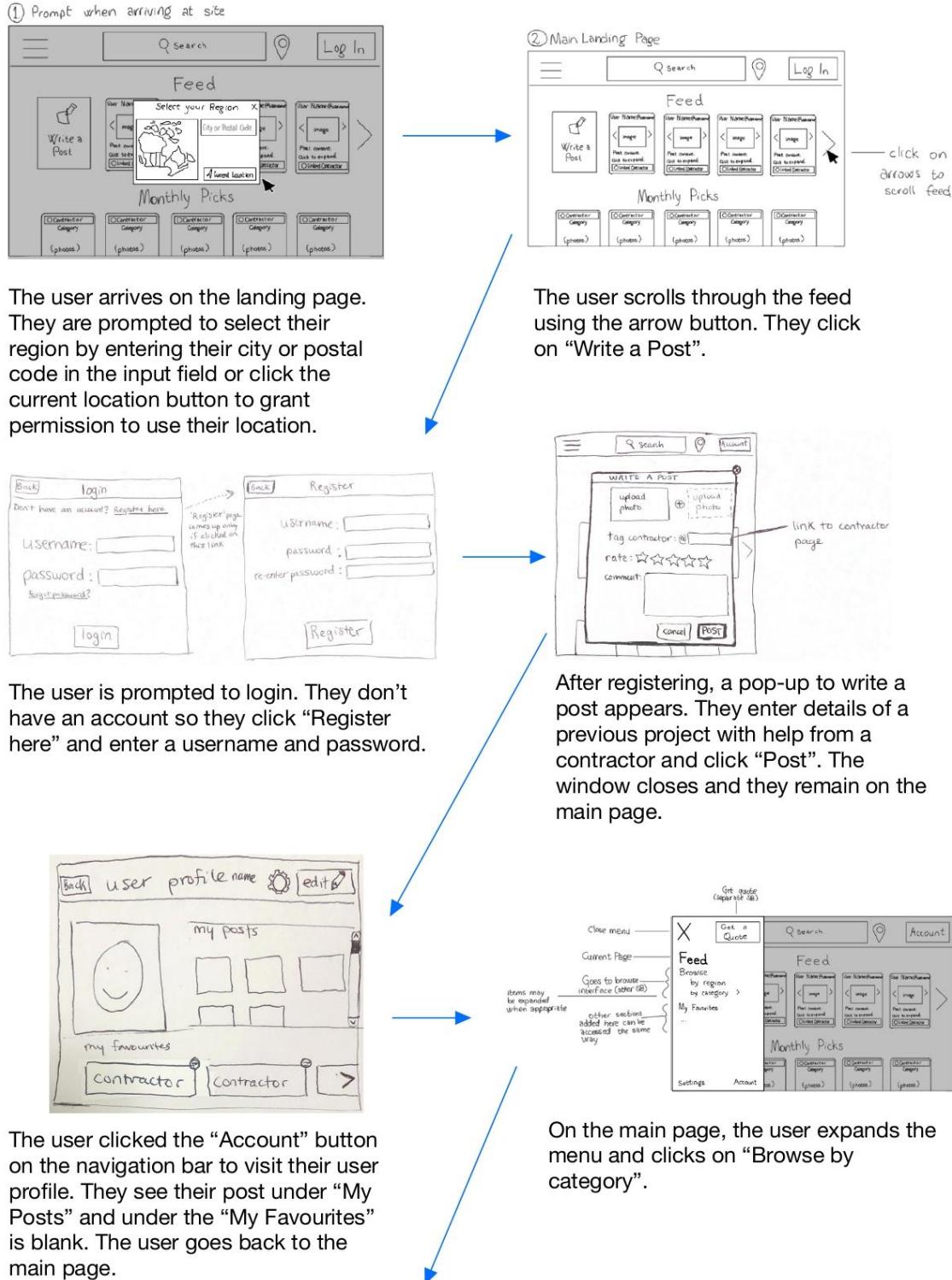
This idea was inspired by 2 of the ideas mentioned in Part B. We wanted to incorporate the dollhouse and project sharing elements into the contractor website to elevate the user experience with interactive and social features.

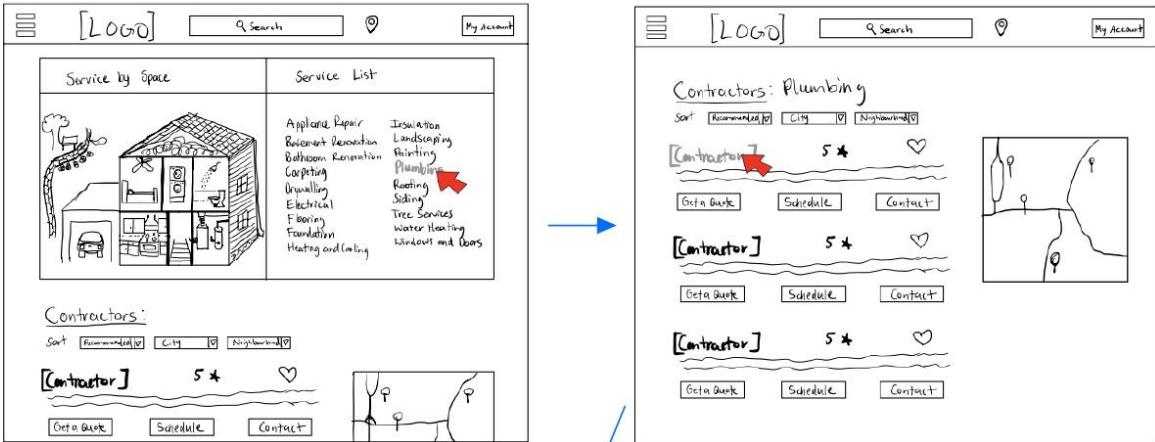
Our idea includes a main landing page (Figure 6) where the user can write a post about a recent experience they had with a particular contractor to share their reviews with others in the community. This promotes social interaction through the website, and will keep users coming back. We also include a "Monthly Picks" feature, where users can select the highest rated contractor of the month depending on the category of service. This would allow the user to find a good contractor quickly, saving them browsing time if they need to find a contractor right away.

Our other main idea is a browse page where all contractors can be found. They can be selected from a Service List, or the user can select a room from the dollhouse and it will bring them to a list of contractors that offer the particular services. This dollhouse feature is exciting because it adds interactivity to the website. It also adds a visual aspect, which allows those who may not be fluent in English or who may not be familiar with the different kinds of services available to quickly find services catering to their needs.

Part D: Storyboards

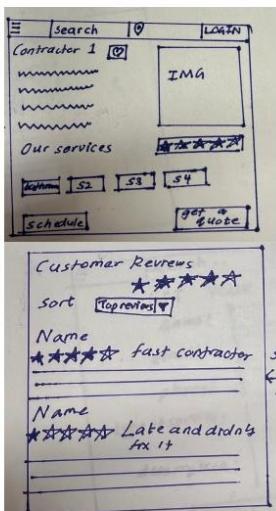
The following is the storyboard for the proposed contractor search website.





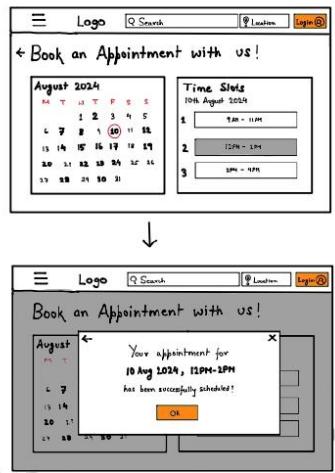
When the user arrives on the browse page, they explore the dollhouse and see that the space name appears when hovering over a room. When hovering over a service in the list the text changes colour. When they click "Plumbing" from the service list, they are directed down the page to the contractor listings.

When browsing the contractor list, the user sees the list is sorted by recommended contractors and by their inputted location. They click on the first contractor listing.



On the contractor profile page, the user can see images on past projects, description of services, and reviews on the contractor. The user clicks on "Get a Quote".

A window pops up with a form to submit a request for a quote. The user fills out the fields and clicks "Submit". A confirmation appears and the windows close. Then the user clicks on "Schedule" and a window pops up.



The user selects a date on the calendar and available time slots appear. They select a time slot and submit their request. A confirmation window pops up and they click "OK". The user ends their session.

The website will consist of 4 pages and will have multiple features and pop-up windows.

Upon arriving at the main landing page, the user is prompted to share their location so search results can be sorted by location. When a user attempts to "Write a Post", save a contractor to their favourites, or write a review, they will be prompted to log in or register. Once logged in, they can complete the aforementioned tasks. The navigation bar—which contains the menu button, search bar, location icon, and login button—will be available on all pages. The menu button will serve as the sole way to access the browse page, and the main way to navigate the site. Users may return to the landing page at any time by clicking the logo next to the menu button.

The browse page offers a unique feature, the dollhouse. The user can interact with the dollhouse to filter their search to contractors that offer services a specific space, such as a bedroom or bathroom, might require. For more specific filter options, they can select a service from the list. The list of contractors can be sorted by review ratings and location. The contractors can also be located on the map feature, which visually displays the contractors' locations on a map alongside the search results. At a quick glance, the user can see the contractors offerings, rating and can choose to "Get a Quote", "Schedule" or "Contact". If they are considering the contractor for hire, they can click the heart button to save that contractor to their favourites.

The contractor profile page holds all the necessary information, including a description, list of services, images of previous projects, and reviews. It provides connection to the specific contractor via the "Get a Quote", "Schedule", and "Contact" buttons.

The user profile page is a hub for the user to view their posts and saved contractors.

Part E: Prototype

Our prototype consists of 4 pages and various pop-up windows and elements. The active screen is presented as an overlay with the purple window.

On the main page, upon initially landing on the website, there will be a pop-up window for the user to select their location. When the user provides their location right away, they can automatically have their search based on their general location. If the user chooses not to provide a location, a prompt will reappear whenever a location-based feature is used. A location may also be chosen or re-selected at any time using the location pin button next to the search button. In the content of the main page, there is a sliding feed that utilizes a right/left scroll function for users to explore posts (Figure 8.1). This social element gives the user insight into other projects, and perhaps more details of the processes and costs associated with a specific contractor based on the description given in a post, which could assist the user in their search for a contractor.

The login window will appear if the user clicks on the “Login” button, or “Write a Post” when they are not logged in (Figure 8.2). The login pop-up can flip open to show the register window if a user selects “Register here” on the login window. Once logged in, the user has access to their user profile via the “My Account” button. Their posts, saved contractors, and booked appointments can be seen on their profile (Figure 8.13) . This gives users a record of their research and ongoing processes in selecting a contractor.

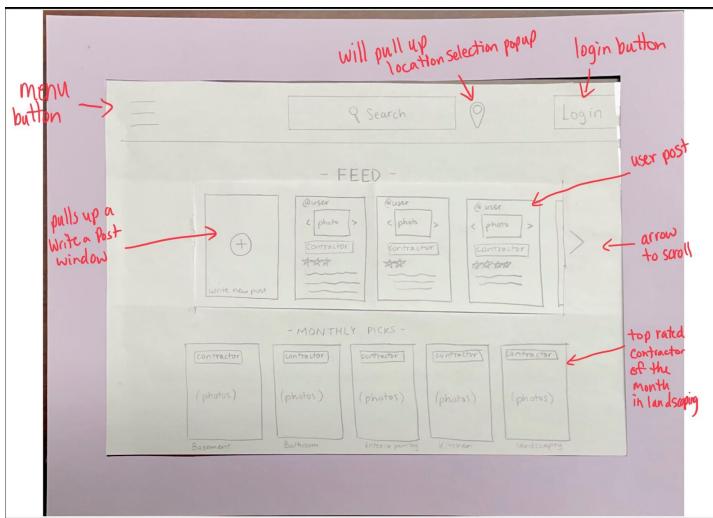


Figure 8.1: Main page

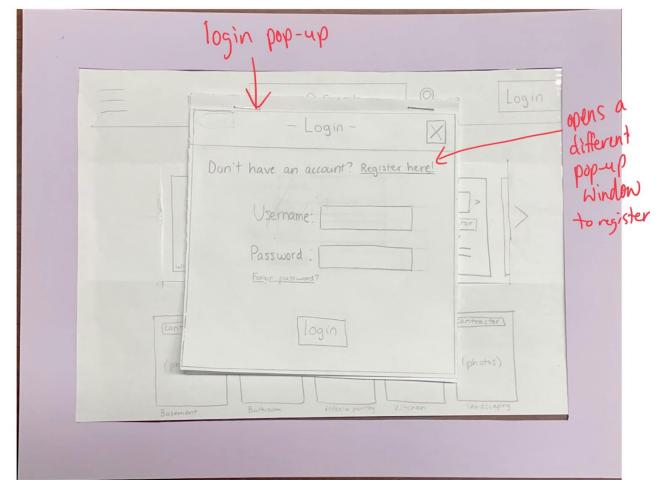


Figure 8.2: Login pop-up

The expanded menu will appear when the user selects the hamburger menu button (Figure 8.3) and will close when the “X” button is pressed, the user makes another selection in the menu, or if the user clicks on a part of the screen not containing the menu. The simplicity of the menu makes navigating to pages easy to understand, and allows for quick selection.

The “Write A Post” pop up gives the user freedom to share their projects in coordination with a contractor, and to offer feedback for other users. This element creates a sense of community among users being homeowners, property managers, renters, and contractors.

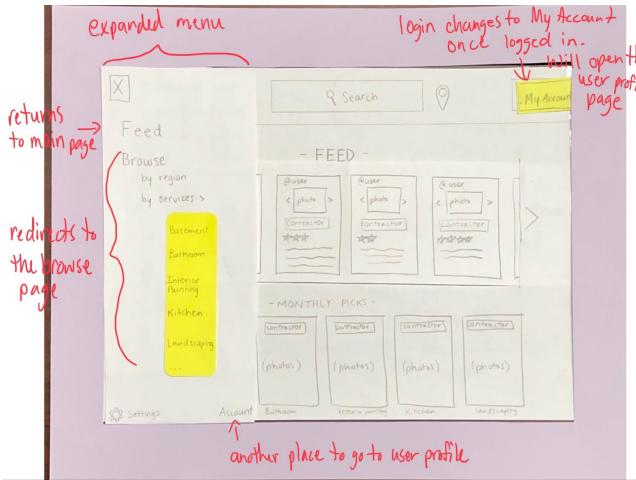


Figure 8.3: Expanded menu in main page

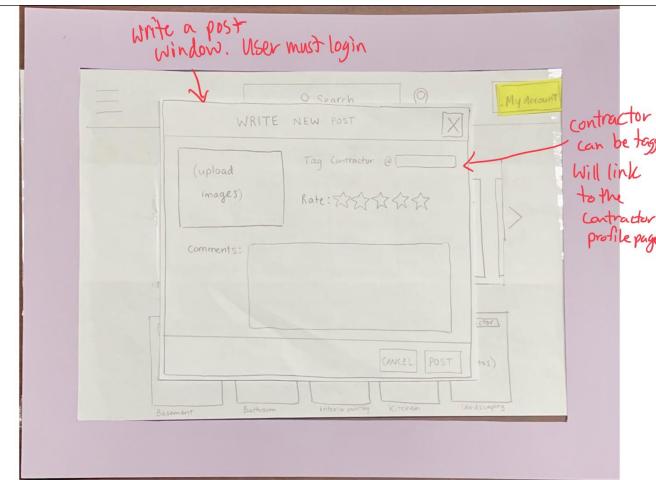


Figure 8.4: Write a Post pop up

The browse page in Figure 8.5 shows a “dollhouse” representing the various rooms and other facilities of a house that may require work. Hovering over a room of the dollhouse highlights the name, and users can then pick services based on their selections. We focused on a visual aspect like this for people who might not be very fluent in English, or people who are not knowledgeable about the different kinds of services they may require. Alternatively, users can also choose services directly from the list, displayed next to the dollhouse. Figure 8.6 shows a list of contractors available to work on the area of the house selected. Features like “Get a Quote”, “Schedule” and “Contact” are available from here. A toggle switch can also bring forth a map with all the nearest contractors displayed on it.

