

WORKSHOP 11:

HANDOFF



FlushFinder

Team Number

G03

Submission Date

01/06/2023

Contents

1.0 Team Details	2
2.0 Handoff Report	3
2.1 Font Guidelines	4
2.2 Colour Palette	5
2.3 Buttons	7
2.4 Icons	9
2.5 Graphics	10
2.6 Space Guidelines	11
2.7 User Flow	12
3.0 Final Hi-Fi Prototype	14
4.0 Posters	15
5.0 Conclusion	17
6.0 UI/UX Glossary and weblinks	18
References	18

1.0 Team Details

Team Number / Name: Gee-Oh-Three (G03)

Tute day / time: Tuesday 11am

Project / Name: Where's the cleanest public loo near me? **Tutor:** Dr Shreya Ghosh

Student	Name	Student Number	Role
1	Hans Wong	20968560	Researcher
2	Harry Walters	19166700	Project Manager
3	Kuldeepsinh Talatia	20872043	User Researcher/Data Analyst
4	Navinda Jayawardhana	20537054	Usability Engineer
5	Ola Malek	19756512	Graphic Designer

2.0 Handoff Report

The following will demonstrate to app developers how to bring our FlushFinder prototype into the real world. Along the way, we'll highlight and justify key design choices made throughout the development process. The report is structured to emphasize the valuable findings that have shaped the app's creation.

Functional Flush Finder App: The main deliverable of the project, the FlushFinder application, is to provide users with a convenient and reliable solution for locating nearby public restrooms. It incorporates core features such as integration with location services, user-generated content, and filters/sorting options to enhance the overall user experience.

This design was created using the dimensions of an iPhone 14 Plus with 6.7-inch (diagonal) screen size.



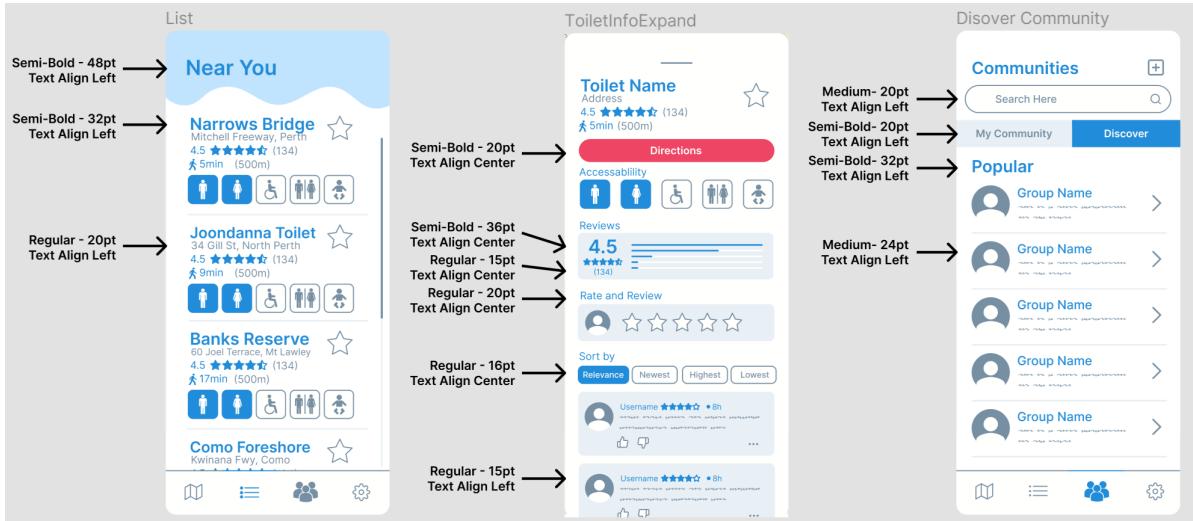
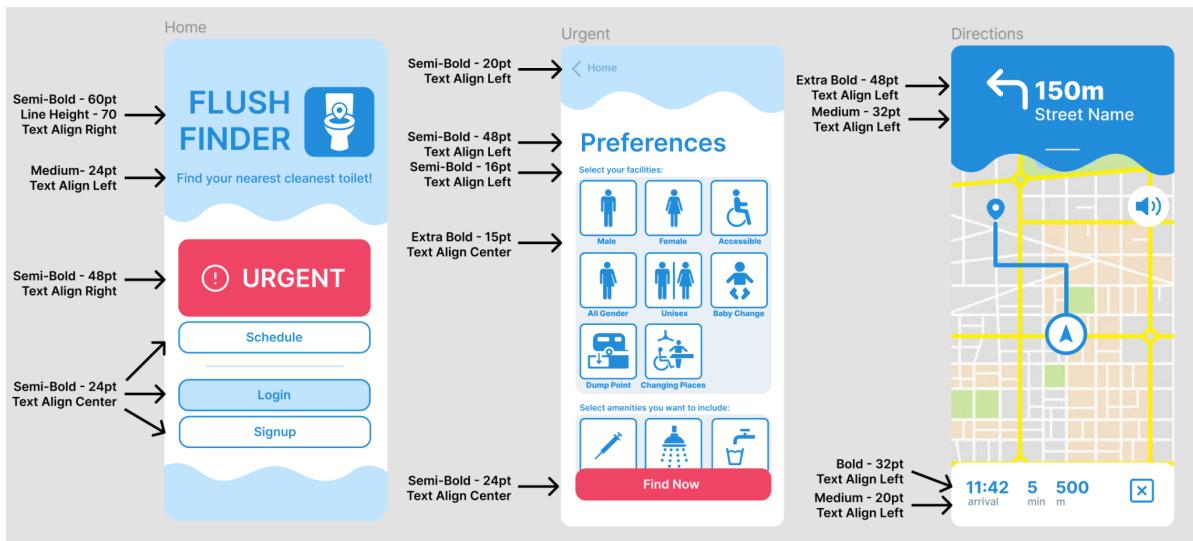
We intentionally chose this form factor as it covers most iPhones produced within the last 5 years. While our design wasn't built for the 14 Pro form factor (with its Dynamic Island), only few design changes need to be made to suit the new shape.

