

Pission

Andreas Lorgen, Merve Ondogan,
Odin Farkas, Darynne Lee



Value Proposition

Pission helps you map out restrooms before you even leave the house, so you can **focus on your journey**, not your next stop.



Problem

Finding restrooms can be challenging, **especially when visiting unfamiliar places.** Traditional location apps don't offer specific, reliable restroom information to help with pre-planning.



Solution

PISSION enables users to plan ahead by providing detailed, crowd-sourced restroom information, allowing them to map out clean, accessible restroom stops before they set out.

Values

Accessibility

Restrooms should be easy for **all users** to locate and access, accommodating diverse needs.

Transparency

Users should have **clear and reliable** information about restrooms, ensuring trust in the platform.

Flexibility

Users should be able to adapt their restroom-finding experience to fit their **unique preferences and situations**.

Community

The app should foster collaboration, with **users contributing and supporting each other**.

Values Encoded

- Filter restrooms based on handicap accessibility, gender, etc. ●
- Allow users to post the codes for private restrooms. ● ●
- Add restrooms to the platform. ● ●
- Leave reviews for restrooms you visit. ● ●
- Find restrooms near your current location. ●

Accessibility

Community

Flexibility

Transparency

Value Tensions

Accessibility vs. Transparency

Promoting accessibility by sharing reviews of accessible restrooms can unintentionally compromise individuals' privacy by disclosing their disability status, creating a tension between the value of transparency and the need for personal privacy.

Accessibility vs. Community

Sharing restroom codes enhances accessibility to those unable to afford purchases, but it conflicts with the businesses in the broader community, as they rely on customer purchases to maintain restroom facilities.

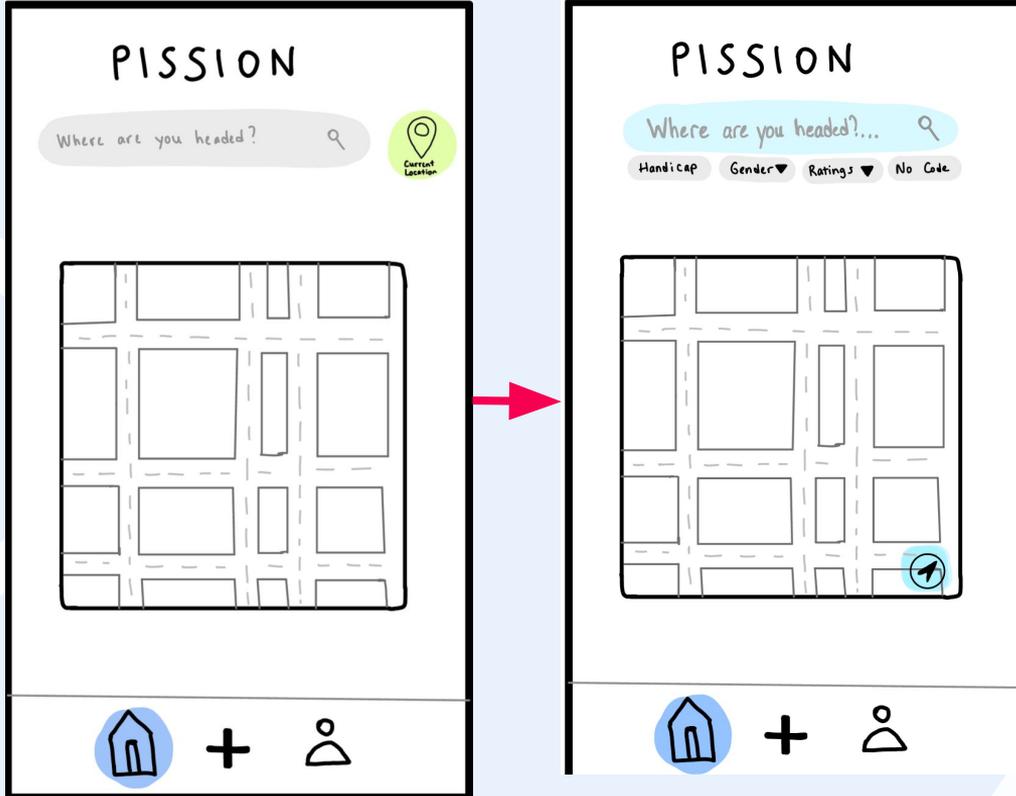
Tasks

- **Simple:** Locating a restroom at your current location / the destination you are heading to
- **Moderate:** Reviewing existing restrooms you've visited
- **Complex:** Adding a new restroom to the map along with descriptions