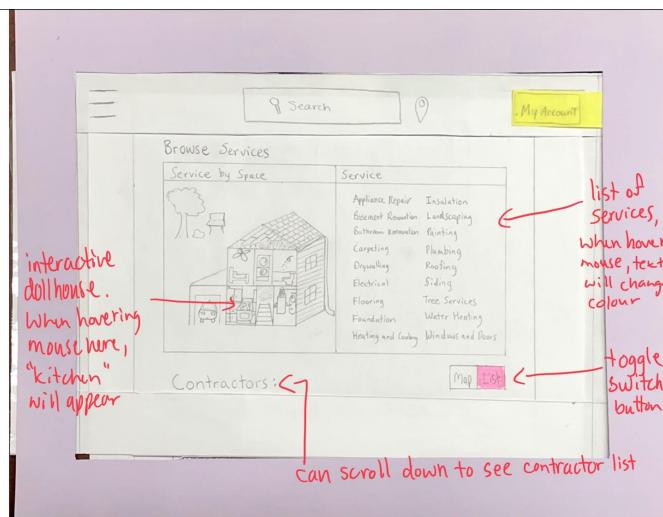


Figure 8.5: Browse Page

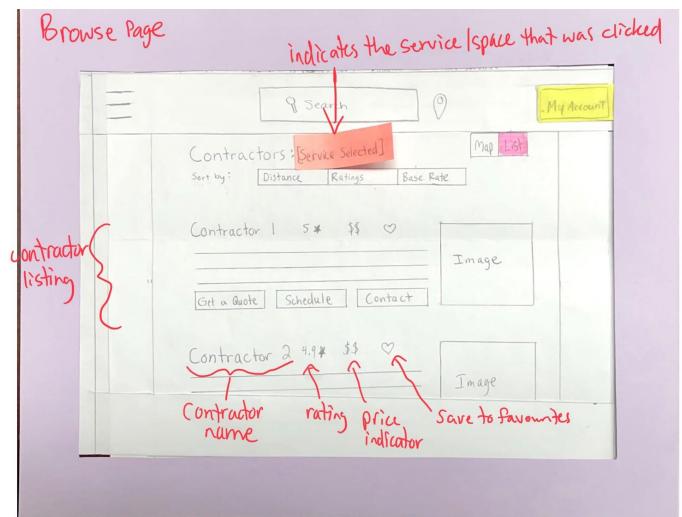


Figure 8.6: Contractor listings on browse page

In Figure 8.7, we see the map pinpointing the location of the contractors from the search. This is a very helpful feature for users to easily find a contractor based on proximity to their location and get information on the contractors' reviews and a short description of the services they offer. In Figure 8.8, you can see the versatile filtering options, which enable a user to further narrow their search by controlling the radius of the area being searched, selecting a specified area or around a postal code. These options further enhance the ability of users to find exactly what they're looking for, with specificity not found on some competing platforms like TrustedPros (TrustedPros Inc.).

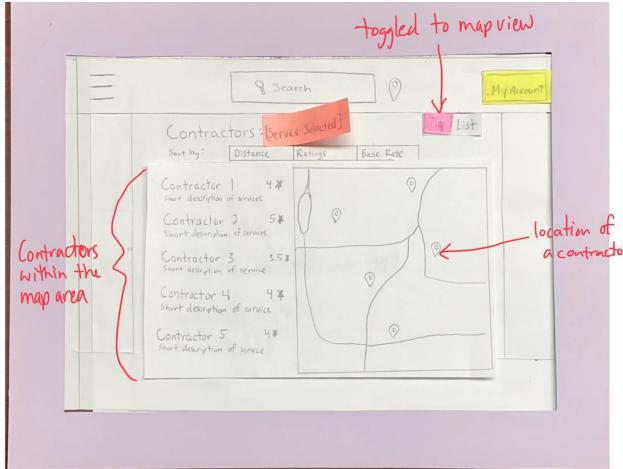


Figure 8.7: Contractor listings on map view

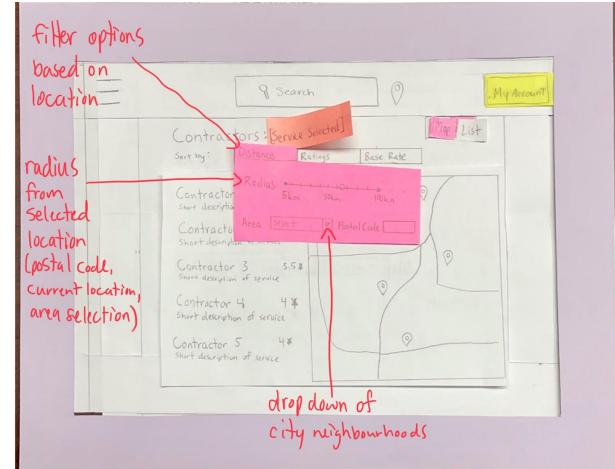


Figure 8.8: Contractor sorting options

Figure 8.9 shows the profile page for a contractor. The contractor provides a brief description about their work, what other services they provide, some pictures of their work and then customers may leave reviews and ratings. Users can ask for a quote and even schedule from the profile page as well. Upon scrolling down, we reach what is displayed in Figure 8.10, which shows the customer reviews for a contractor.

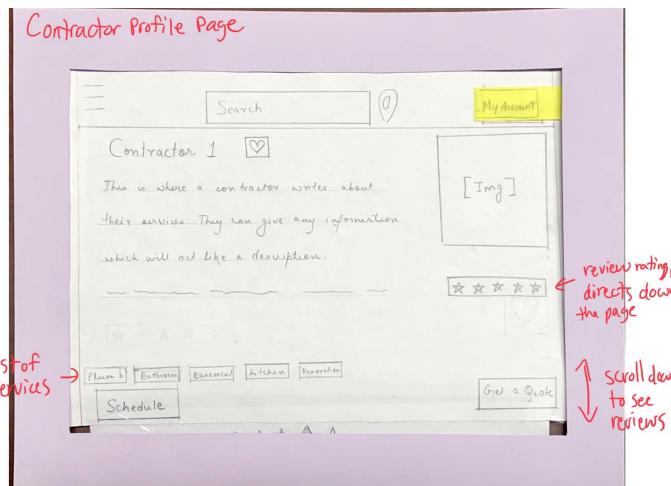


Figure 8.9: Contractor's profile page

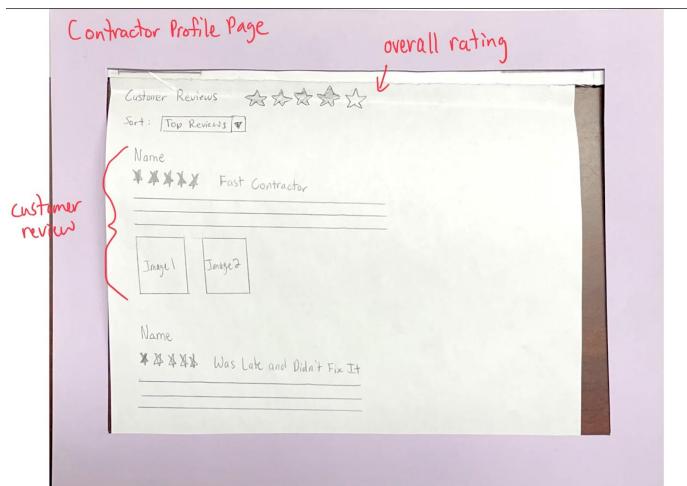


Figure 8.10: The reviews section of the contractor's profile page

If the user clicks on “Schedule” from a contractor listing, or on a contractor profile page, the user will see the pop-up shown in Figure 8.11. The user can select a date that suits them on the calendar to book an appointment with a contractor. Only the dates shown in bold are available for booking. Once a date is selected, the time slots appear on the right and the user can select one time to schedule the contractors. A confirmation pop-up appears when a booking has been made successfully. It is important to note that the time slots do not appear until a user has selected a date. This prevents the users from getting confused, and lets them follow a pattern that they are familiar with.

Alternatively, if the user clicks on “Get a Quote” from a contractor listing, or on a contractor profile page, they are directed to a quote request form (Figure 8.12). Users can enter their details in this window and mention what type of work they need and submit their requests. Again, a confirmation pop-up is displayed upon a successful submission.

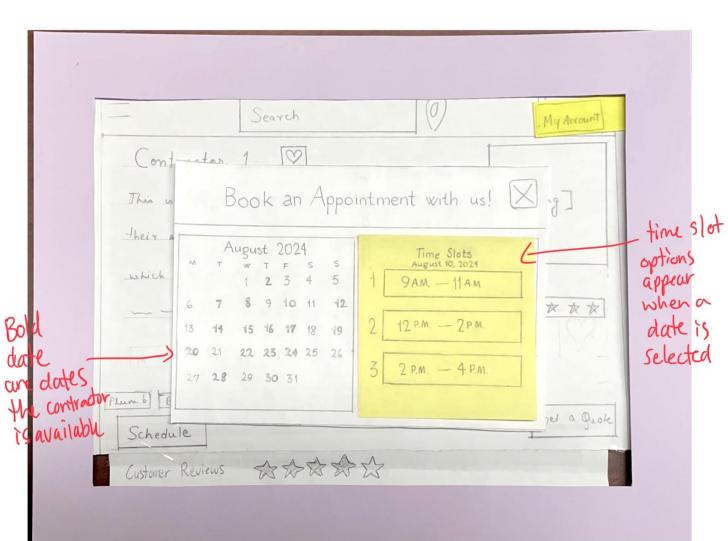


Figure 8.11: Scheduling Menu

Figure 8.12: Menu to submit request for a Quote

Figure 8.13 shows what the user account page will look like. A user can upload their own picture or select an avatar as their profile picture. It will also contain a list of their uploaded posts, a user-managed list of contractors they have saved or previously booked appointments with, and their bookings.

Note: Though a section for booked appointments was not presented on the user profile prototype page, it was previously discussed with the team. Due to time constraints, it was not included in the prototype.

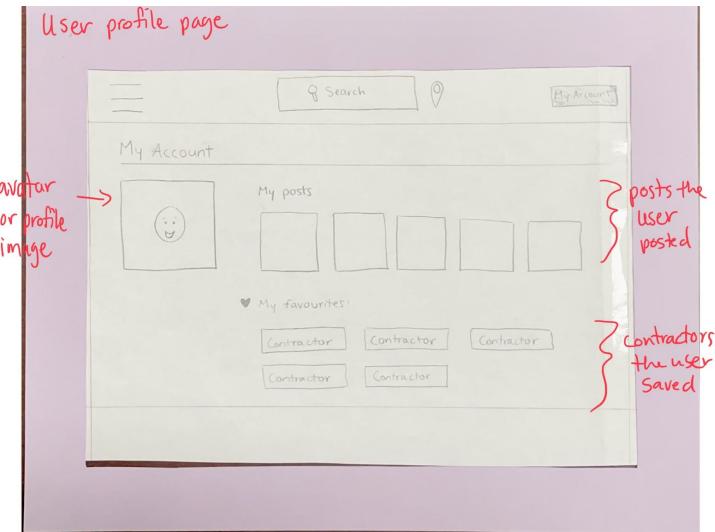


Figure 8.13: User's Profile Page

Part F: Prototype Evaluation

Participant 1

Participant 1 is a 31 year old male that is a CPA (Chartered Professional Accountant).

After interacting with the prototype, his overall thoughts of the website idea were that he liked the feed and monthly picks sections and the browsing page and contractor profiles were fairly standard from what he had seen on other websites. Initially, he was unsure if the feed posts were from the user or the contractors. He noticed some missing elements in the prototype that he would expect in a finished product.

The first missing elements mentioned were in the menu for settings. The prototype didn't include a page or window to adjust settings. He expected to find a "Help" button or "FAQ" button in the menu or somewhere on the website. When registering, he expected more information fields like email, name, and phone number. It was unclear whether the username would be his email or a chosen username for the website. This raised concern to him because if the username is not his email there was no "Forgot my Username" option.

When on the user profile page, he thought the layout and elements were similar to the Allrecipes (Allrecipes) profiles. He would have liked to see where he can view his personal information or adjust account settings. Also, he expected sections for upcoming appointments and a history of quote requests to be on this page.

When on the browse page, the pop up window for the "Contact" button, the "Write a Review" button and the overall rating at the top of the "Reviews" section was missing. He thought changing the "Base Rate" sort options to \$, \$\$, \$\$\$ versus "Increasing" and "Decreasing" would be a more useful sort, since it is standard for other websites. He raised the question as to how the dollhouse hover feature would work on a mobile device. This is something we can consider in future prototypes.

In the "Get a Quote" window, the "Type of Service" would be better as a drop down selection.

There were some inconsistencies across pages that he noticed, one being the price indicator in contractor listing details in the list and map view. Also, the star placement on the contractor profile page was below the picture versus beside the name like on the browse page. The contractor profile page was missing a contact button.

Participant 2

Participant 2 is a 22 year old male. He is currently a student studying Electrical Engineering.

Participant 2 provided a lot of feedback about our interface prototype including what worked and what didn't work for him. What worked for him was the general flow of the pages was very clear and concise, he mentioned that it had the feel of browsing on AutoTraders (TRADER Corporation). He enjoyed the "post" feature because it keeps people engaged and interacting with the website. Booking an appointment with a specific contractor was straight forward. Also, he liked the dollhouse because it is user friendly and interactive.

Additionally, he provided plenty of feedback for what didn't work or what could be improved. For the browse page he would have liked it if there was an "available now" section where there would be a list of contractors who are available now instead of looking through the contractor's schedules individually. On the "My Account" page, participant 2 mentioned that it would be helpful if the appointment bookings would appear on the user profile after they booked something. As for the "Main" page, there is no shortcut to book a contractor and instead he had to go through "browse" from the menu, he suggested having a "Book Now" button on the "Main" page to easily jump to the list of contractors. On the Login/Register pop-up the username should be an email because he feels he would forget a username more easily.

Participant 3

Participant 3 is a 21 year old female business student.

When interacting with the prototype, she loved the aesthetic and the pop-ups in general that were showing up in the site. Furthermore, she loved how the feed moved sideways and the "Browse by Region" feature where you can alternate between list and map feature, and called it "really fun to use".

However, she did have some feedback on what she thought was missing.

Regarding the scheduling feature, she was confused about whether the user had to have had a quote before scheduling, and once when schedule is confirmed, if it shows up on the user's account.

On the feed and how it relates to the user account page, she was concerned about how all the posts would fit in the user's account page. For example, she had imagined it would implement a side-to-side scrolling behavior, similar to the feed. Furthermore, since all user posts show up on the homepage, she wondered how the site plans to deal with harmful, negative, or upsetting posts.

With writing new quotes and posts, she wanted to know whether there is a word limit for the amount you could write in the description of the “Get a Quote” screen and when writing new posts.

She also wanted to see a “Settings” feature implemented in the user account page for further customization.

Participant 4

Participant 4 is a 23 year old second year psychology student.

Participant 4 had a lot of positive feedback about the prototype regarding the dollhouse feature and how it incorporates visual understanding of the site’s functionality. She also liked the sorting drop-downs available not only to sort out reviews regarding contractors, but also to sort the list of contractors in search results by base rate, distance, and review ratings.

However, she had some feedback as to what she thought our prototype was missing.