2.1 Font Guidelines

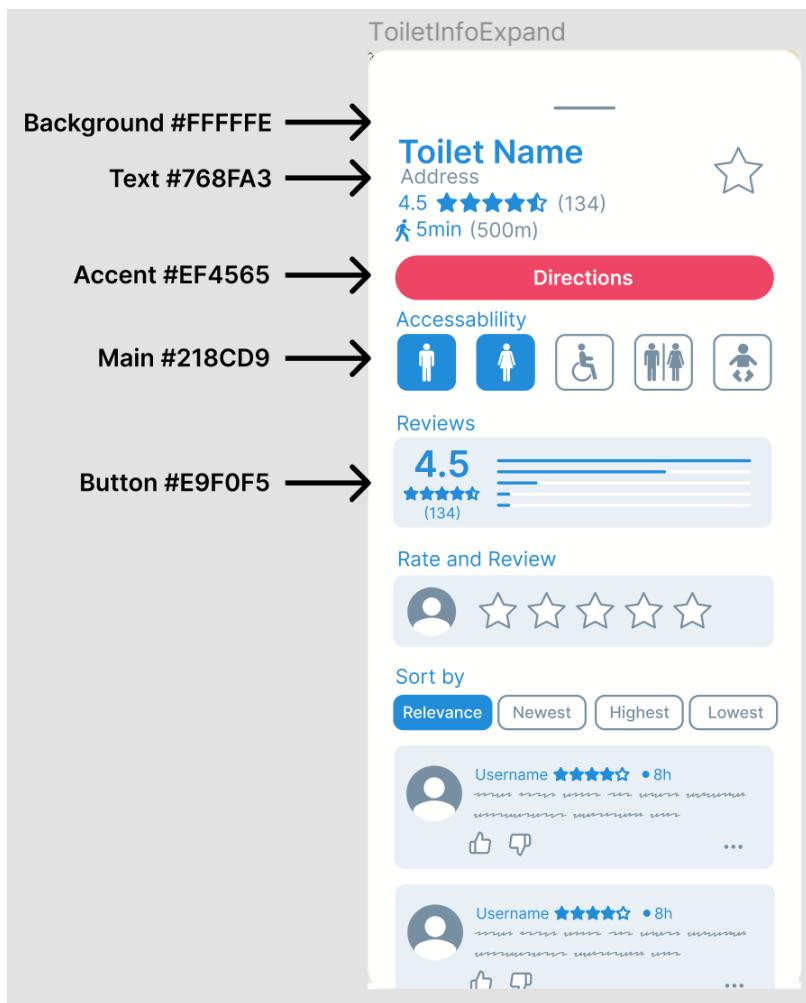
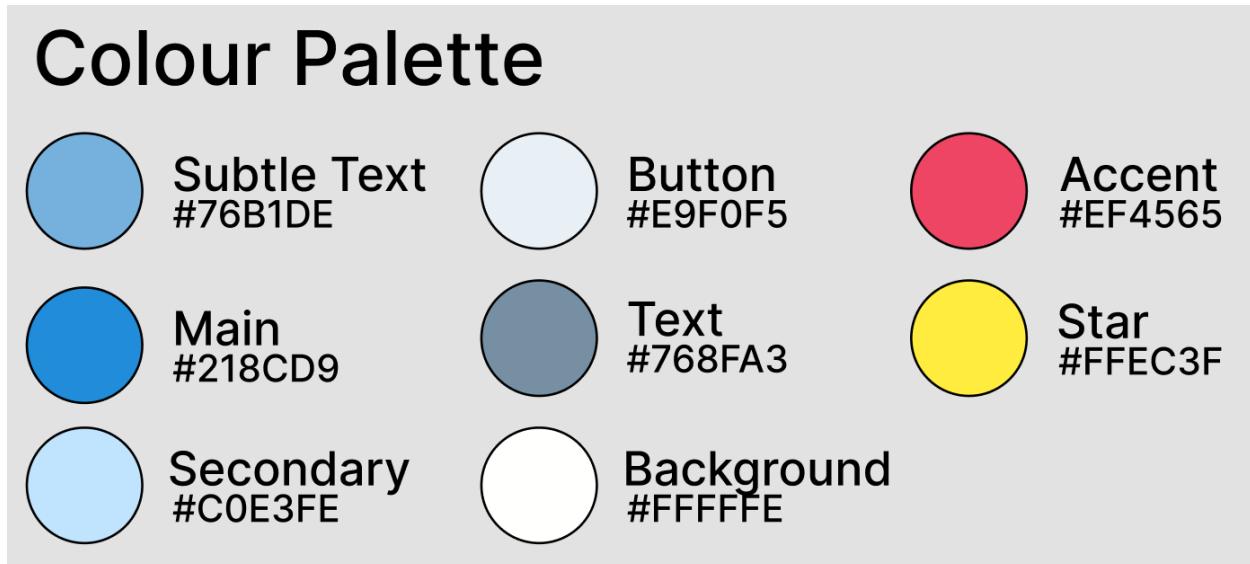
Typography

Font: Inter
Regular Medium
Semi-Bold Bold

All of the copy in the FlushFinder visual identity uses the same font; Inter. Below, you'll see how we have used it across different point sizes and weights.



2.2 Colour Palette



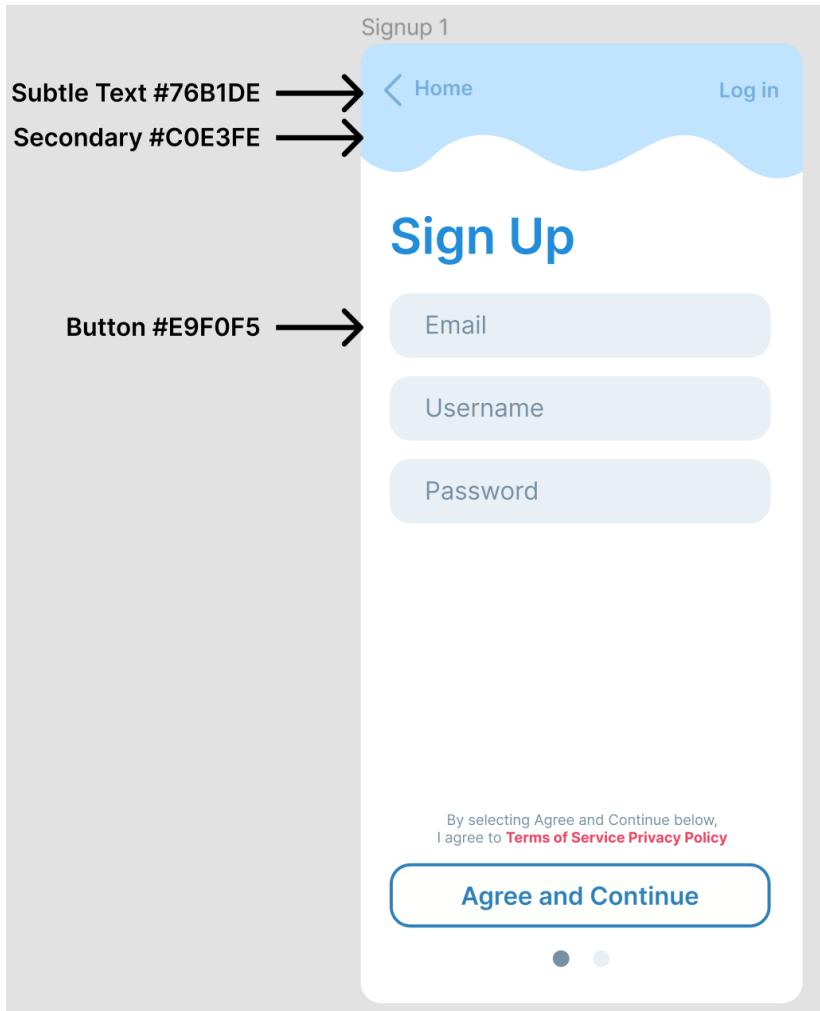
The image shows a mobile application screen titled "ToiletInfoExpand". The screen displays information about a toilet, including its name, address, rating (4.5 stars), and accessibility icons. It also features a "Directions" button, a reviews section with a 4.5 rating, a rate and review section, and a sort by section. Arrows point from the color palette definitions to specific UI elements on the screen:

- Background #FFFFFF → The background of the entire screen.
- Text #768FA3 → The text color used for the toilet name, address, and reviews.
- Accent #EF4565 → The red color used for the "Directions" button and the star icon in the reviews section.
- Main #218CD9 → The blue color used for the toilet name and address.
- Button #E9F0F5 → The light gray color used for the "Directions" button.