(Before, the moderate task was filtering and reviewing restrooms. Now, filtering is wrapped into the simple task, since it's a core part of restroom location.)

Revised Interface Sketches

Change #1



Changes:

- 1) Replaced the get current location button to be in the bottom right of the map
- 2) Added filtering to the home screen, eliminated filtering as a separate screen

Why:

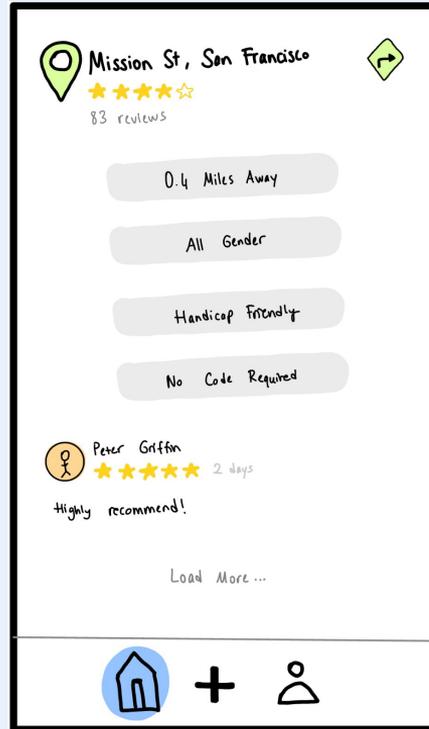
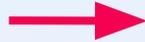
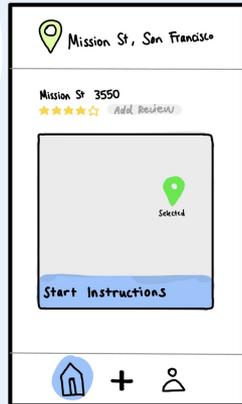
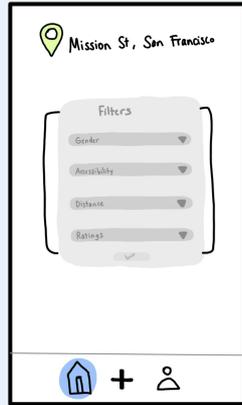
- Some users were confused how to get current location as most maps have the button on the bottom right corner.
- Some users did not see the filter option. Putting it right under the search bar makes it evident.

Usability Goal:

- 1) Eliminating the confusion between having two options around the search area. More intuitive to have your current location on the map in the home screen, only use the search bar if you are heading somewhere
- 2) Eliminating the number of clicks and separate screens needed to filter, getting the results you want immediately

Revised Interface Sketches

Change #2



Changes:

- 1) Combined the 2 screens that help you view a restroom based on your filters, into a review page where you can see features and reviews of a restroom

Why:

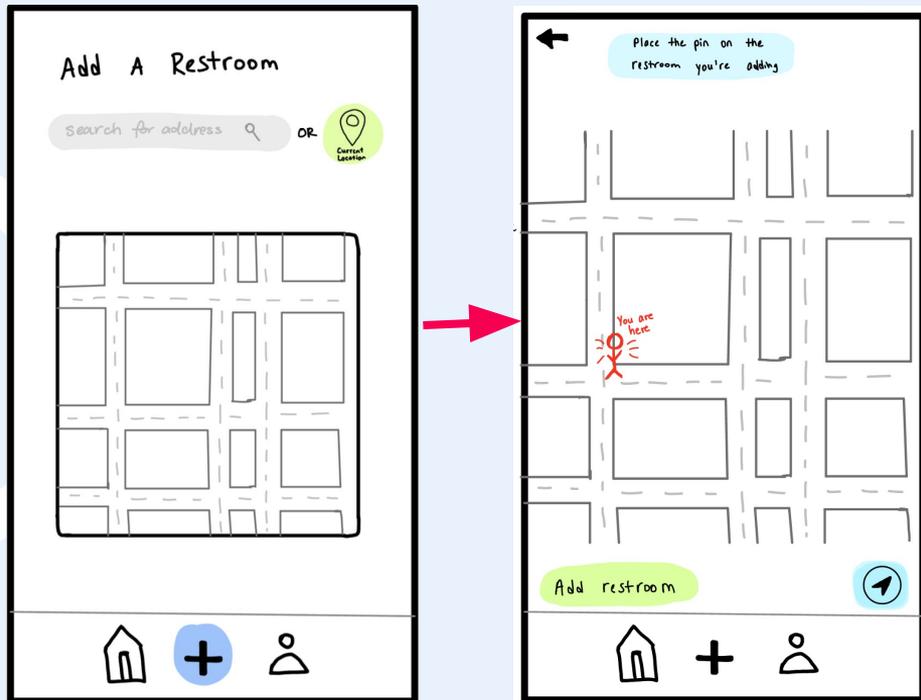
- Users did not know when to hit the check mark below filters versus "+" in footer to add a restroom
- Too many details to add (e.g. users did not think "Type" was necessary)
- Filters were embedded into the search screen so this screen can focus on the details of the washroom

Usability Goal:

- 1) Provide a clear overview of restroom features and user reviews in one place, making it easier for users to make informed decisions.