She thought a brief introduction about the site on the homepage to describe what the site does and what problem it aims to solve would be helpful to new users, and also the implementation of help features to provide step-by-step assistance to do common tasks.

She would have liked to see a confirm button for scheduling the time and date. For example, instead of the pop-up confirming the appointment, she would implement a pop-up asking “Do you want to confirm the appointment?” with “OK” and “CANCEL” options.

She also would have liked a way to navigate to the user page from the main hamburger menu, as well as having a “Settings” feature on the user account page as it is commonly seen on other sites. She was concerned about not having the option to log out.

Overall summary

We learned a lot from the valuable feedback that our participants gave, which helped us see what our website is missing and what works well. We learned that there are some things we oversaw while making the prototype, such as the missing “Booking” section on the user profile page, and a “Write a Review” feature on the contractor profile page. These elements were previously discussed in the early stages of prototyping but due to time constraints, they were not included in the paper prototype design. Nonetheless, since the participants noticed these missing features, it reinforces that they are important and should be included in future prototypes.

From having different people test out the prototype, we learned that we should incorporate more help and safety features such as a “FAQ” section and confirmation pop ups when booking a contractor. We could also add more shortcuts to different pages instead of having to go through a variety of pages to get to a specific feature. We learned we should also be more consistent with the layout, pricing, and review stars throughout all pages.

Based on the feedback, we learned that our sorting options work well for the most part, except we could potentially change the sorting for “Base Price” from “Increasing” and “Decreasing” to \$, \$\$, \$\$\$ to be consistent with standards among other websites.

To conclude, various details will be considered in following prototypes to improve the structure and flow of navigation for users for the contractor search website. Then, in future evaluations, we can hope that feedback will be given on different aspects as the design becomes meticulous.

Appendix A: Task Distribution

Task distribution plan (Before)

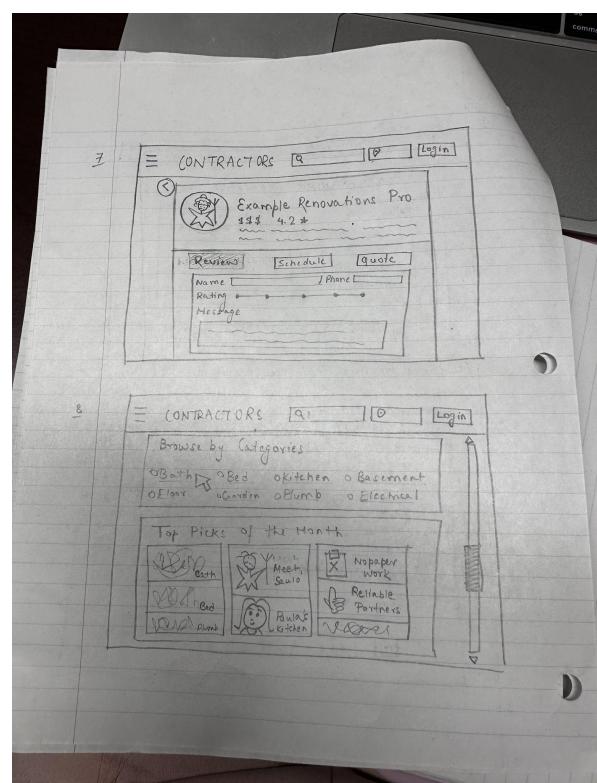
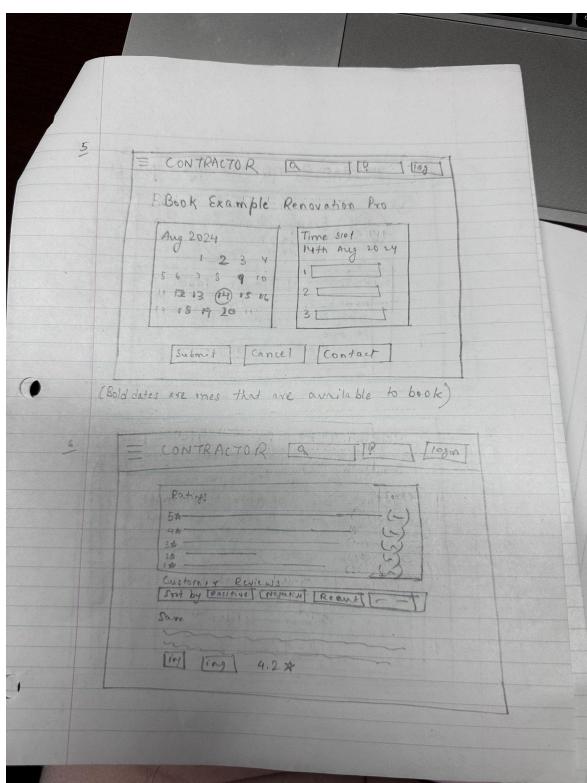
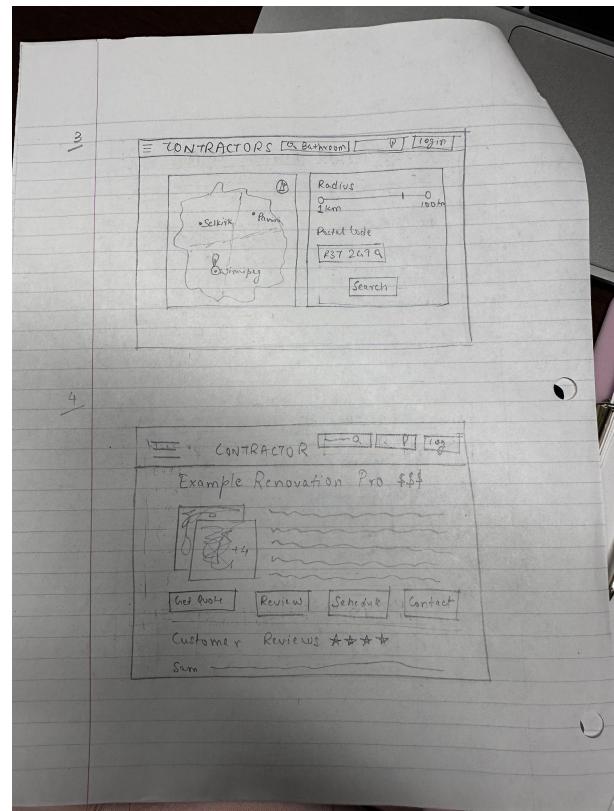
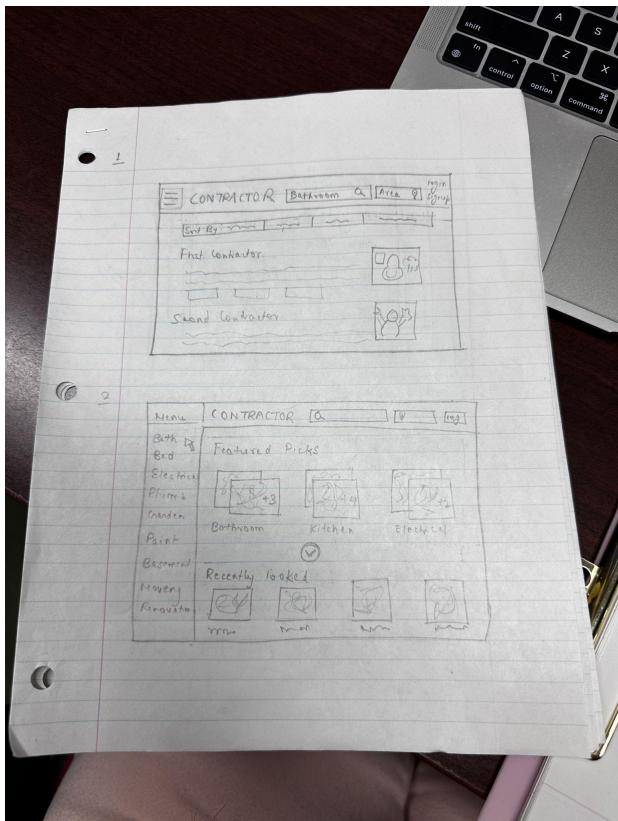
- Sketches of interface ideas
- Polished sketch
- Storyboard
- Paper prototype
- 4 participant interviews
- Report summaries

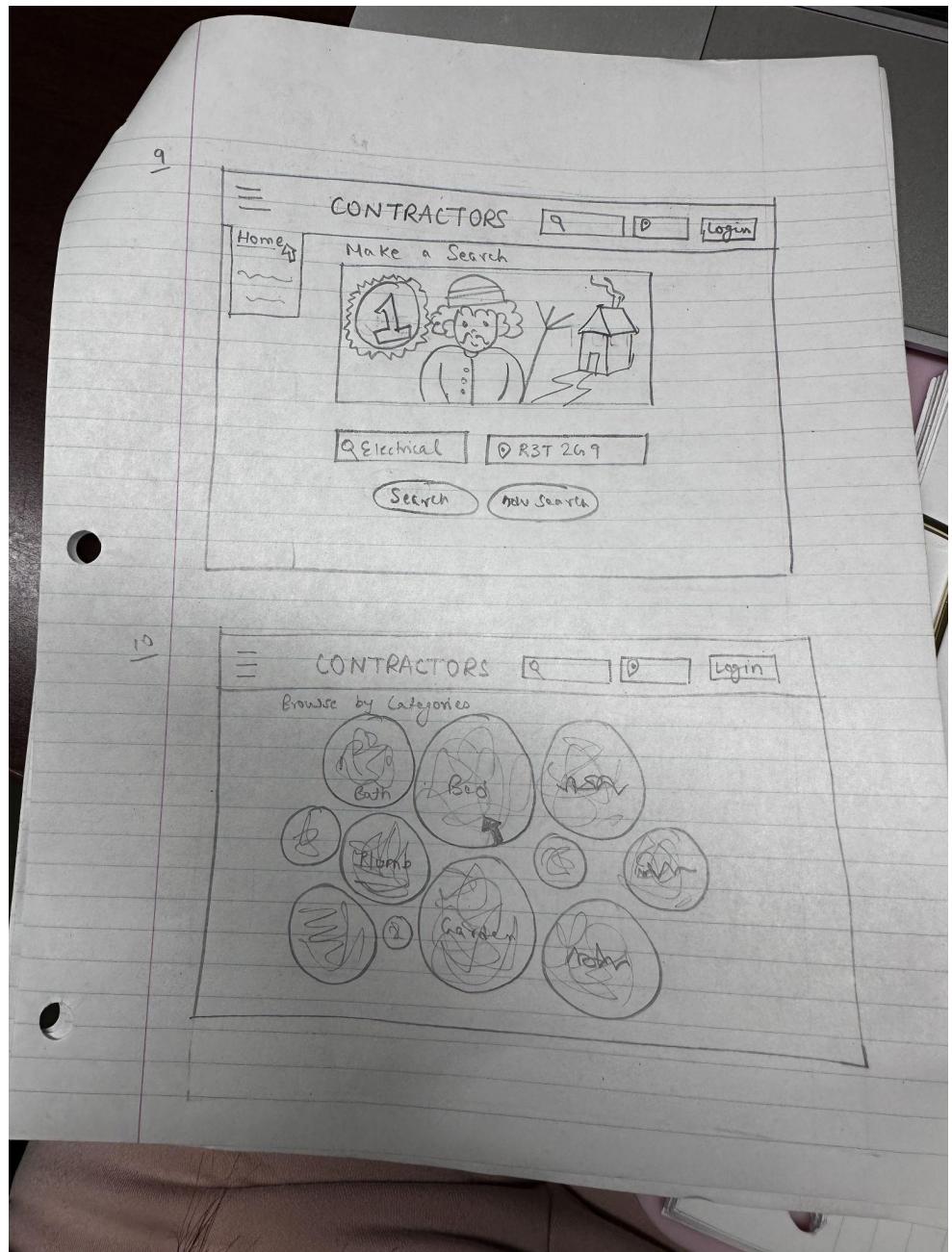
Task distribution (After)

- Ginelle:
 - Drawings for browse page for polished sketch and storyboard
 - Made browse page and map for prototype
 - Assembled part A, B, C, D, E
 - Interviewed participant 1
 - Read and revised the entire report
- Toran:
 - Drawings for main page for polished sketch and storyboard
 - Made schedule window for prototype
 - Read and revised the report
 - Submitted MS2
- Thamira :
 - Drawings for contractor profile page for polished sketch and storyboard
 - Made layout/outline for most pages for prototype
 - Interviewed participant 3 and 4
- Melanie:
 - Drawings for user profile page, login window and write a post window for polished sketch and storyboard
 - Made main and user profile page and login and write a post windows for prototype
 - Interviewed participant 2
- Pritha:
 - Drawings for map and schedule features for polished sketch and storyboard
 - Made contractor profile page for prototype
 - Booked a room for the meeting
- All:
 - Completed 10 sketches
 - Summarised interview findings

Appendix B: Sketches

Pritha



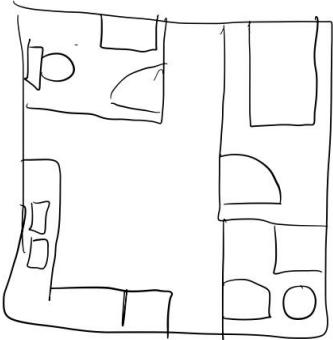


Ginelle

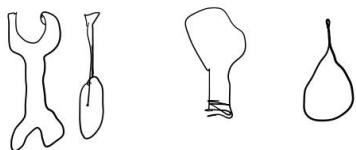
①

(⌚) NAME Services Contractors Get a Quote

Room to Renovate



Pick a Service



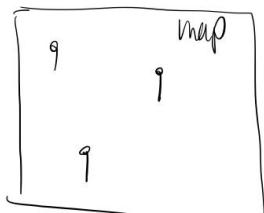
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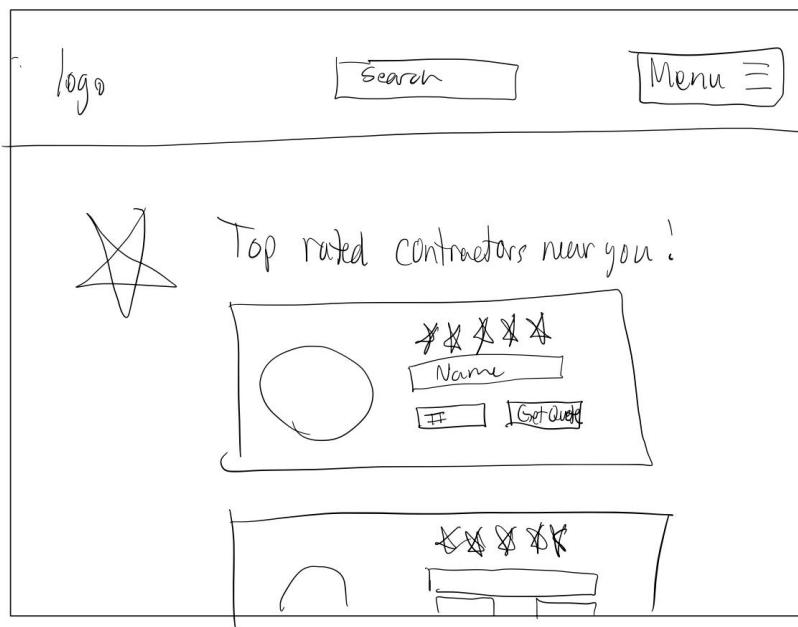
NAME

[] Search

Contractors near you



(3)