By looking at some of our frames, you can get a better understanding of how colour is used. Here, you can see that **Main** blue is heavily used when the information is important to the user so that it stands out against the **Text** grey colour.

The **Accent** colour is used mostly to highlight to the user where they can find directions and notifications. It is also used to show the user where they can find the terms and conditions as shown on the SignUp view on the next page.

The **Button** colour is used to separate pieces of text by grouping them in boxes. Another way this colour is used is shown in the image on the next page, where users enter their email, username and password details.



This image shows how the **Secondary** colour is used. This colour is mostly used for headings in context of the wave graphic. It can also be seen used as a filler colour for some buttons to highlight importance over ones that have no filler colour.

The **Subtle Text** colour is used when text is put over the **Secondary** colour but it is used in a subtle context as the information is not highly important to the user.



The **Star** colour is only used when a favourite button is clicked.

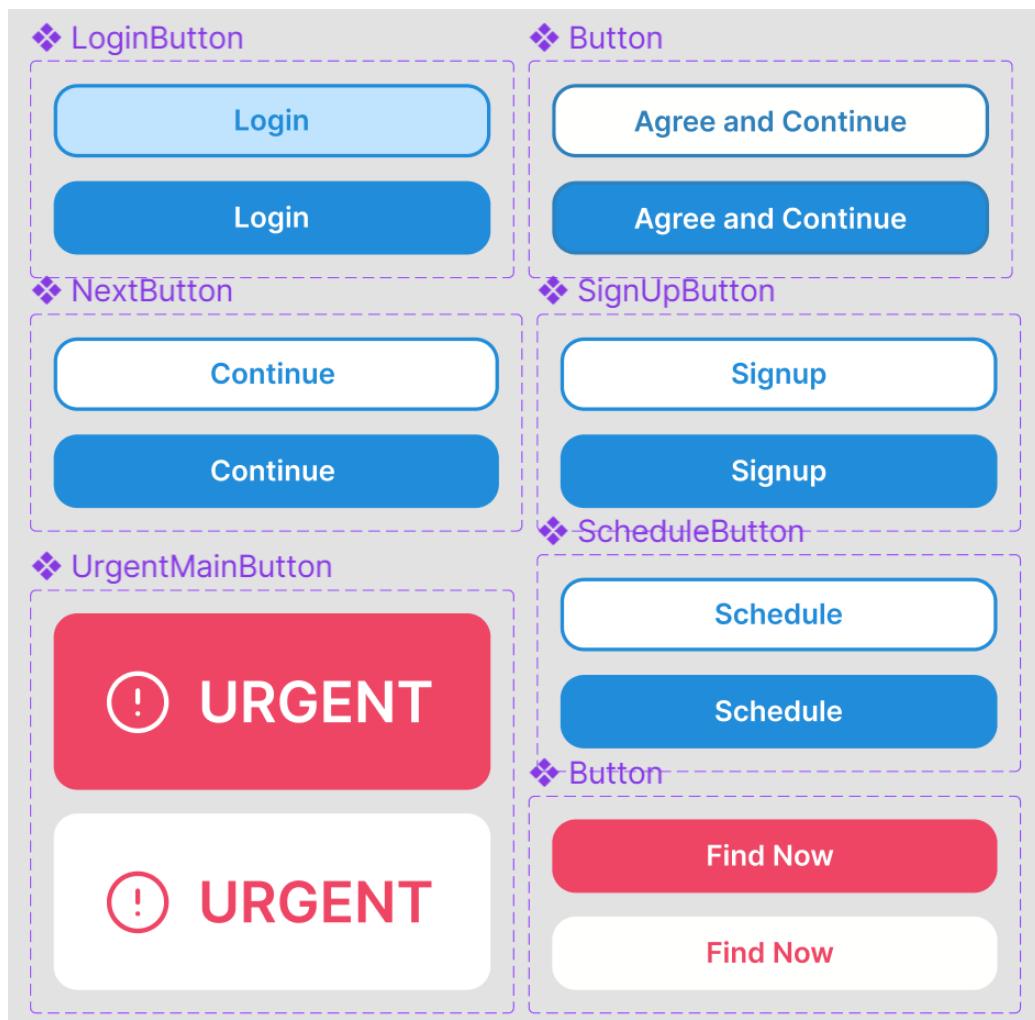
2.3 Buttons

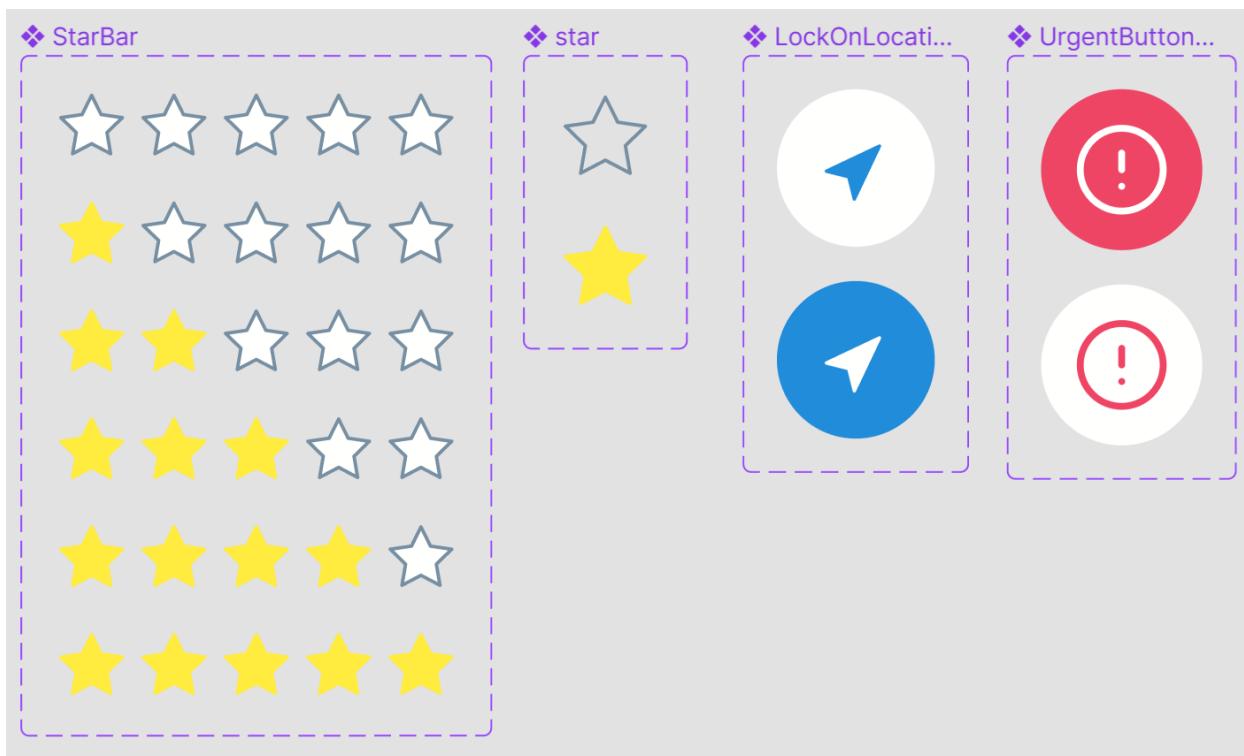
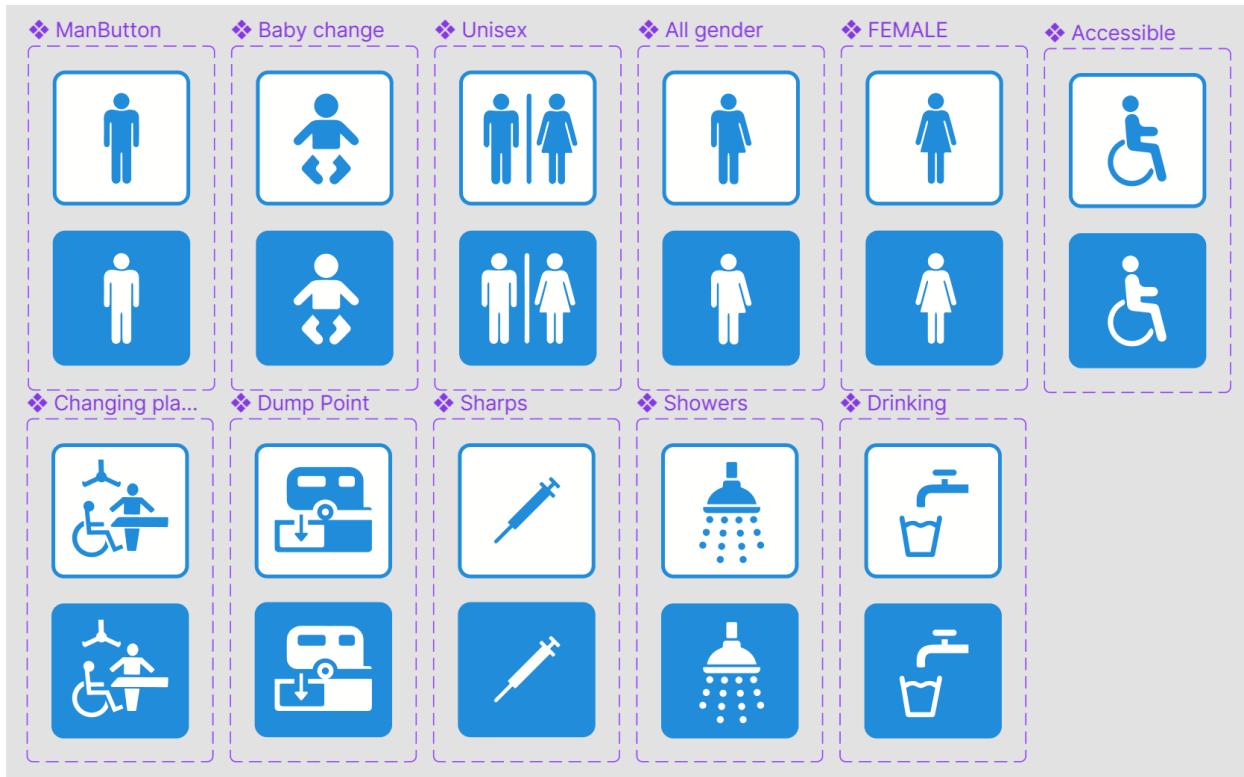
On the following, you will find all the clickable buttons and their different states when they are interacted with. We try to include as few reasonable colours as possible for the buttons, where users will (in a split second) see that the interaction with the buttons with contrasting colours of the text and background interchange - a small detail to capture the dynamic user experience.

Buttons with blue borders with white backgrounds are generally the initial state of the button and when it is tapped on, the blue will fill the button signifying the user they have interacted with.

The urgent button is worded with the colour white and a bright red background as its initial state, when it is tapped on, the words' colour turns from white to red and the background from red to white.