- 2) Improve the user experience by making it quicker and simpler to find a restroom that meets their needs without navigating between multiple screens.

Revised Interface Sketches

Change #3



Changes:

- 1) Map will cover the whole screen
- 2) Drop pin to add a location
- 3) "Add Restroom" will be a separate button
- 4) Eliminated pin search for adding a restroom - current location will be available immediately

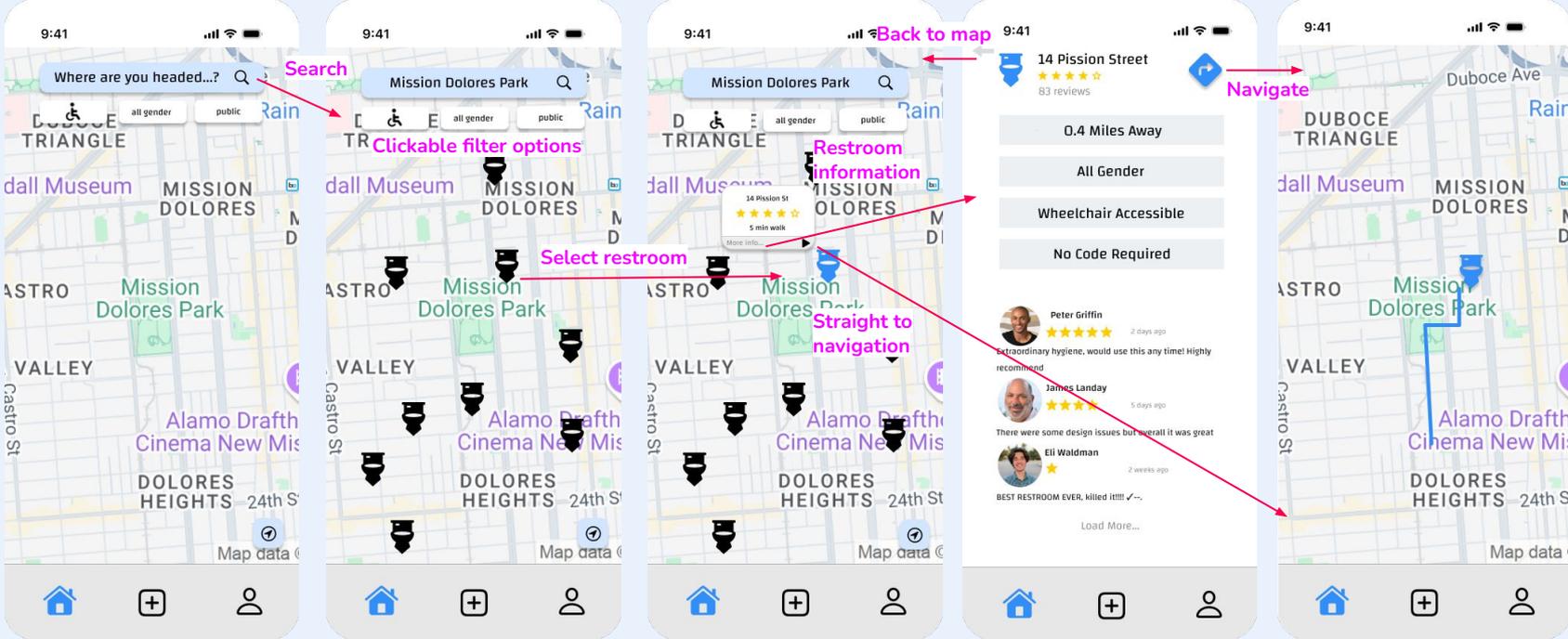
Why:

- Although we had "search for address" and "current location" button, most users intuitively directly pressed the map to drop a location
- Users asked why the map was contained in a box as it constrained the view and there's too much white space

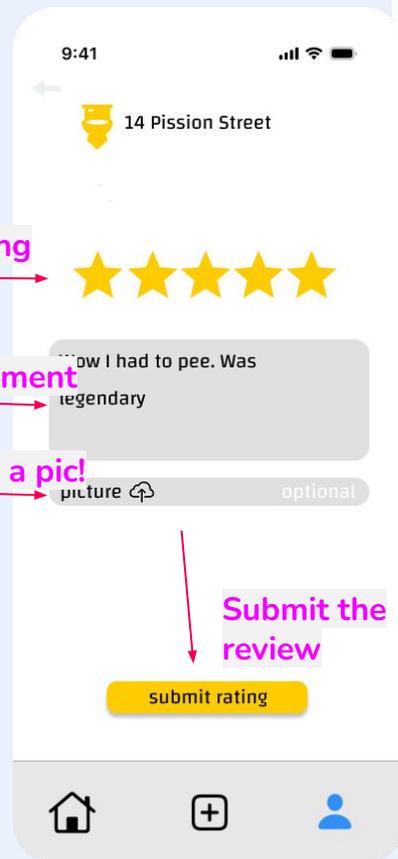
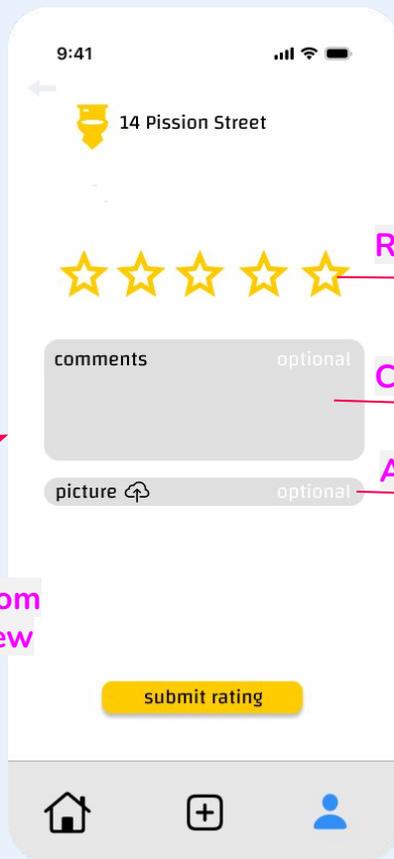
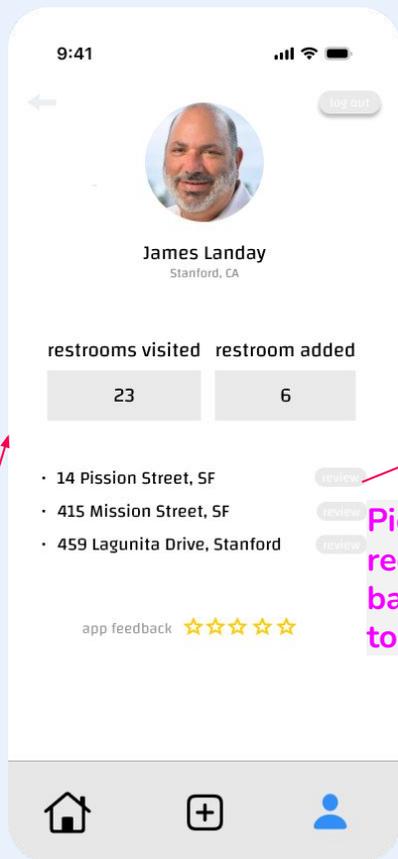
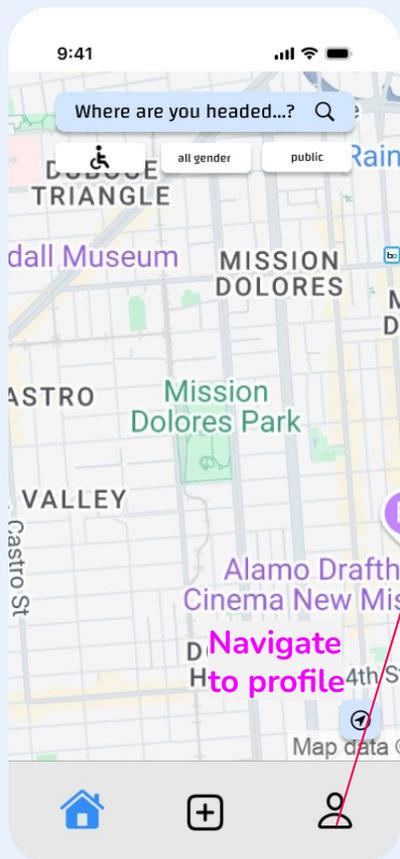
Usability Goal:

- 1) Expanding the map to full screen enables users to see a larger area for more accurate pin placement.
- 2) Removing the search bar and showing the current location immediately reduces decision-making steps and simplifies the process.
- 3) "Add Restroom" button and direct map access allow users to add a restroom faster, minimizing navigation.

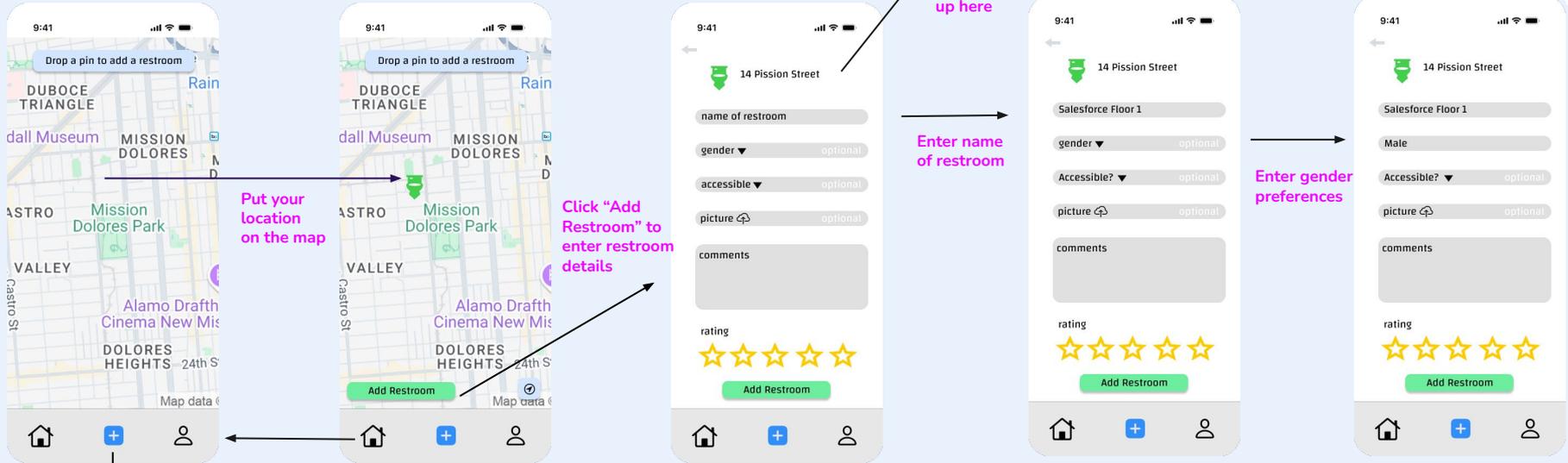
Simple Task Flow: Finding a Restroom



Moderate Task Flow



Complex Task



You will be directed to the "add a restroom" page after clicking the plus button here

You can click home to go back and readjust the location

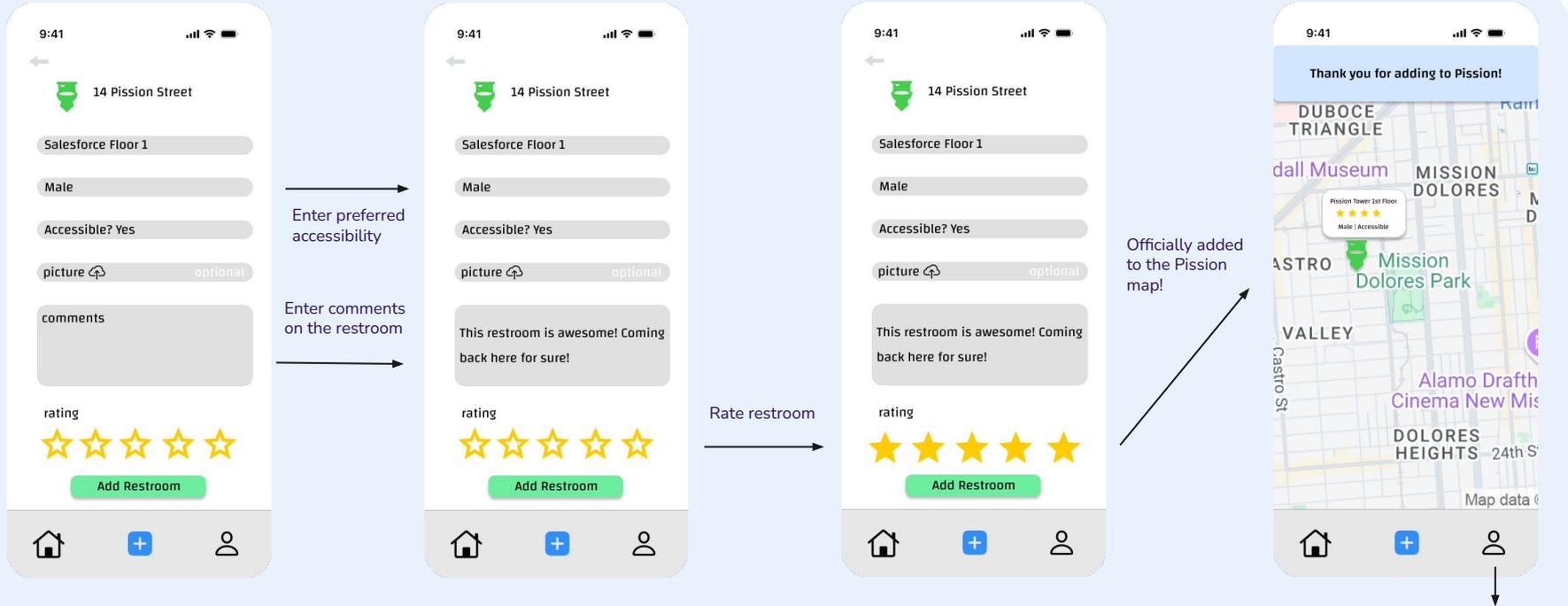
Click "Add Restroom" to enter restroom details