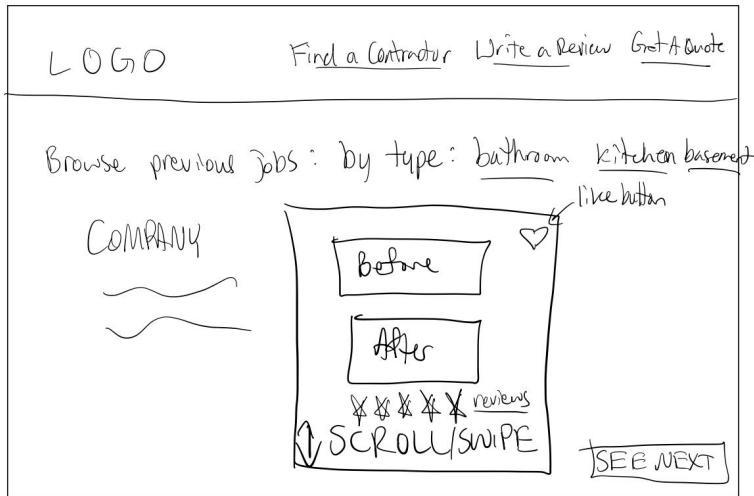


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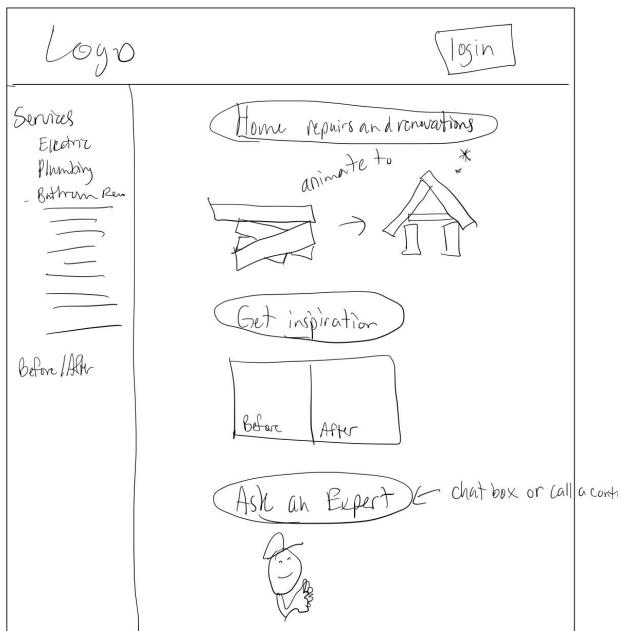
A hand-drawn wireframe sketch of a web-based contractor search interface. The top navigation bar includes links for "ABOUT", "SEARCH", "SERVICES", and "REVIEWS". Below the navigation, a section header reads "On-Call Contractor Ready for a Quick Fix". Underneath this header is a "Sort By:" dropdown menu with options "Category", "Neighborhood", and "Availability". A table follows, showing contractor availability and names. The columns are "Available" and "Contractor". The rows are:

Available	Contractor
Now	Name - Service - #
Today	Name - Service - #
Tomorrow	Name - Service - #
~	~

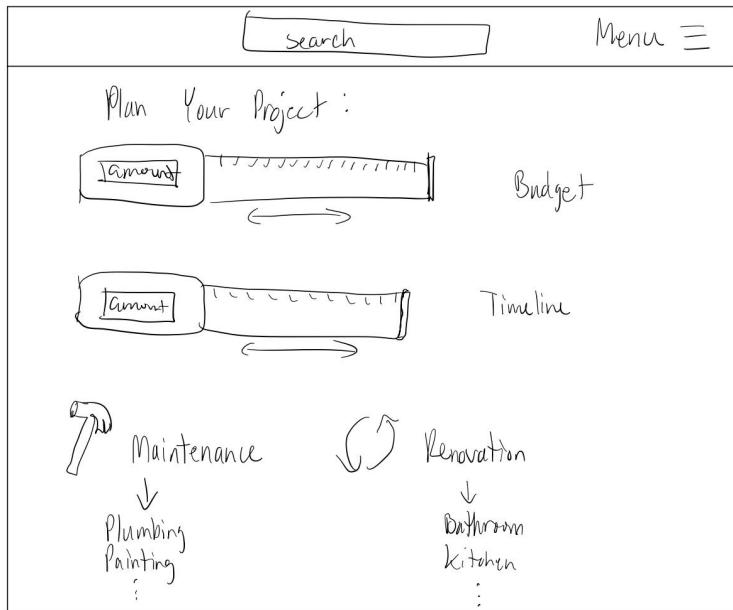
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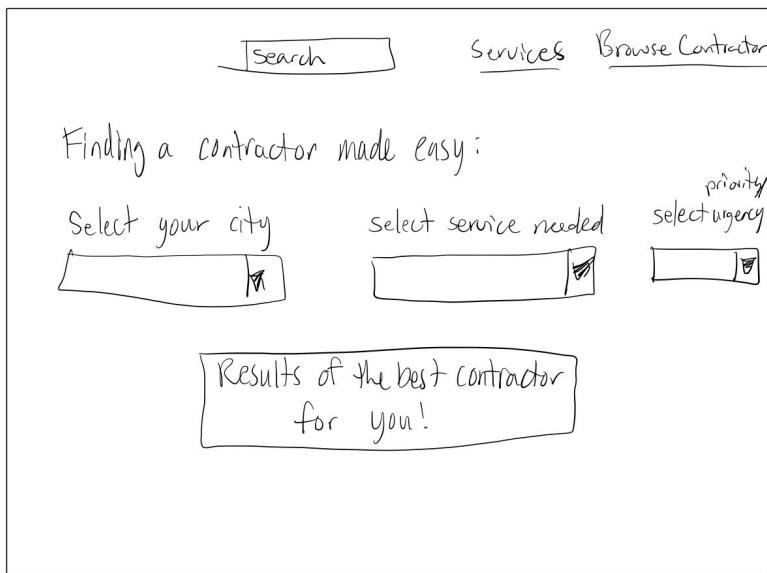
⑥



(7)



(8)



⑨

CONTRACTORS.CA

Search for Contractors near you:

City

Neighbourhood

Service

Services :

⑩



Melanie

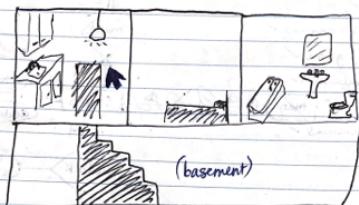
Sketch 1



Sketch 2 (CATEGORIES)



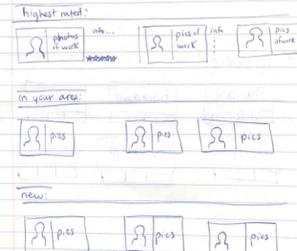
Sketch 7



Sketch 3 (organize by location)

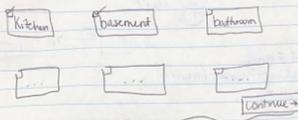


Sketch 4

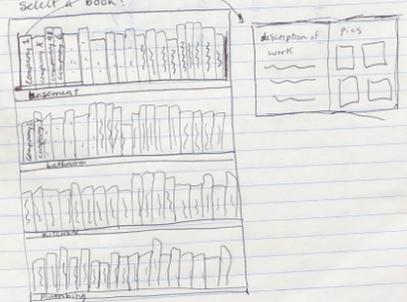


Sketch 5

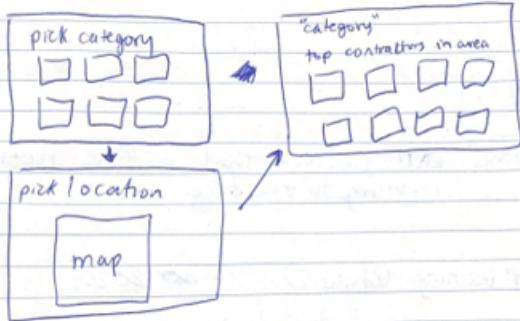
Which areas need work? check all that apply



Sketch 6 Select a book!



Sketch 10



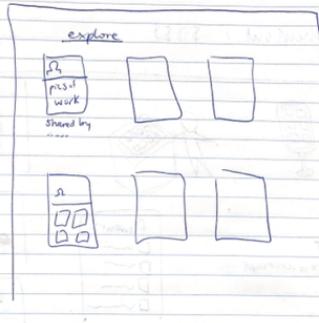
Sketch 8

Share fav to friends

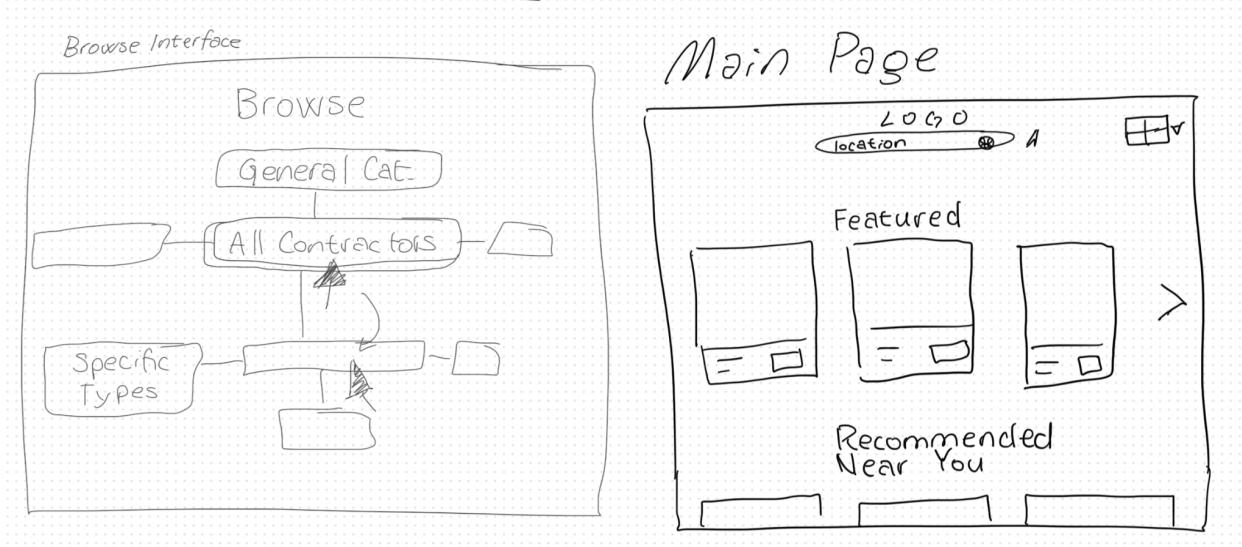


Sketch 9

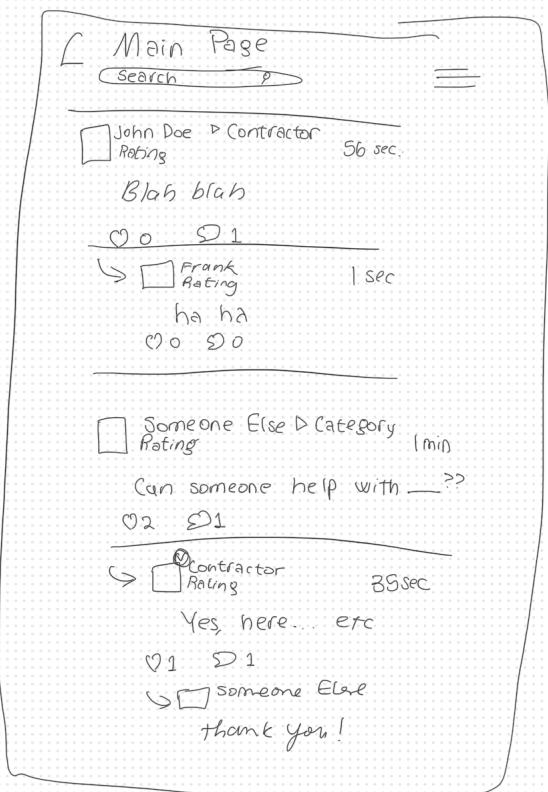
Share on general page



Toran



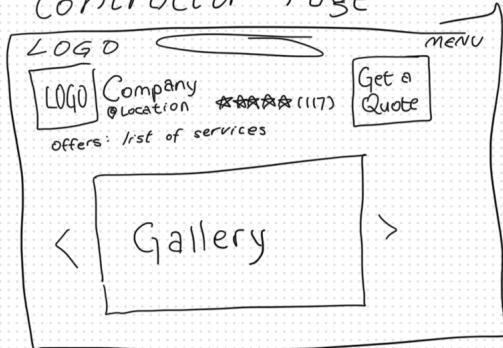
Main Page (social feed)



Main Page (Region select)