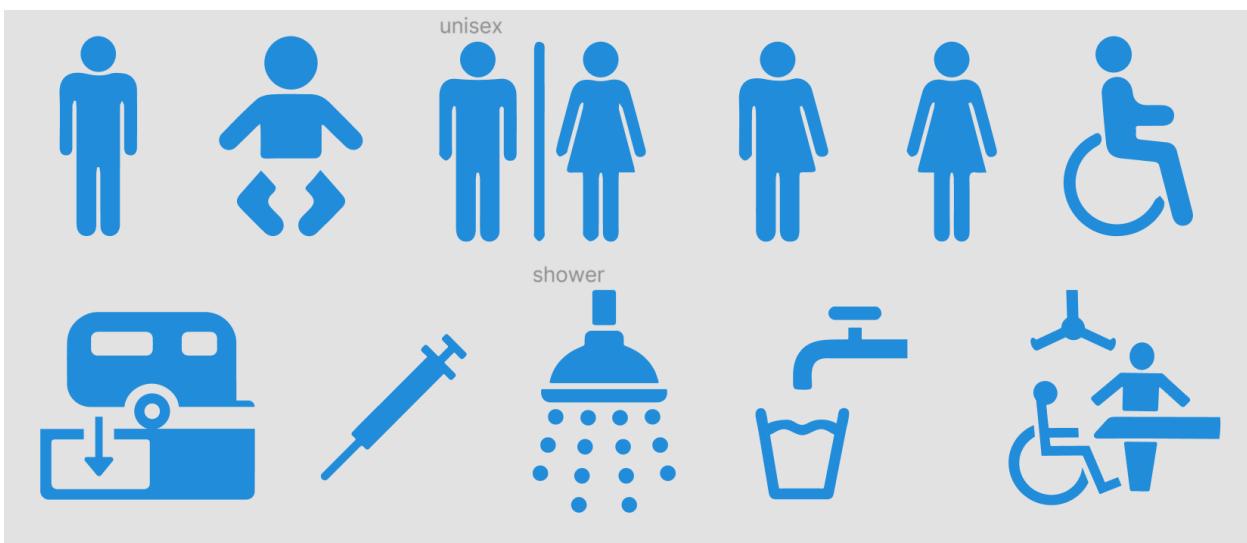
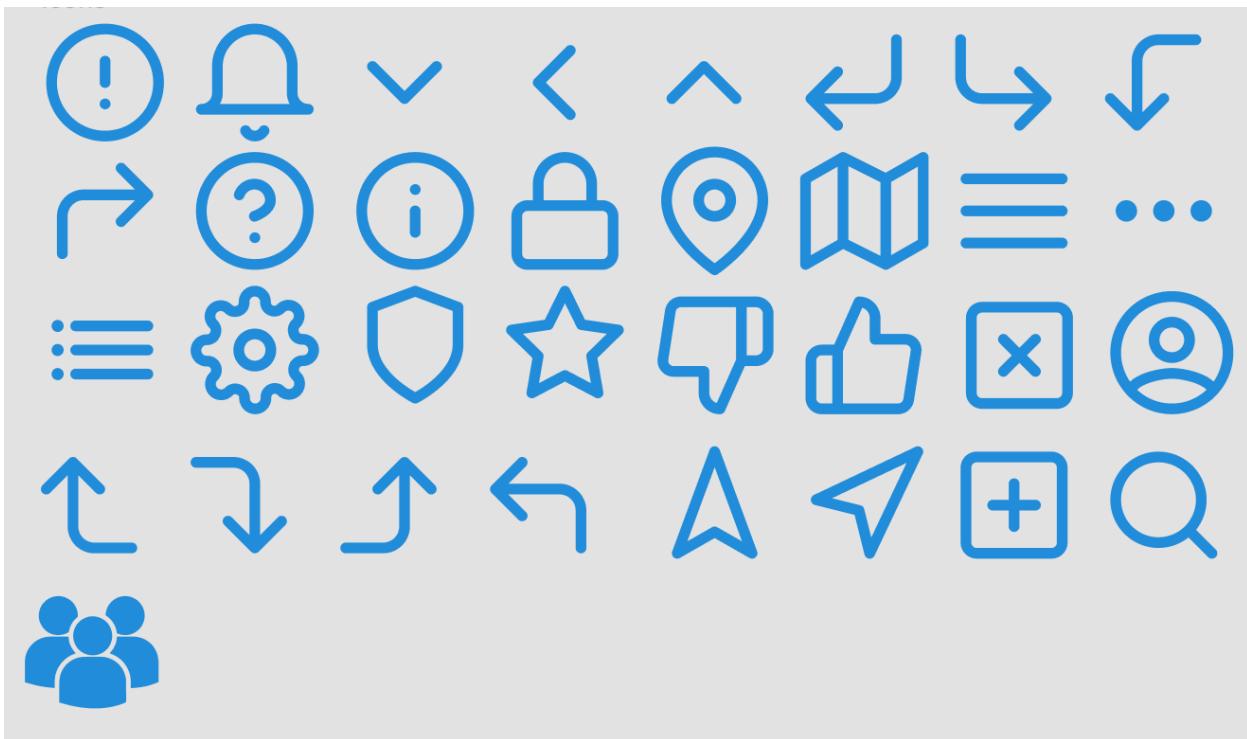
NOTE: The results of our pilot usability test indicated that users didn't know the next valid interaction on the login page was the 'Login' button. This is why the "unpressed" state of the LoginButton component is a darker shade of blue.





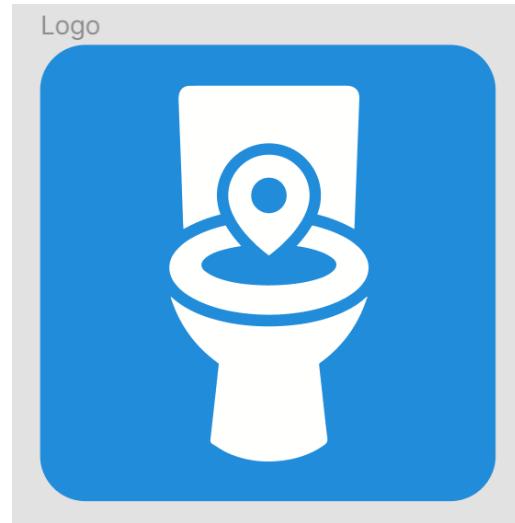
2.4 Icons

In the design of our toilet finder app, we have incorporated a range of intuitive and visually appealing app icons to enhance the user experience. Incorporating the colour palette we created iconography, consistent with our palette (we started with the preferences screen, then expanded for the rest of the sections). To reduce cognitive load, we were inspired by universally-recognized icons so that a user is familiar with their meanings.



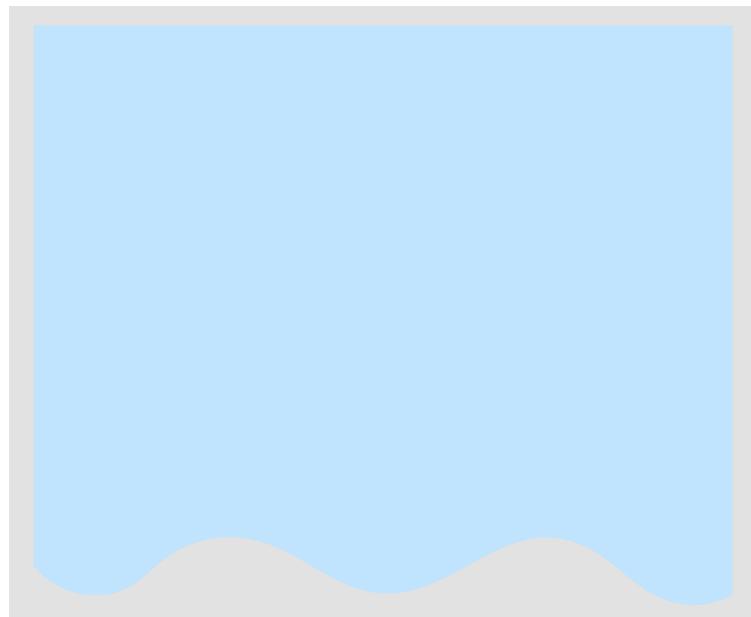
2.5 Graphics

Logo



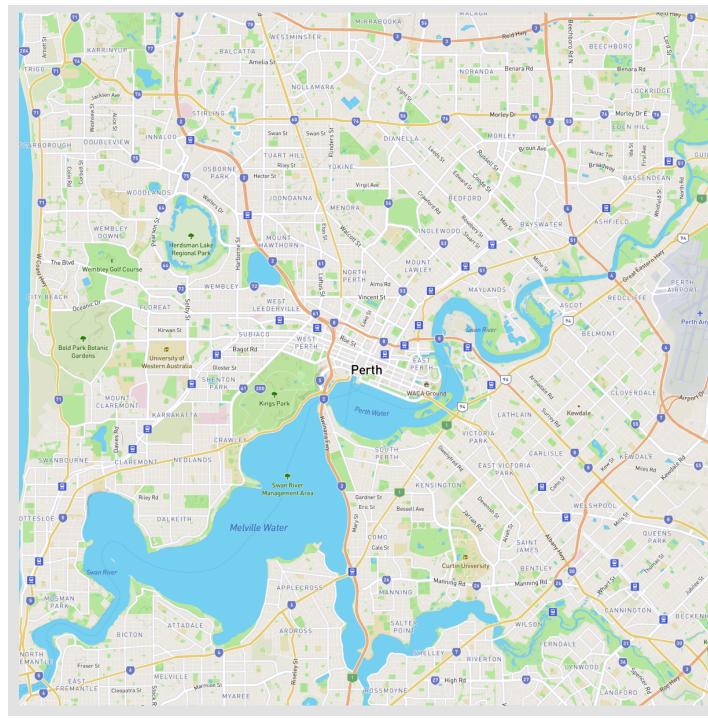
Our graphic designer created this custom vector graphic for the FlushFinder brand. This unique icon allows users to easily identify the product and its use.