Enter name of restroom

Address of the restroom will be automatically up here

Enter gender preferences

Complex Task



Navigate to the profiles page to view your visit history & rate restrooms you have visited before

Usability Goals & Key Measurements

Efficient

Rationale: Users should locate restrooms quickly and efficiently

Key Measurement:

- Steps to find a restroom (<9 clicks)
- Time to find a restroom (<2 mins)

Intuitive

Rationale: Users should easily navigate features without confusion

Key Measurement:

- User misclicks (< 2 ideally)

User-Centric

Rationale: Users should feel empowered to add new restrooms effortlessly

Key Measurement:

- Steps to add a restroom (<12 clicks)
- Time to add a restroom (<3 mins)

Progress Towards Usability Goals

Efficient

- The default home page is the “Find Restroom” page
- Users can navigate by exploring in-depth info (filters, reviews, accessibility) or quickly starting their route with key info (street name, rating, distance)
- Steps to find a restroom: 4-6 clicks ✓
- Time to find a restroom: 2 mins ✓

Intuitive

- Clear color shifts to differentiate which page (home page, add a restroom, profile) the user is on
- Shadow and rounded corners for buttons
- Toggle settings allow intuitive filtering
- User misclicks: ~3

User-Centric

- A whole separate page dedicated to adding a restroom with a “+” sign
- Ability to add optional details
- Steps to add a restroom: 9-1 clicks ✓
- Time to add a restroom: 3 mins ✓

Design & Prototyping Tools

We used **Notability** to sketch our low-fi prototype.

PROS:

- Super intuitive and user-friendly interface
- Diverse color options
- Helpful when creating shapes or making minor adjustments that only a pen can do

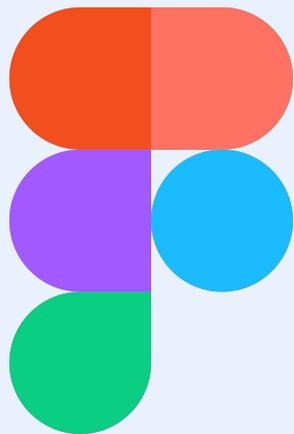
CONS:

- Hard to layer colors on top of each other as the previous color changes when a new one is added on top
- Hard to create transparent buttons
- Hand drawn shapes are asymmetrical
- Cannot create color transitions



Design & Prototyping Tools

We used **Figma** to build our high-fi prototype.



PROS:

- Allows collaboration and simultaneous work
- Frame matches the device's screen
- Allows layering and grouping components
- “Prototype” feature lets you demonstrate user experience

CONS:

- Hard to visualize ideas in the beginning
- Too many options can be overwhelming

Limitations

- Task flows, like adding a restroom, follow a fixed order to reduce complexity while still showcasing dropdown functionality.
- Location and restroom options are pre-set due to the lack of backend support for dynamic data.
- Profile creation, editing, comments, and picture uploads are omitted to focus on demonstrating core app functionality without integrating complex features.

Wizard of Oz Features

What did we have to simulate?

- Location access simulates tracking by placing a blue dot at Stanford.
- Dropping a pin mimics adding a restroom to the database by placing it at a fixed location.
- Restrooms appear on the map during searches to simulate a populated database.
- Restroom ratings are displayed but don't actually update the database.

Hard Coded Items

What features were pre-set?

- The available areas to search for, such as current location or a different place, are both pre-selected.
- No registered restrooms available yet, so restrooms are randomly placed on the map.
- Example reviews for restrooms are manually written rather than user-generated.
- The restrooms a user can select to navigate to or add to the map are pre-determined.
- Options for filtering search or adding details to restroom a user adds to the map simulate the ability to choose, but only have one available option.

Link to Prototype
Link to Figma

Appendix