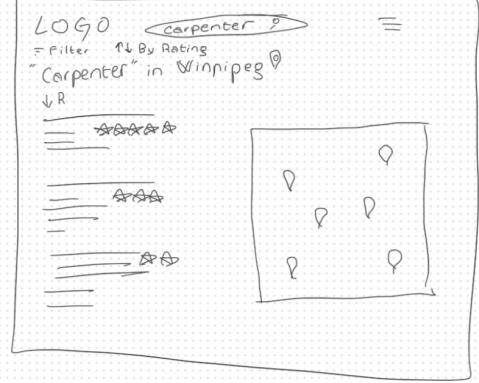
Contractor Page



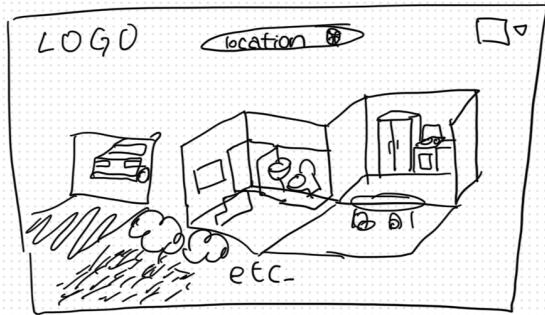
Main Page



Search Interface



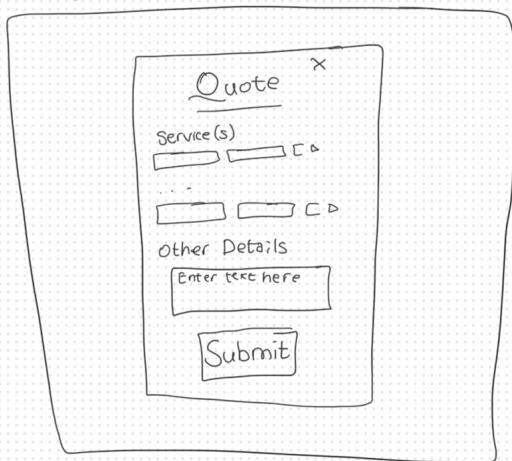
Main Page



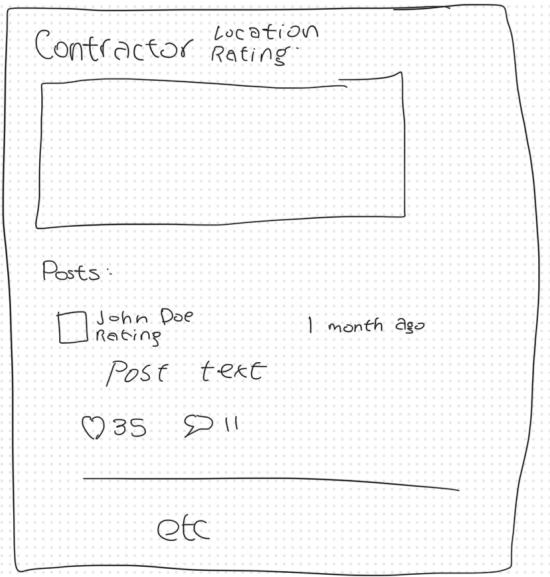
"My Favorites" Interface



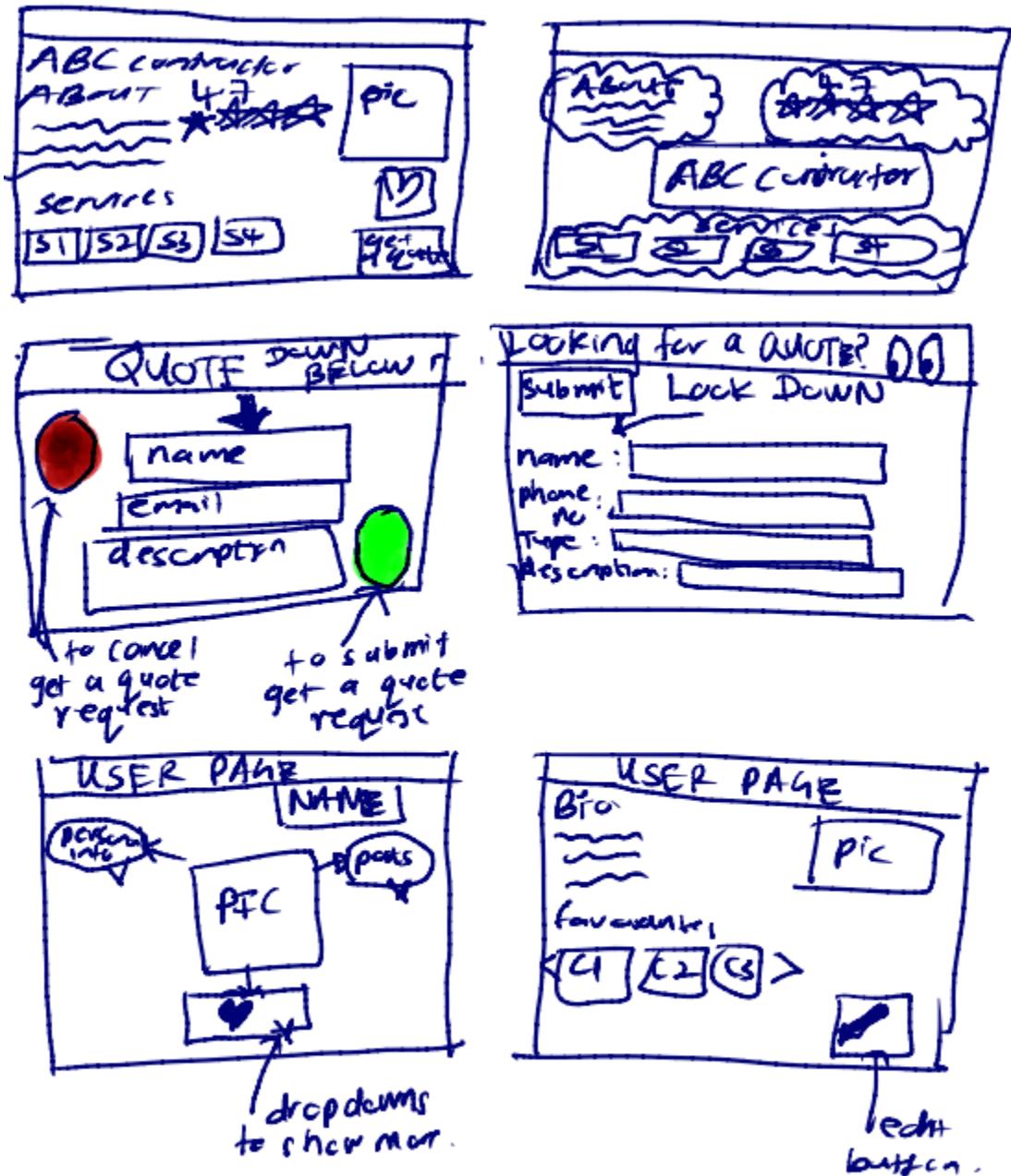
Quote Page



Contractor Page (social)



Thamira



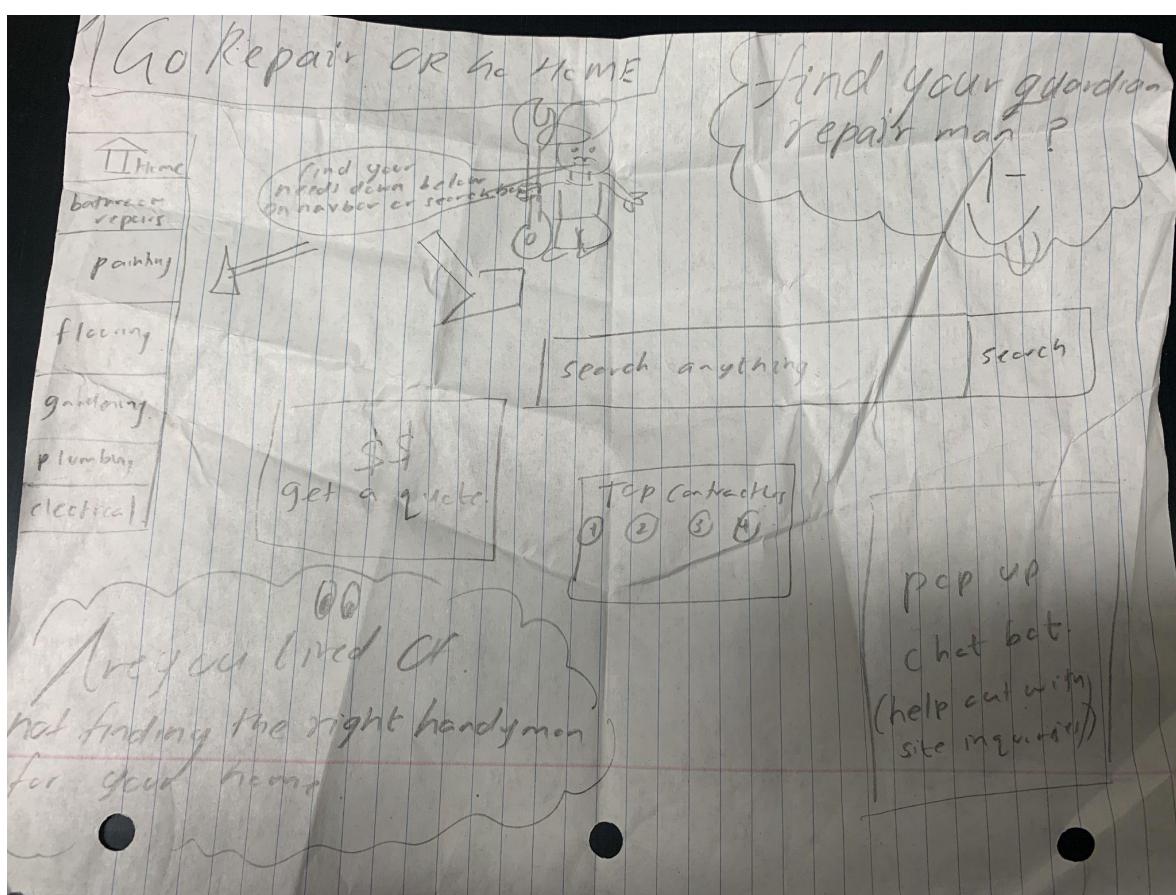
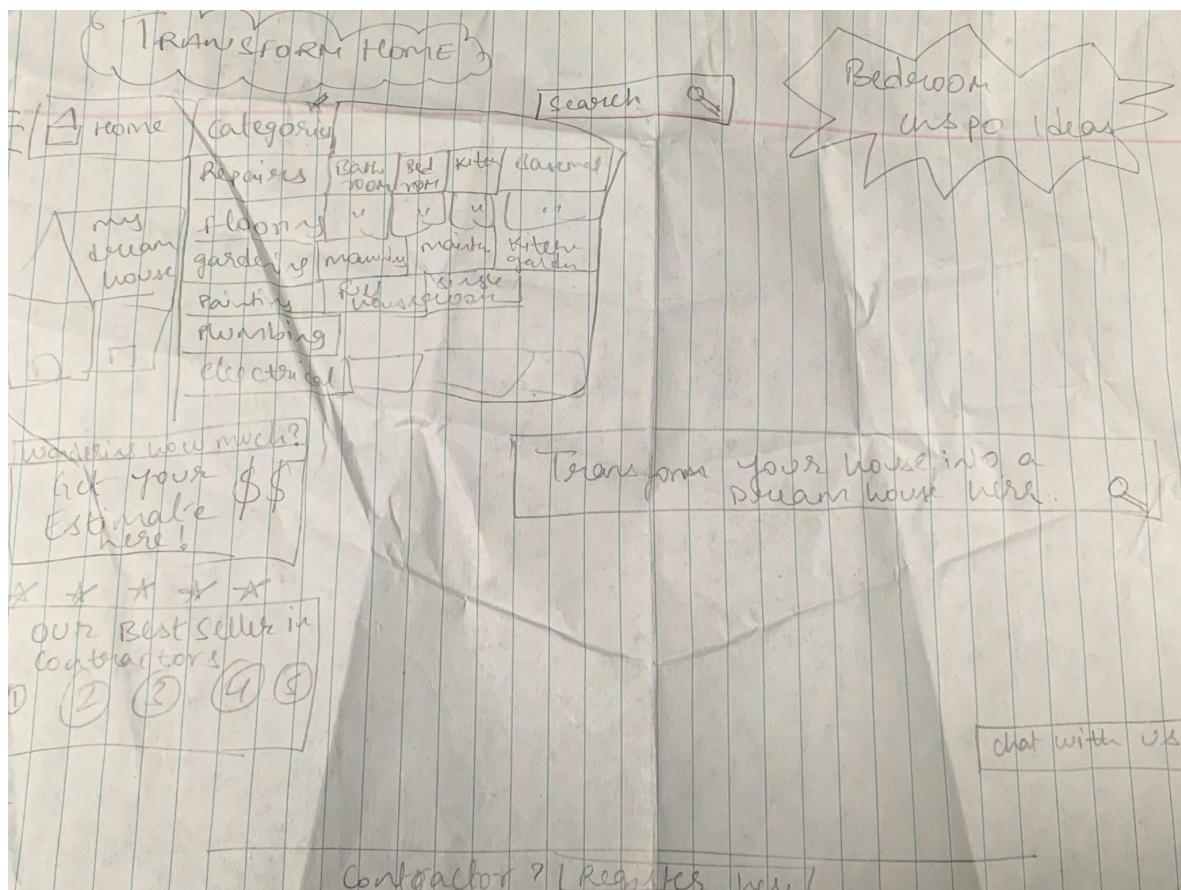
SEARCH RESULTS			
		Sort	
C1	\$1	★★★	
C2		★★	
C3		★	
C4		?	
C5			read more

scroll
down

reach
more will
redirect you to
Contractor page.

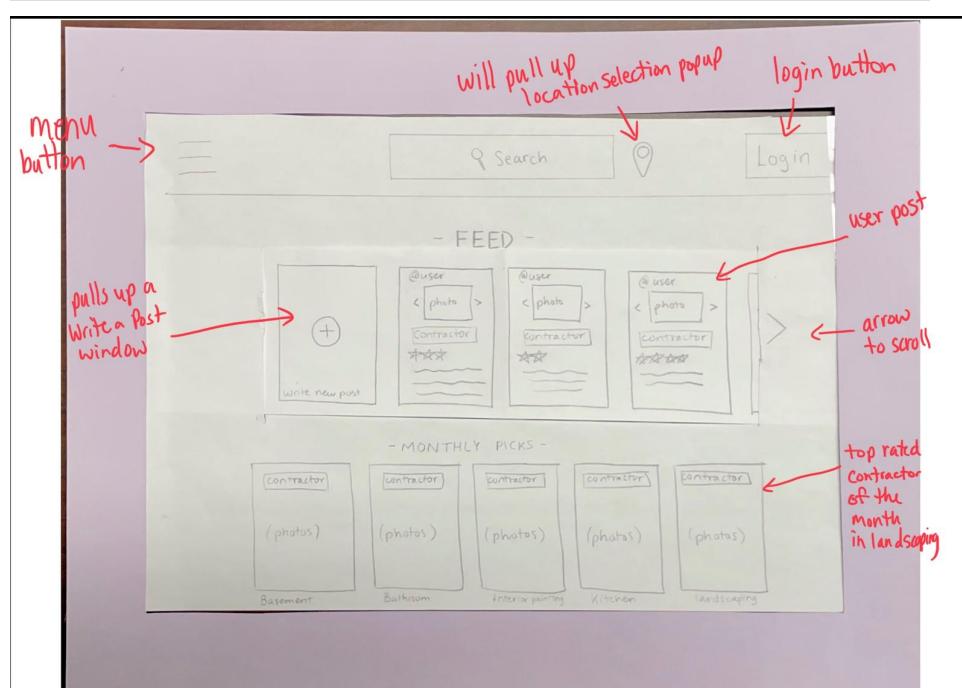
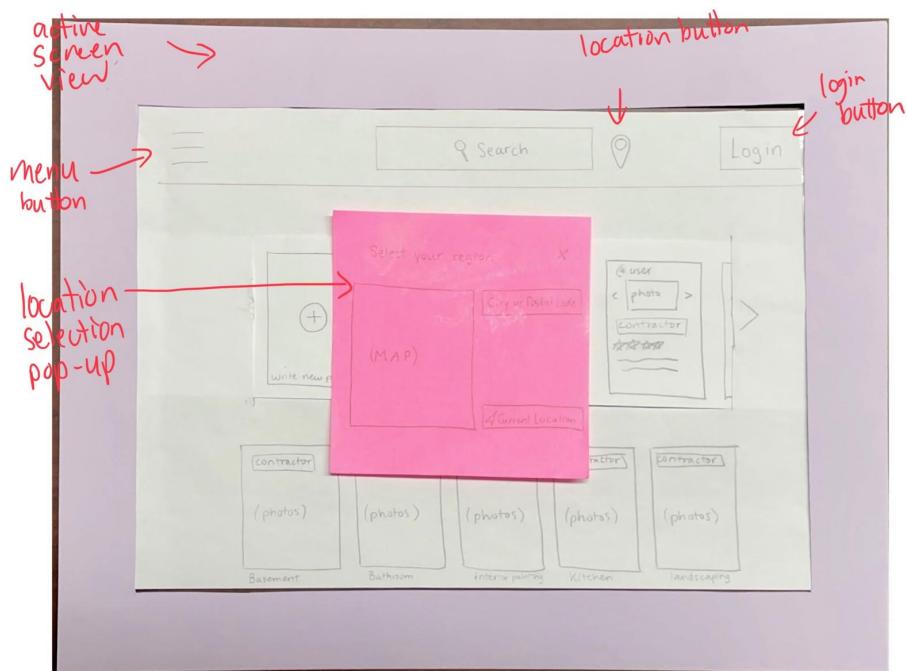
SEARCH RESULTS pg. A		
sort by	price	category
ABC Contractor	\$1	
4.7 ★★★★★		read more