Header



Speaking of original, the header and footer graphics are also original vector creations (made in Adobe Illustrator). This is used to visually separate sections of content across the application.

Map



The map graphic has been taken from Mapsicle (which uses the OpenStreetMap api). For the prototype, it has been used as the main “MapView” page for the navigational screens.

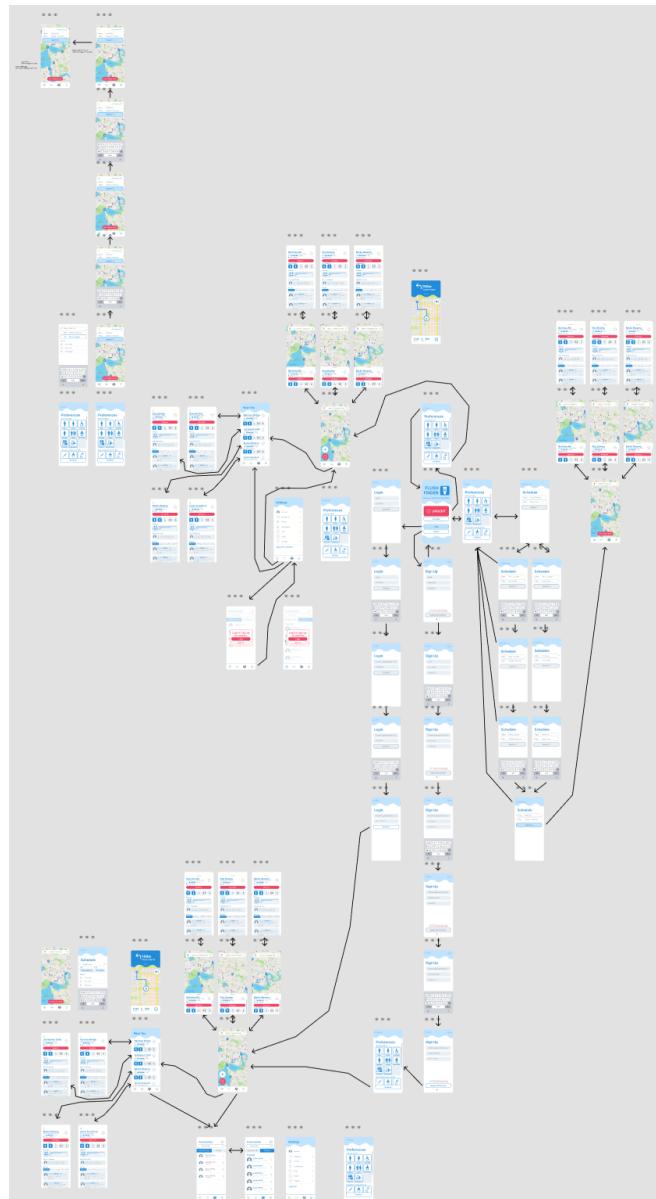
2.6 Space Guidelines

Zeplin exports the pixel spacing values between our design elements into the following CSS code:

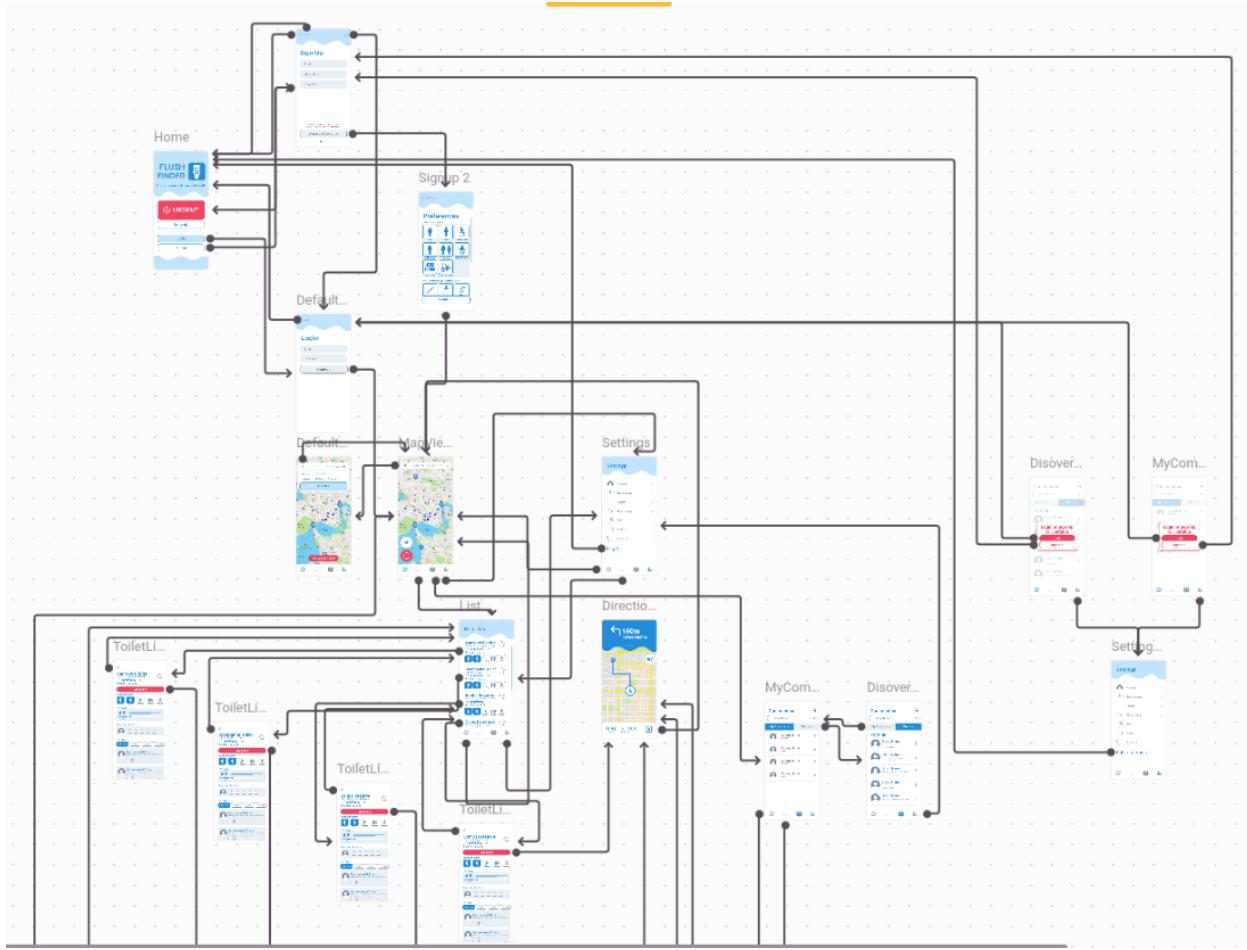
```
:root {  
  --button-spacing: 9px;  
  --edge-spacing: 18px;  
  --spacing-m: 25px;  
  --preferences-spacing: 26px;  
  --taskbar-spacing: 85px;  
}
```

For example, –taskbar-spacing refers to the 85 pixel height of the taskbar menu. You can view the spacing and more information on our [Zeplin](#) page.