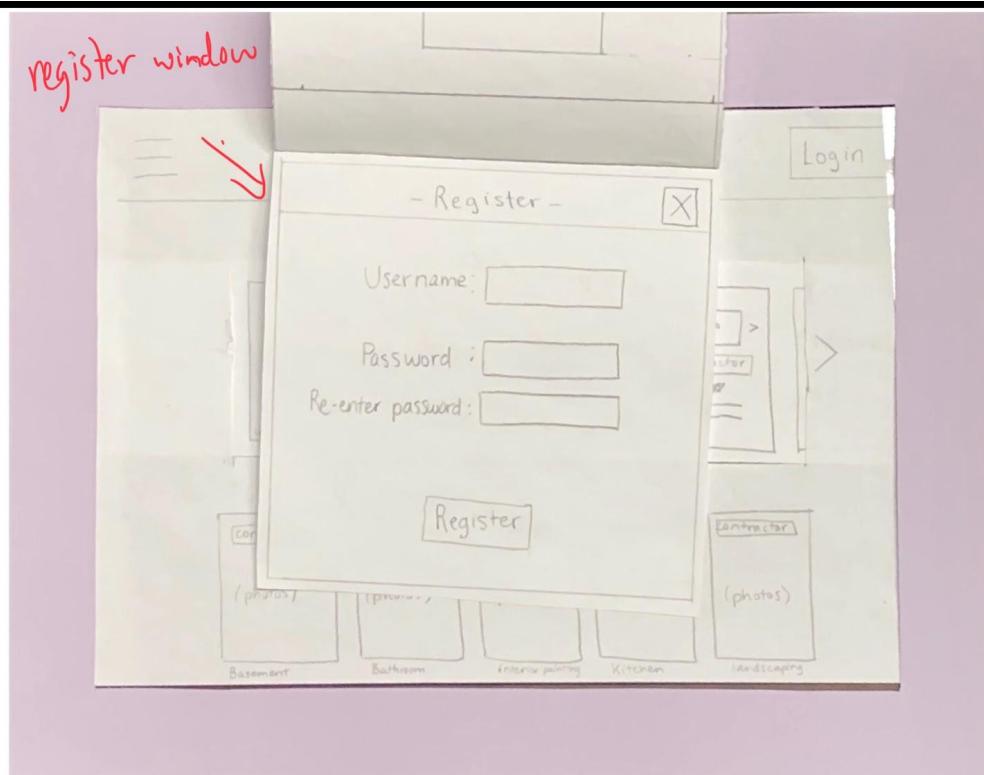
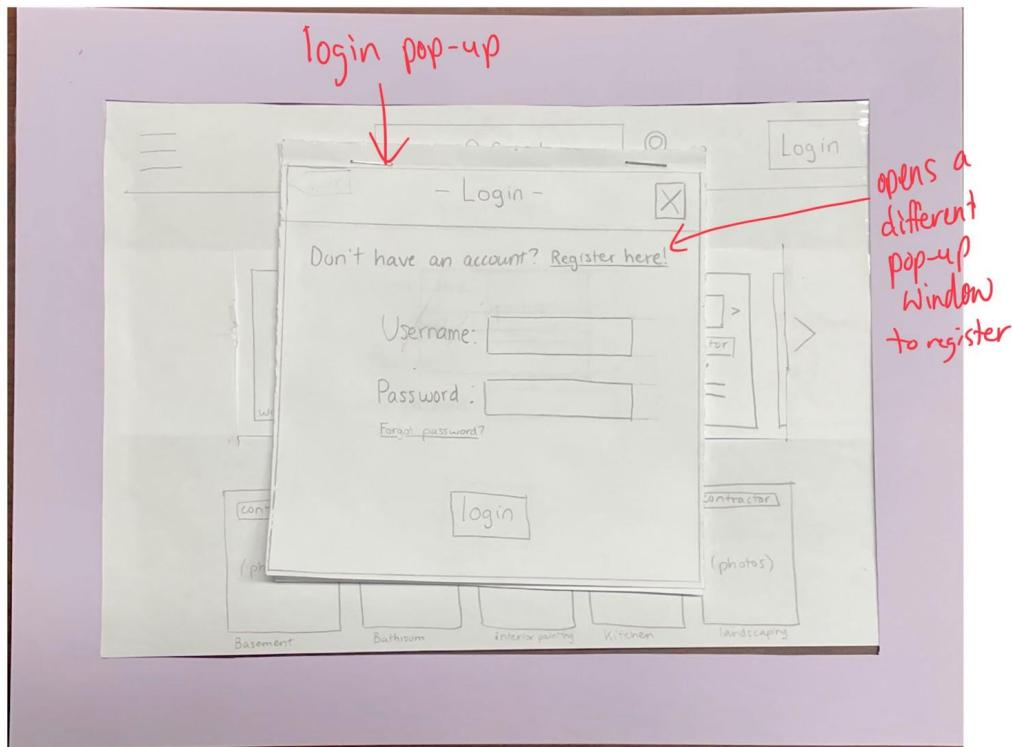
DEF Contractor	\$1
4.7 ★★★★★	S-C read more

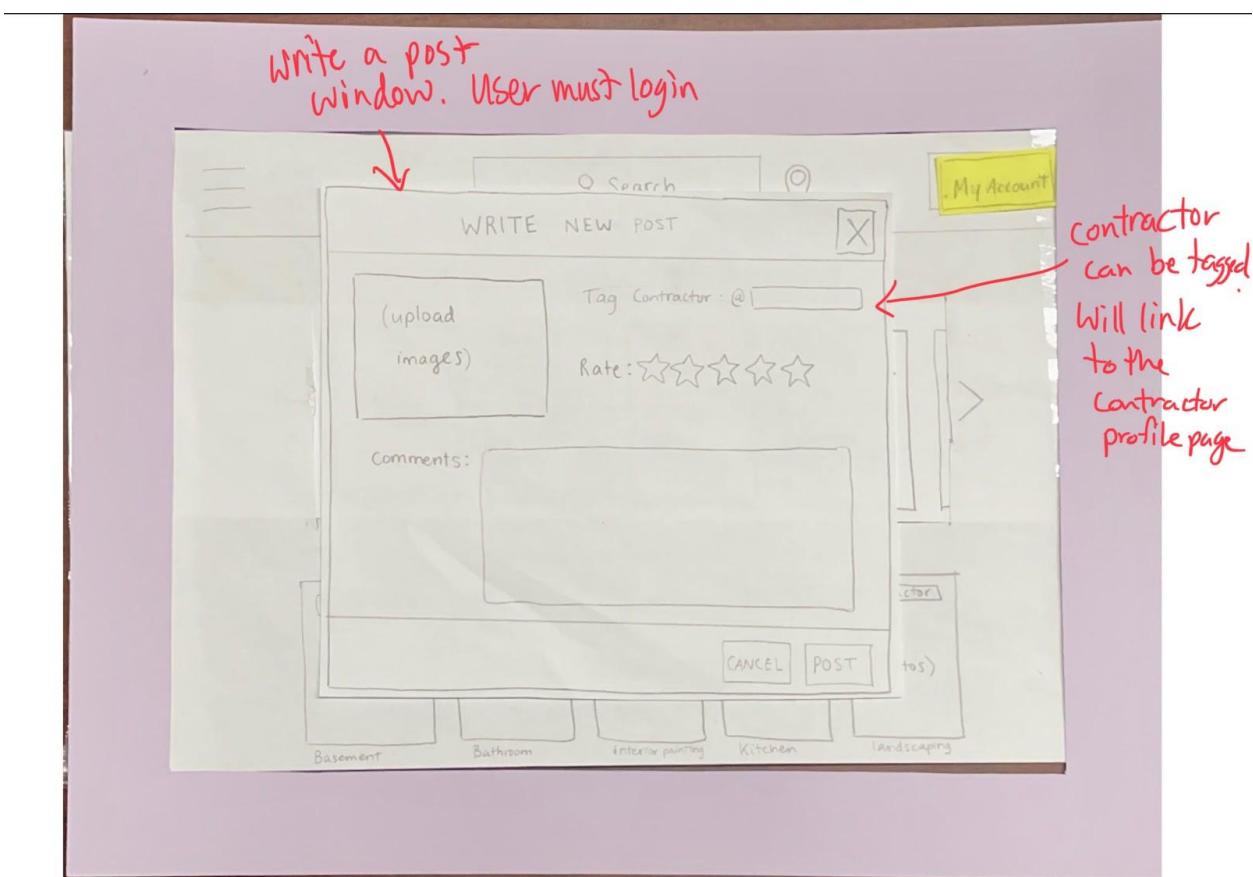
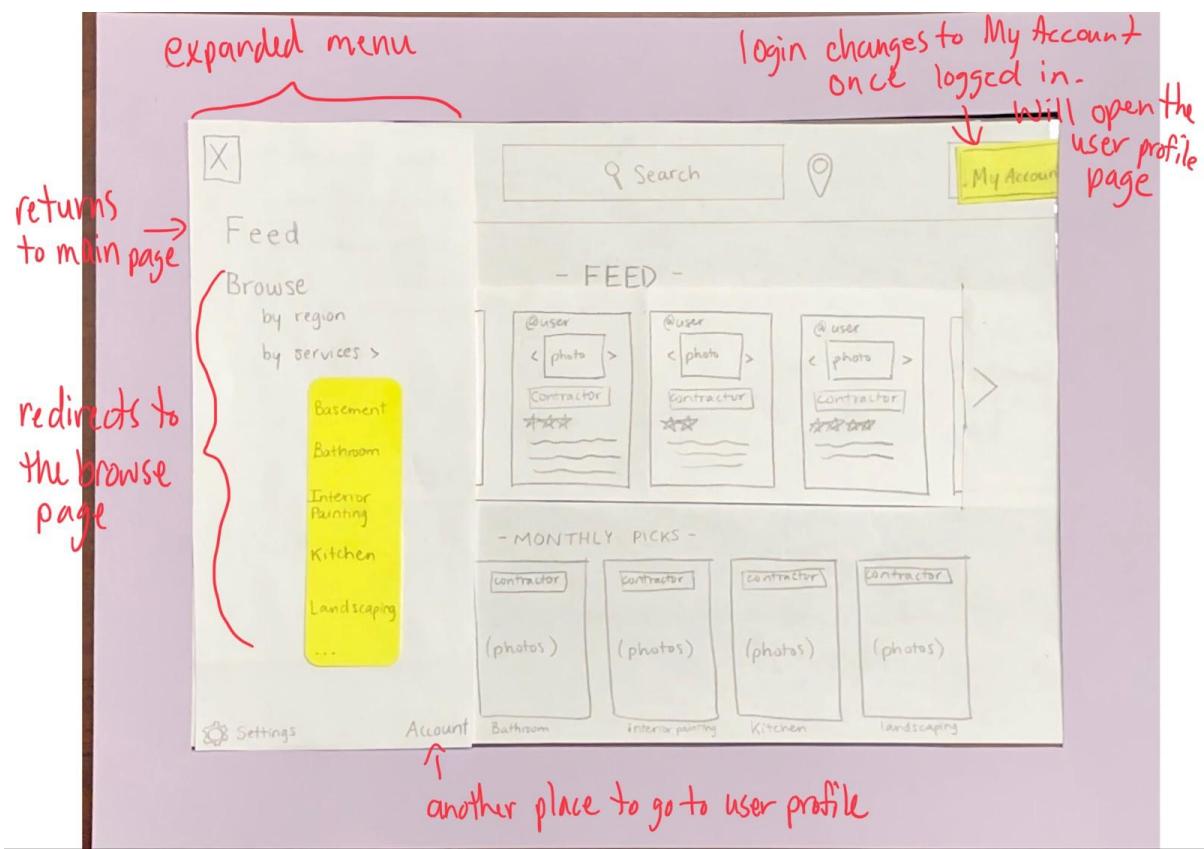


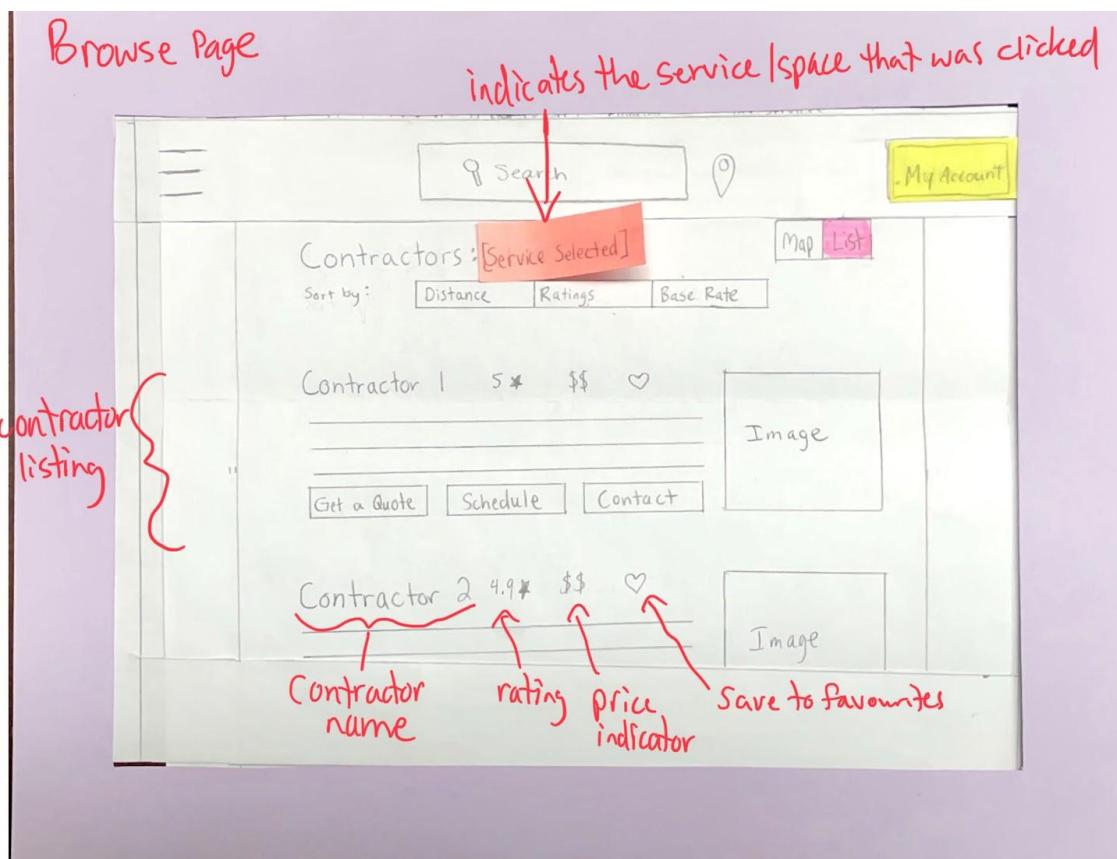
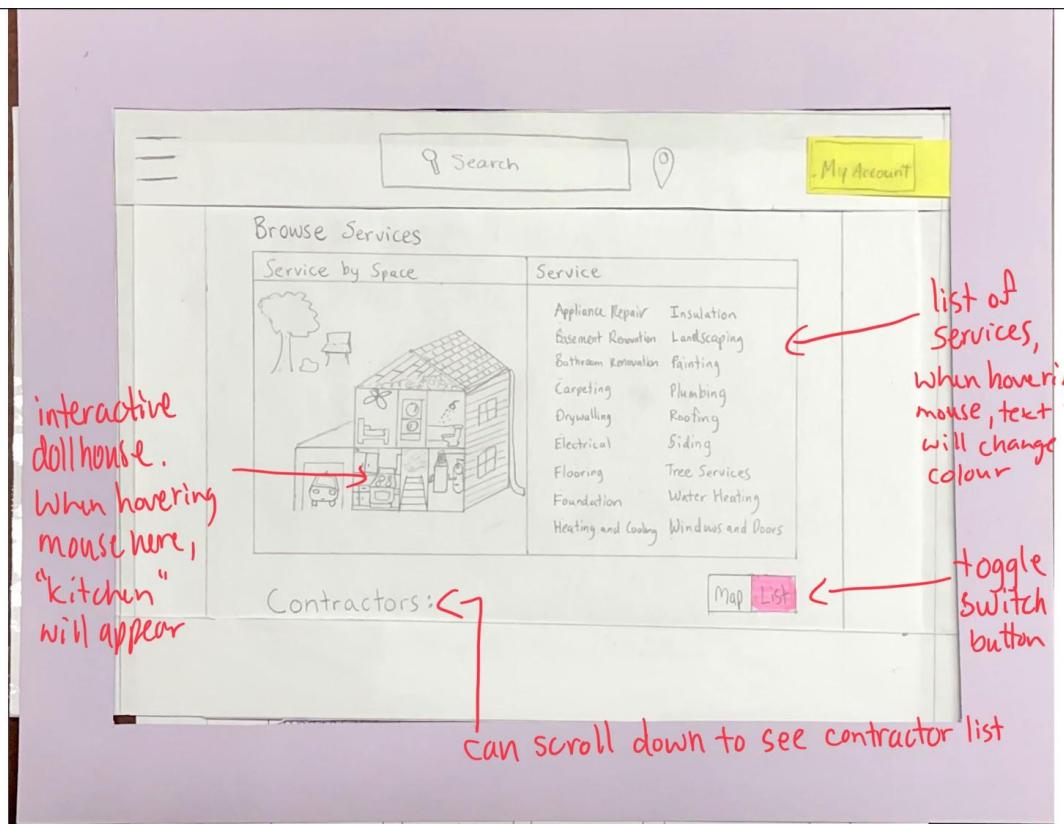
Appendix C: Prototype