2.7 User Flow

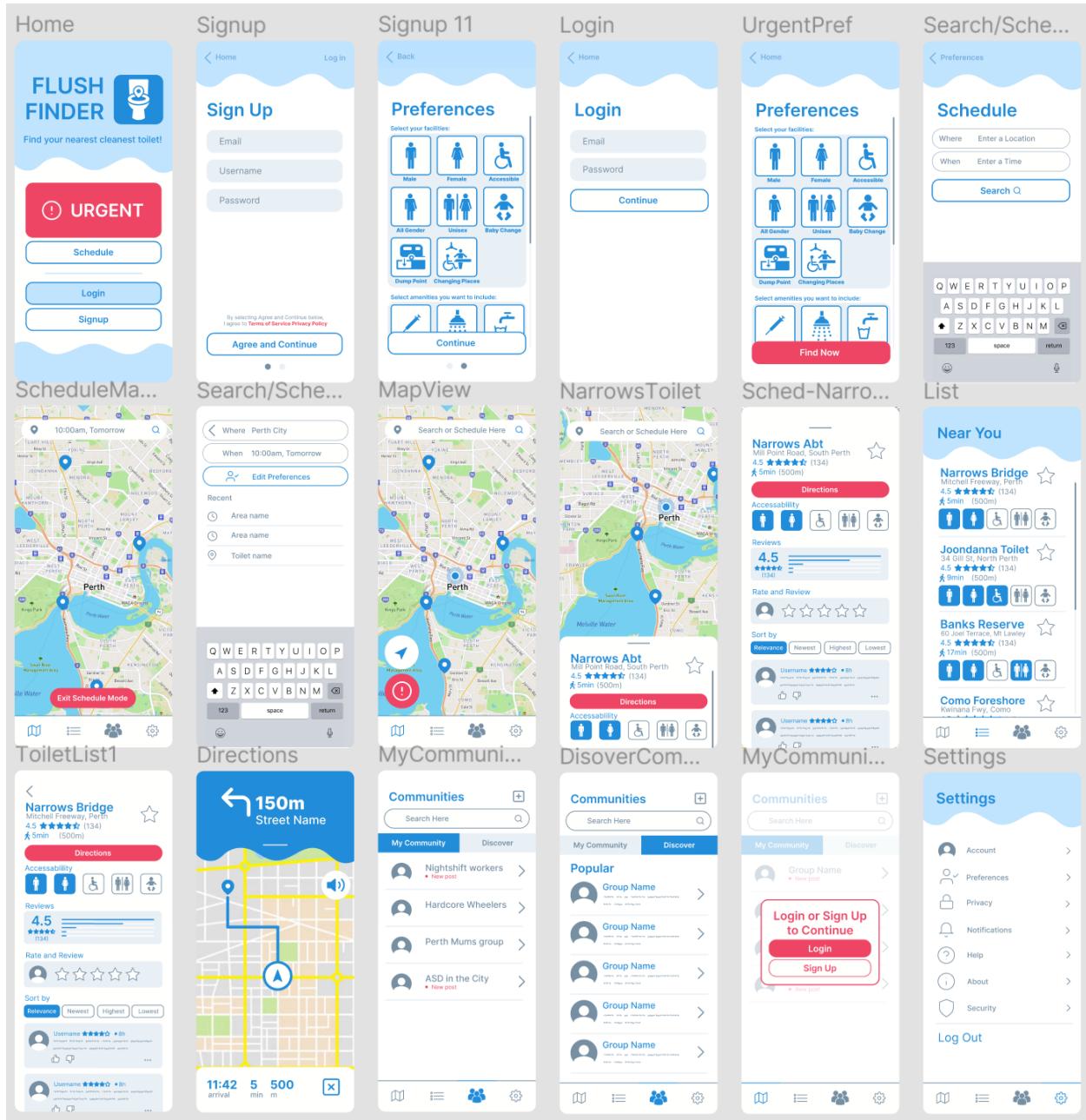


Due to Figma not allowing dynamic states, we had to emulate the appearance of functionality by duplicating similar pages multiple times. For example, for the keyboard interaction, we made a separate frame with a keyboard image superimposed.



We decided to make a version of the user flow without these duplicate pages, using Zeplin.
 Personally, we believe both user flows have their unique advantages.
 A full-quality version can be seen here: <https://zpl.io/r1JXDZL>

3.0 Final Hi-Fi Prototype



After collecting and analyzing the usability testing data, we had adjusted the previous High Fidelity prototype accordingly.

4.0 Posters

Our graphic designer developed a sales poster and a conference poster. Here are copies of the first drafts of both:



Sales Poster (First Draft)

The conference poster is a detailed document divided into sections: Background, User Research, Ideation, Prototyping, Decisions Considerations, and User Flow. It includes charts, icons, and screenshots of the app interface. The 'Background' section describes the app as a mobile application for finding clean and suitable restrooms. The 'User Research' section shows survey results and personas. The 'Ideation' section details pain points and requirements. The 'Prototyping' section shows wireframes and prototypes. The 'Decisions Considerations' section discusses design decisions like iconography and color palette. The 'User Flow' section illustrates the user journey through the app. The poster is signed off by 'ICTE3002 - Human Computer Interface School of Electrical Engineering, Computing and Mathematical Sciences (EECMS)' and 'Curtin University'.

Conference Poster (First Draft)

While there was no negative feedback with the sales poster, we were given some advice from our industry expert on how to make the conference poster more readable. Our expert give us design resources for developing more effective conference posters, (Morrison, 2019).

While we found the feedback to be extremely useful, we were at odds with our visual identity. How could we make a poster more readable while being instantly recognized as “FlushFinder”?

Our graphic designer made (what we call) a ‘best-of-both-worlds’ solution; putting the most important messages in the centre, with supplementary details being moved to the outer edges.

User Research

Surveys

Public Bathroom Accessibility Challenges

- Easily Find Suitable Bathrooms
- Sometimes Struggle to Find Suitable Bathrooms
- Often Struggle to Find Suitable Bathrooms
- Regularly Struggle to Find Suitable Bathrooms

Our user surveys found that most people regularly struggle to find a suitable bathroom. Key factors which influenced people's choices in bathrooms were distance, cleanliness and safety.

Personas

Our user experiences and pain points were grouped into user personas. These are fictional representations of our potential customers. They allow us to further understand and empathise our user's needs.

As someone who loves hiking and biking, I'm always on the lookout for new trails and routes to explore. But when you're out in the wilderness, finding a bathroom with a shower can be a real challenge.