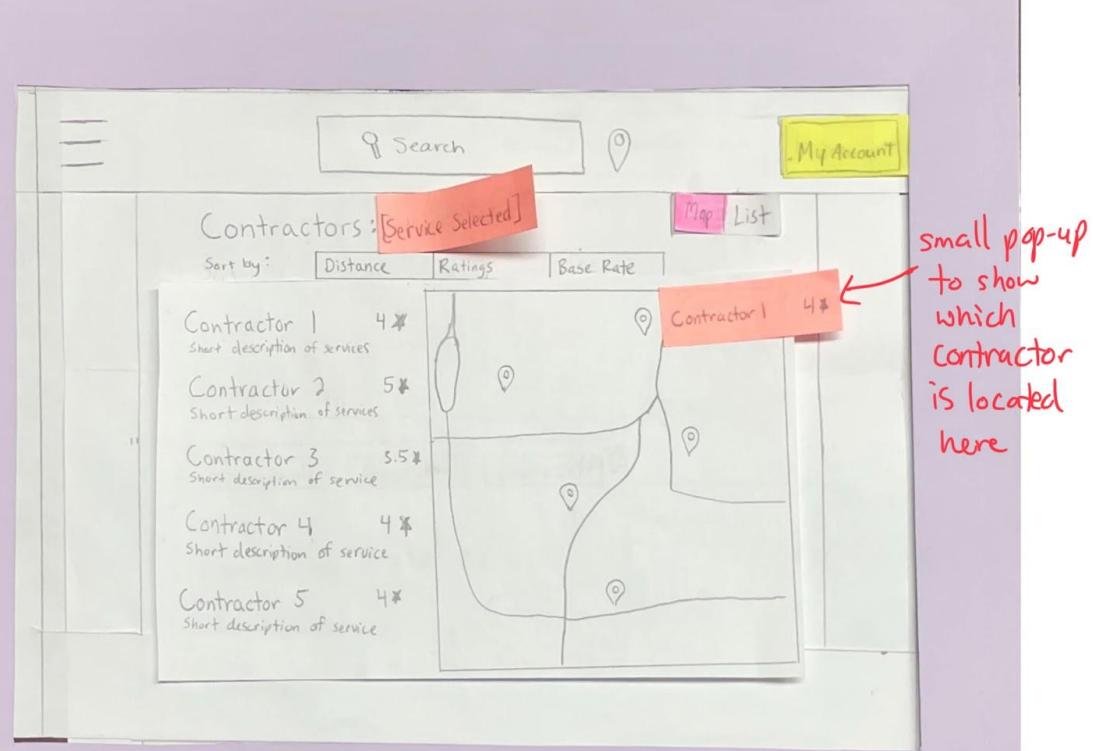
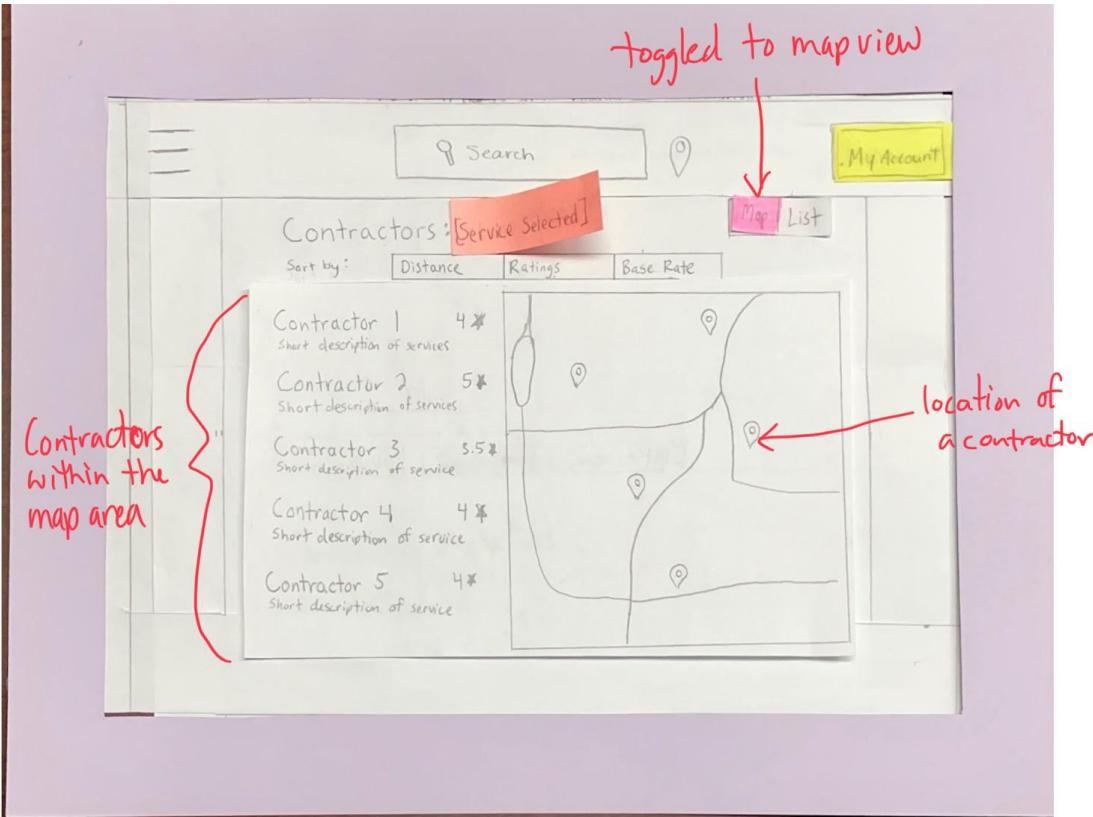
Prototype











Sort options for ratings

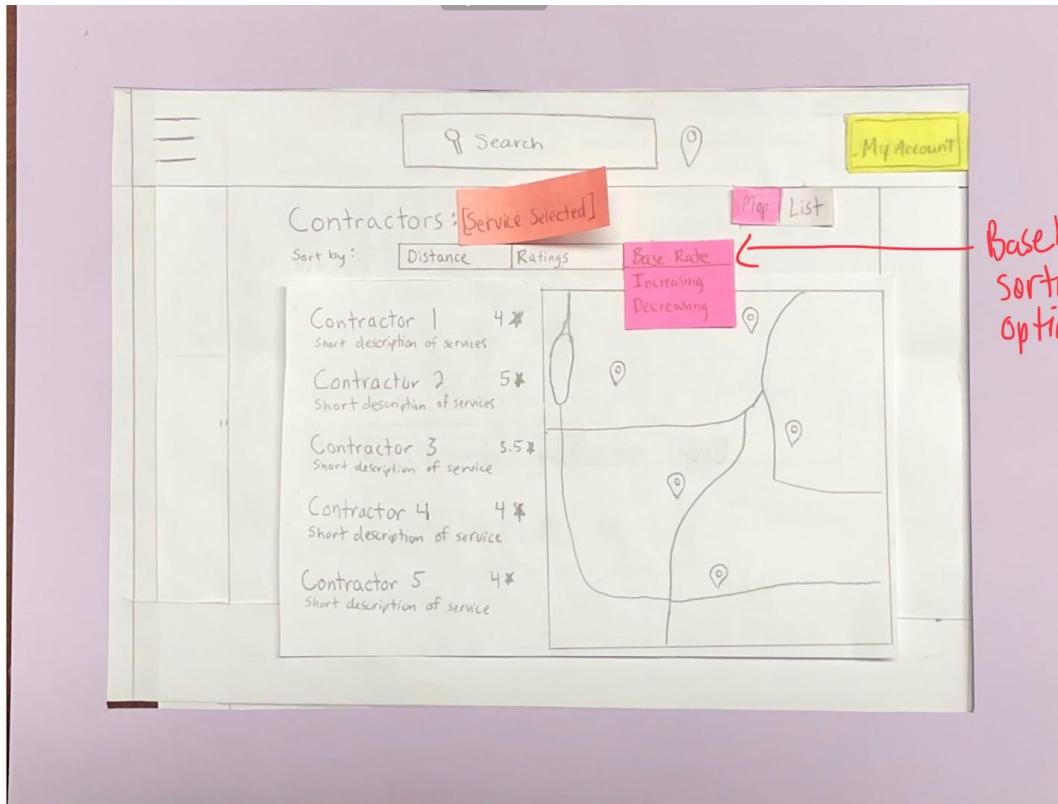
A hand-drawn sketch of a user interface for a contractor search application. At the top, there is a search bar with a magnifying glass icon and a location pin icon. To the right of the search bar is a yellow 'My Account' button. Below the search bar, the title 'Contractors: [Service Selected]' is displayed. Underneath this, there is a 'Sort by:' section with three buttons: 'Distance', 'Ratings', and 'Base Rate'. A pink sticky note highlights the 'Ratings' button. Below the sort buttons, five contractors are listed with their names, star ratings, and short descriptions. To the right of the contractor list is a map showing several location pins. A pink sticky note is placed over the map area.

Contractor	Rating	Description
Contractor 1	4*	Short description of services
Contractor 2	5*	Short description of services
Contractor 3	5.5*	Short description of service
Contractor 4	4*	Short description of service
Contractor 5	4*	Short description of service

filter options
based on
location

radius
from
selected
location
(postal code,
current location,
area selection)

drop down of
city neighbourhoods



Contractor Profile Page

Contractor 1

This is where a contractor writes about their services. They can give any information which will act like a description.

[Img]

★★★★★

Plumbing Bathroom Basement Kitchen Renovation

Schedule

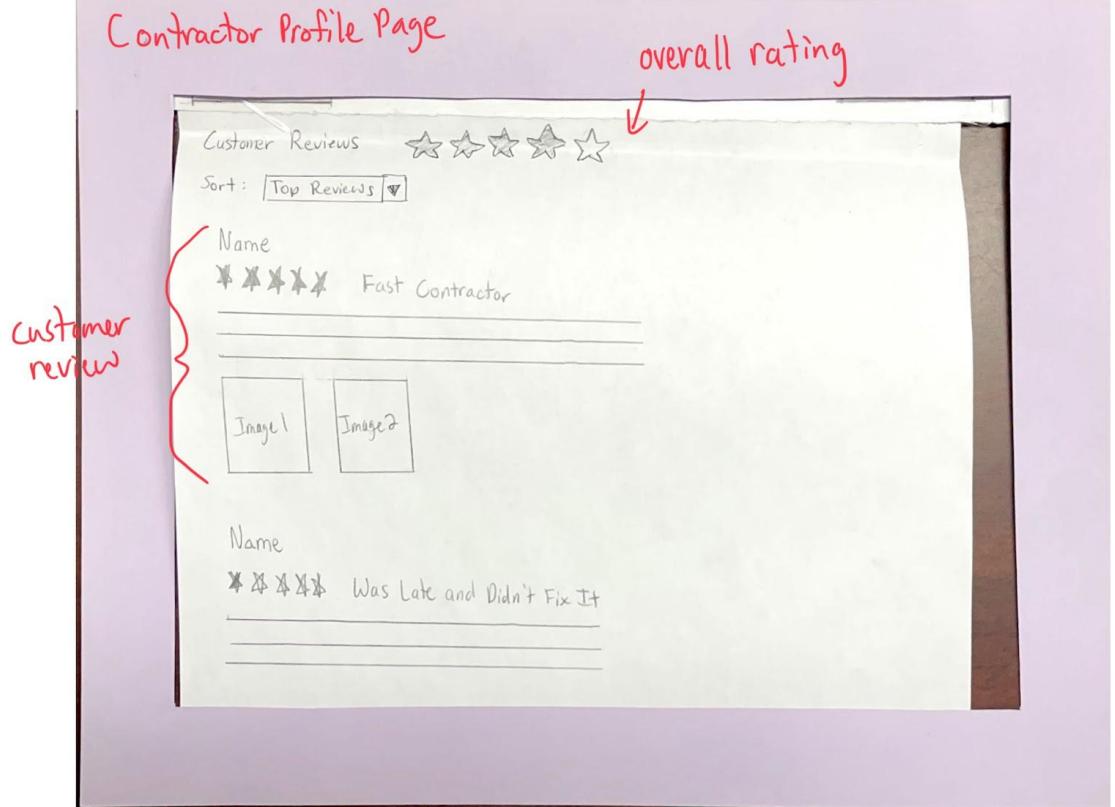
Get a Quote

list of services →

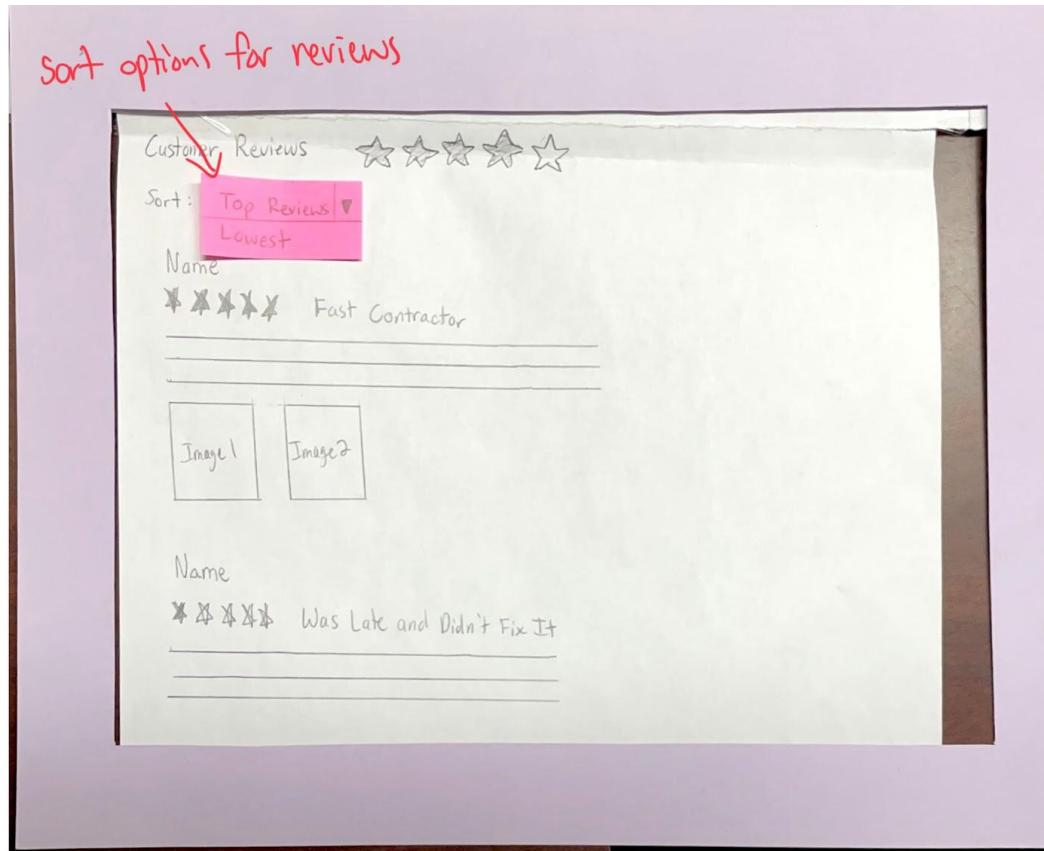
review rating, directs down the page

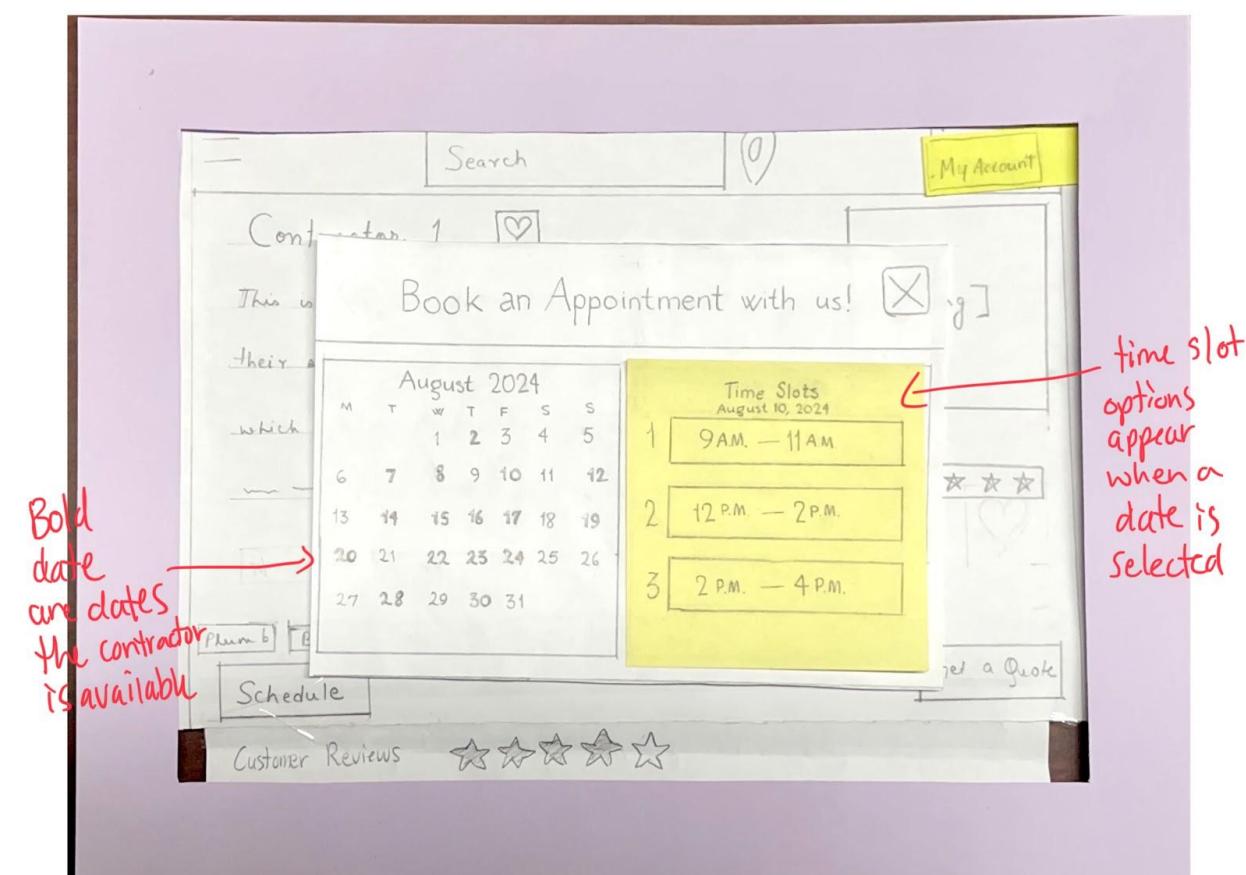
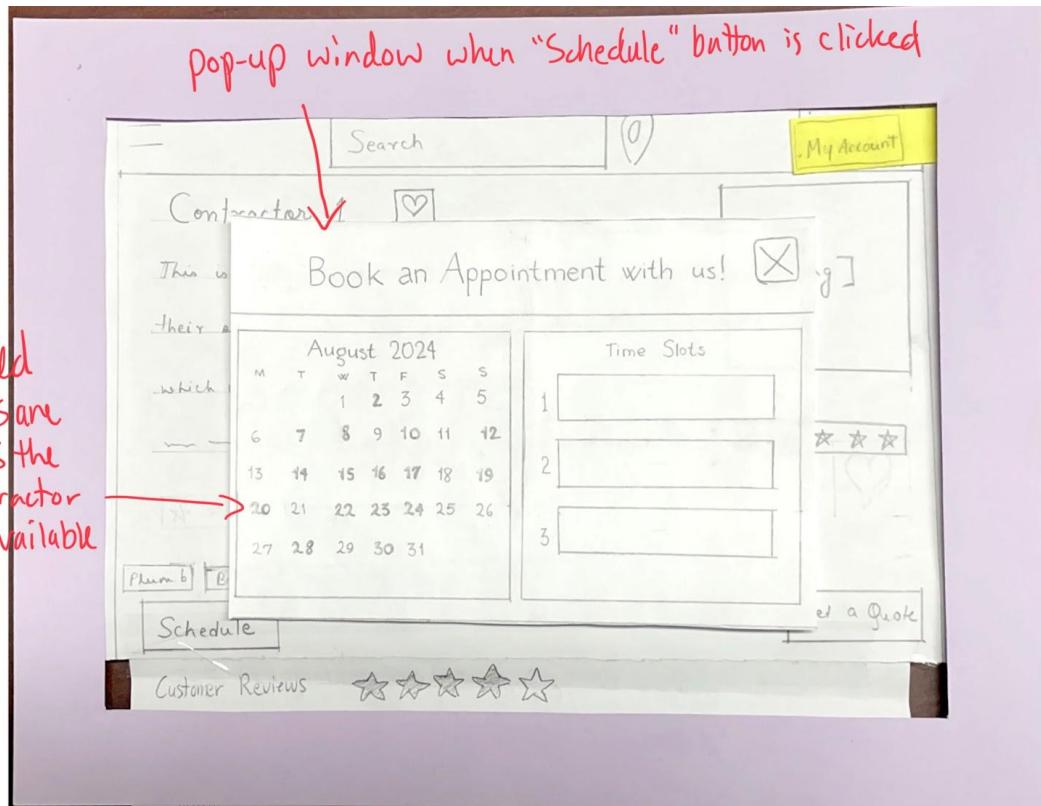
scroll down to see reviews

Contractor Profile Page

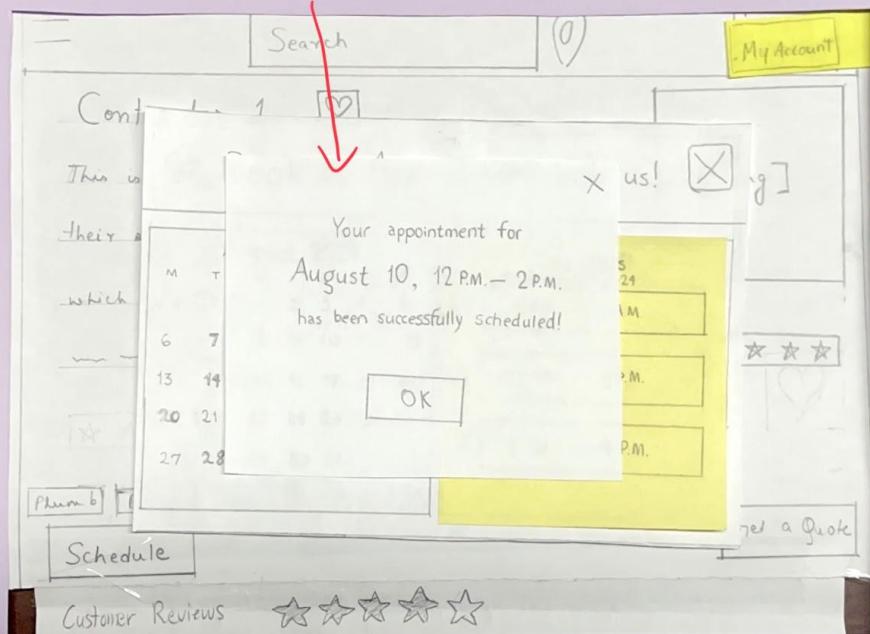


Sort options for reviews



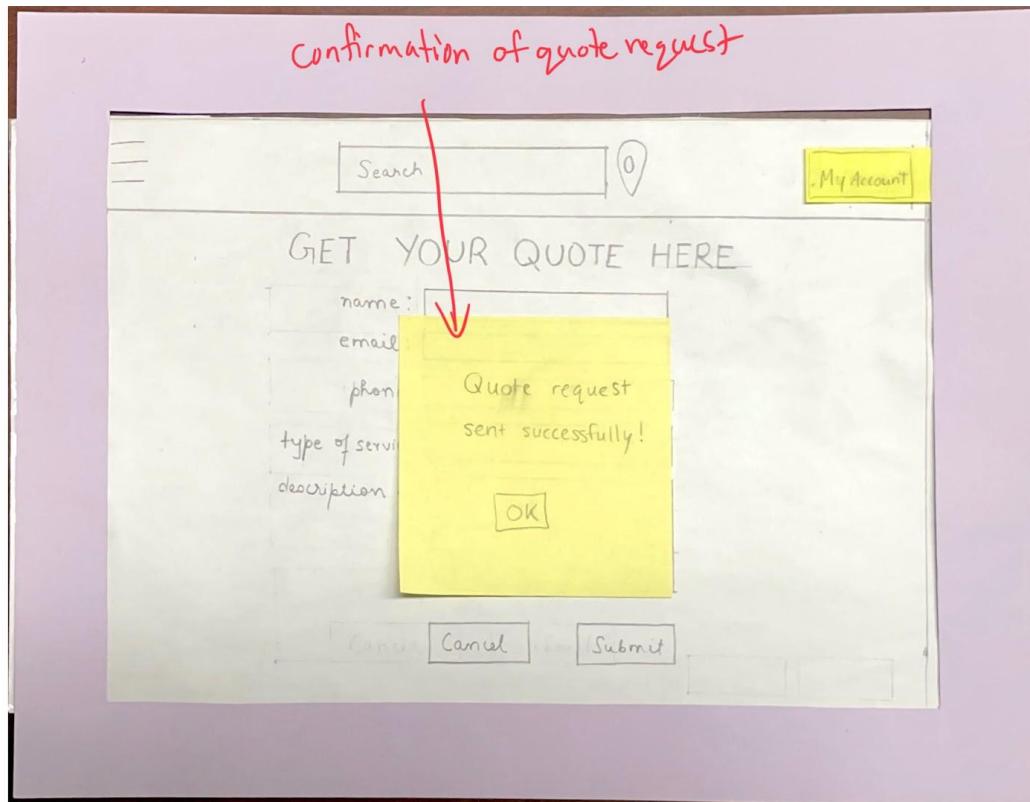


Confirmation of scheduled appointment

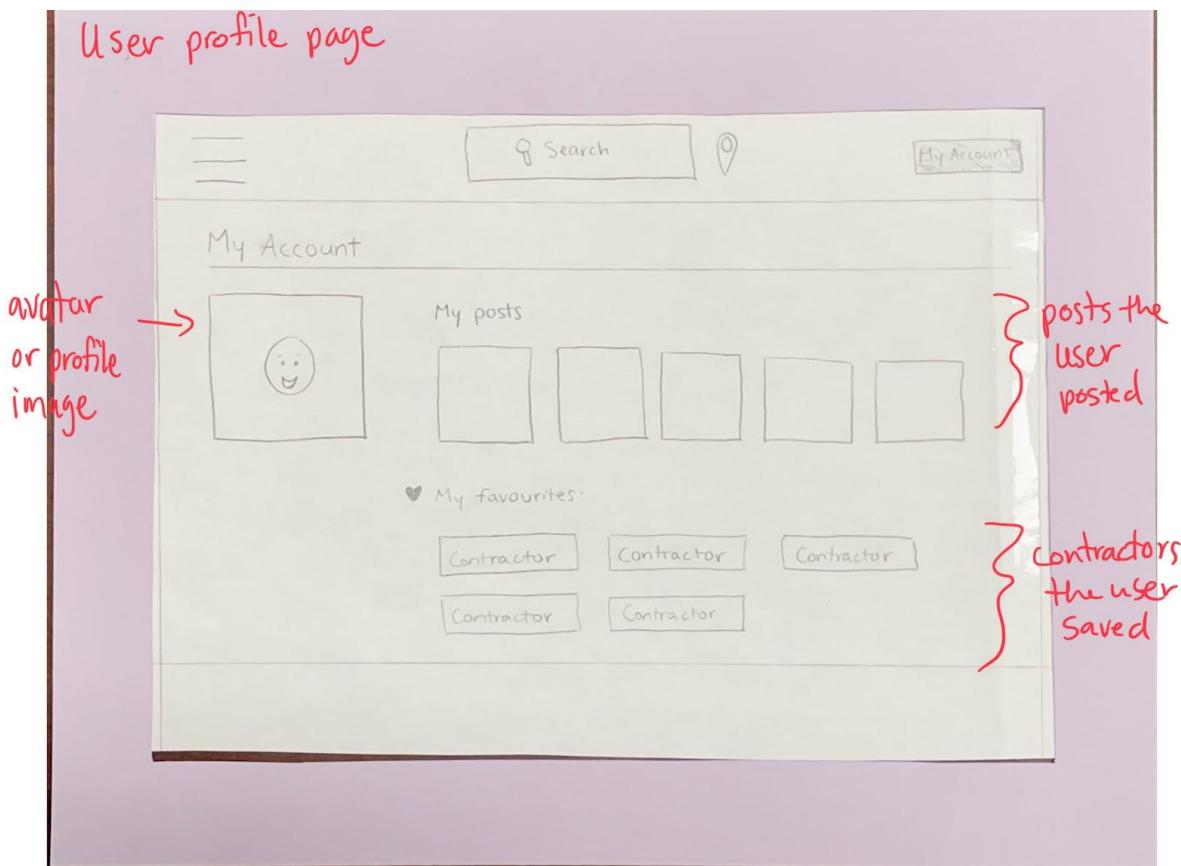


Pop up window when "Get a Quote" is selected for a specific contractor

A hand-drawn wireframe of a form titled 'GET YOUR QUOTE HERE'. The form includes fields for 'name:', 'email:', 'phone:', 'type of service:', and 'description:'. At the bottom, there are buttons for 'Cancel', 'Submit', and a large empty rectangular box.



User profile page



References

Works Cited

Allrecipes. "Allrecipes." *Allrecipes | Recipes, How-Tos, Videos and More*, 2023,

<https://www.allrecipes.com/>. Accessed 2 November 2023.

TRADER Corporation. *New and Used Cars for Sale - AutoTrader*, 9 March 2019,

https://www.autotrader.ca/?gad_source=1&gclid=CjwKCAjwkY2qBhBDEiwAoQXK5QKUb1P4Q_urk17ifOozLqYvOuS4Mt5d1j9VHh2OMz5qYCPX51yVnhoCteYQAvD_BwE.

Accessed 2 November 2023.

TrustedPros Inc. "Trusted Pros." *TrustedPros | Find The Right Contractor For Every Project*,

2023, <https://trustedpros.ca/>. Accessed 1 November 2023.