Hi there! I'm someone who identifies as non-binary, and finding a comfortable bathroom experience can be a bit of a challenge. Using a gendered bathroom just doesn't feel right, and can be quite uncomfortable.

FLUSH FINDER

The app that finds your nearest and cleanest toilet.

User Flow

Everyone deserves to have a good toilet experience. This is why FlushFinder was created, to help users find their most suitable toilet as fast as possible. The user flow above demonstrates how someone could use this app in an urgent scenario.

Ideation

Pain Points

After conducting a thorough user research, we were able to identify and the user pain points were summarised through affinity mapping shown below.

- Technical Issues**
 - Hates to pay lots of update fees
 - Hates to input lots of data
 - Inclusive of all people
 - Checks users reliability
- Performance**
 - Slow loading time
 - Too many notifications
 - Apps with broken links
 - Wrong directions
- Services**
 - Hates to pay for extra options
 - Bad customer service
 - Out of date Map Data
- User Interface**
 - No personalisation
 - Unbearable navigation system
 - Limited functionality
 - Text-to-speech for visually impaired people
- Requirements**
- Functional**
 - Turn-by-turn navigation
 - Customisable user preferences
 - Reviews and reviews system
 - Mark a toilet as a favourite
- Non-Functional**
 - Easy to use, quick to navigate
 - Home screen toilet location button
 - Reliable and available service 24/7
 - Secure to protect user data

Prototyping

Low-Fidelity

High-Fidelity

Design Considerations

- Recognition rather than recall: consistent, familiar icons enable intuitive information interpretation.
- Aesthetics and minimalist design: The wave motif representing a clean functioning toilet, contributes to the aesthetic aspect of the app's design.
- We use an analogous colour scheme to establish visual hierarchy. Our use of warm and light tones help associate cleanliness, while aligning with the wave motif.

Expert Reviews

- Design feedback highlighted potential user confusion with the 'urgent' navigation interaction. Users understood the interaction when on the landing page, but not when on the map view.
- We resolved this issue by making the two identical interactions visually consistent, with the same colours and icons.
- A usability suggestion was made, to create an interaction for a user to quickly view nearby toilets on a map. We accepted their feedback by incorporating a 'snap back' button in the map view.

Acknowledgements

The team would like to thank Dr. Ivana Ivánová for their time, expertise and trust. Without Dr. Ivánová, none of this would be possible. We also thank Dr. Susannah Soon and our tutor, Dr. Shreya Ghosh, who both provided us with invaluable guidance and feedback.

ICTE3002 - Human Computer Interface
School of Electrical Engineering, Computing and Mathematical Sciences (EECMS)

Curtin University

Our “best-of-both-worlds” Improved Conference Poster

As an experiment, we also decided to make a version of the poster, but entirely within the constraints of Morrison’s “Good Conference Poster” guidelines. We entirely traded our visual identity for an (allegedly) more readable, effective poster.

FlushFinder

Team G03: Gee-Oh-Three

Navinda Jayawardhana, Ola Malek,
Kuldeep Singh Talati, Harry Walters, Hans
Wong

INTRO

- Everyone deserves to have a good toilet experience.
- Every bathroom experience is unique, for every individual.
- We created **FlushFinder** to help everyone find the most suitable toilet as fast as possible.

BACKGROUND

- Our user surveys found that **most people regularly struggle** to find a suitable bathroom.
- Key factors which influenced people's choices in bathrooms were **distance, cleanliness and safety**.

PERSONAS

- Our interviewee's **experiences and pain points** were grouped into user personas.
- These are **fictional representations** of our potential customers.
- They allow us to further **understand and empathise** our user's needs.

REQUIREMENTS

- We defined requirements to align the user's **expectations** with our UI design.

Functional:

- Turn-by-turn navigation
- Customisable user preferences
- Ratings and reviews system
- Mark a toilet as a favourite

Non-Functional

- Easy to use, quick to navigate
- Home screen toilet location button
- Reliable and available service, 24/7
- Secure to protect user data

Acknowledgments

The team would like to thank Dr. Ivanna Ivanova for her time and expertise as our mentor. Without Dr. Ivanova, none of this would be possible. We also thank Dr. Susannah Soon and our tutor, Dr. Shreya Ghosh, who both provided us with invaluable guidance and feedback.



Finding bathrooms is hard. Your preferences are unique.

We've fixed that.

FlushFinder plans and guides
your next toilet journey.



Try Here



"As someone who loves **biking** and **hiking**, I'm always on the lookout for new trails and routes to explore. But when you're out in the wilderness, finding a bathroom with a **shower** can be a real challenge."

"Hi there! I'm someone who identifies as **non-binary**, and finding a comfortable bathroom experience can be a bit of a challenge. Using a gendered bathroom just doesn't feel right, and can be quite **uncomfortable**."

EXPERT REVIEWS

- Design research highlighted potential user confusion with the 'urgent navigation' interaction. Users understood the interaction when on the landing page, but not when on the map view.
- We resolved this issue by making the two identical interactions visually consistent, with the same colours and icons.
- A usability suggestion was made, to create an interaction for a user to quickly view nearby toilets on a map. We accepted their feedback by incorporating a 'snap back' button in the map view.



DESIGN CONSIDERATIONS

- Recognition rather than recall:** consistent, familiar icons enable intuitive information interpretation.
- Aesthetic and functional design:** The wave motif, representing a clean functioning toilet, contributes to the aesthetic aspect of the app's design. A strong component of our visual identity, it adds visual appeal and engages users through a simple and fun graphical representation.
- We use an **analogous colour scheme** to establish visual consistency. The use of warm and light tones help associate cleanliness, while aligning with the wave motif.

Our "Morrison-inspired" Conference Poster

While our entire team (and our industry expert) prefer the graphic designer's 'best-of-both-worlds' poster, we have been invited to print off both versions - so that during the poster presentation, we can see which of the two layouts prove more effective. (An AB test of sorts!)

5.0 Conclusion

In conclusion, our team is very happy with the final outcome of the FlushFinder app. We are looking forward to continuing working alongside Dr. Ivanova to further develop this project through Curtin Ignition and Curtin Innovation. What's more, we've loved getting to work with our UC and tutor to develop our team skills and communication, improve our design work and how to take an idea to a (mostly) real product. Thanks so much for coming on this journey with us.

6.0 UI/UX Glossary and weblinks

Weblinks:

<https://uxplanet.org/top-10-design-handoff-tools-for-designers-and-developers-81ba02618e33>

<https://uxplanet.org/a-complete-guide-to-executing-a-great-design-to-development-handoff-4bd545be9416>

<https://medium.com/@thedsqnr/how-to-prepare-design-files-for-the-developer-design-handoff-guide-ef2bff879aeb>

<https://marvelapp.com/blog/guide-successful-design-handoffs/>

<https://phase.com/magazine/designer-and-developer-handoff-guide/>

References

Figma

<https://www.figma.com/file/8sdhma3iM8iET2bwTRJiRM/Hi-Fi-Revised?type=design&node-id=4759-17603&t=pPhp5n5v1MZ7Z5BF-0>