



WORKSHOP 03: REQUIREMENTS



FlushFinder

Team Number

G03

Group Name

GEE-OH-THREE

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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

1.1 Figma link

<https://www.figma.com/file/bBWoPUHxCSTJ49UVtASqt8/HCI-Week-3---G03?node-id=0-1&t=NaVA5qEg8yrrd6ND-0>

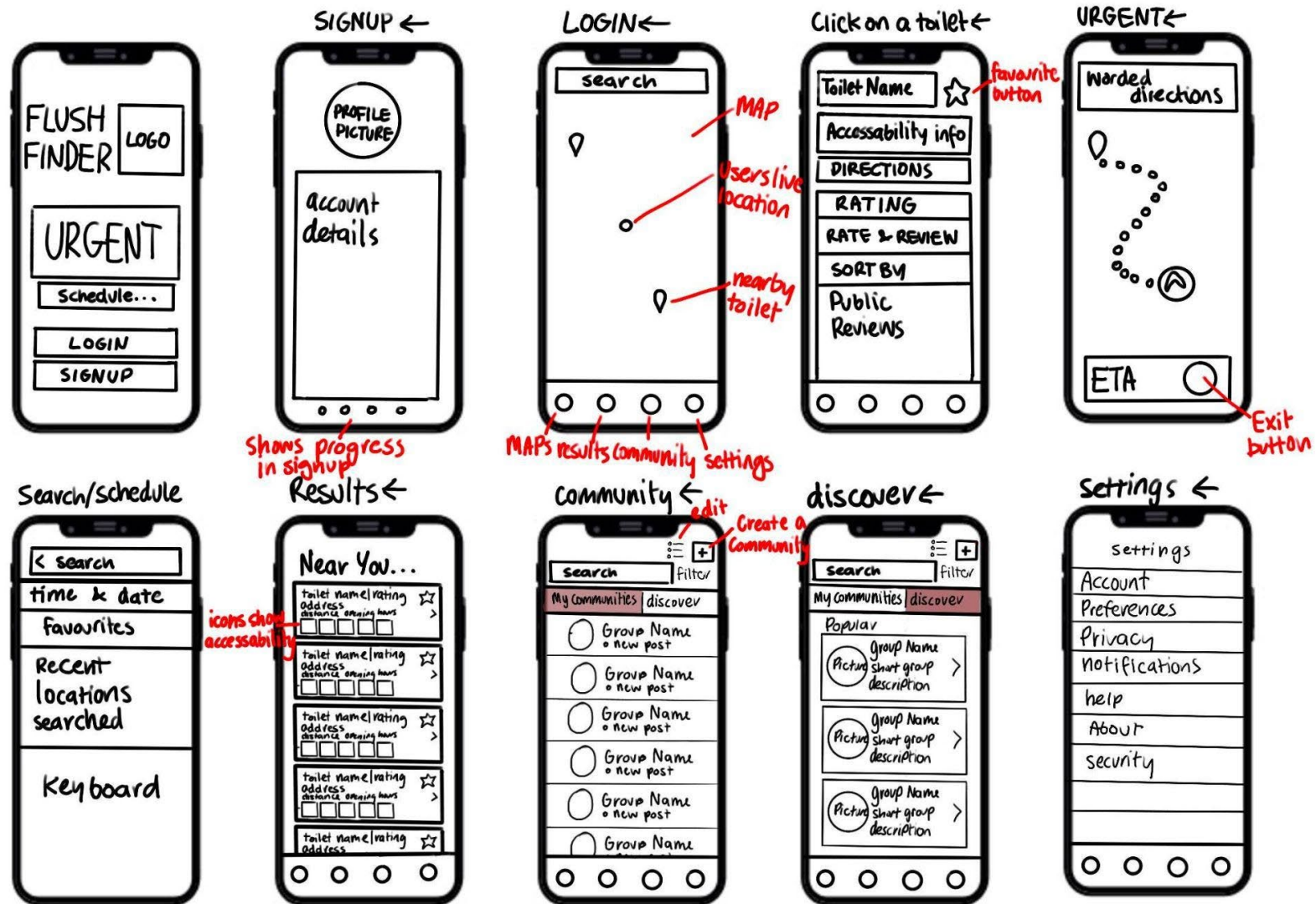
2.0 Functionality and Requirements

2.1 Functionalities your prototype will have/ Ideating solutions



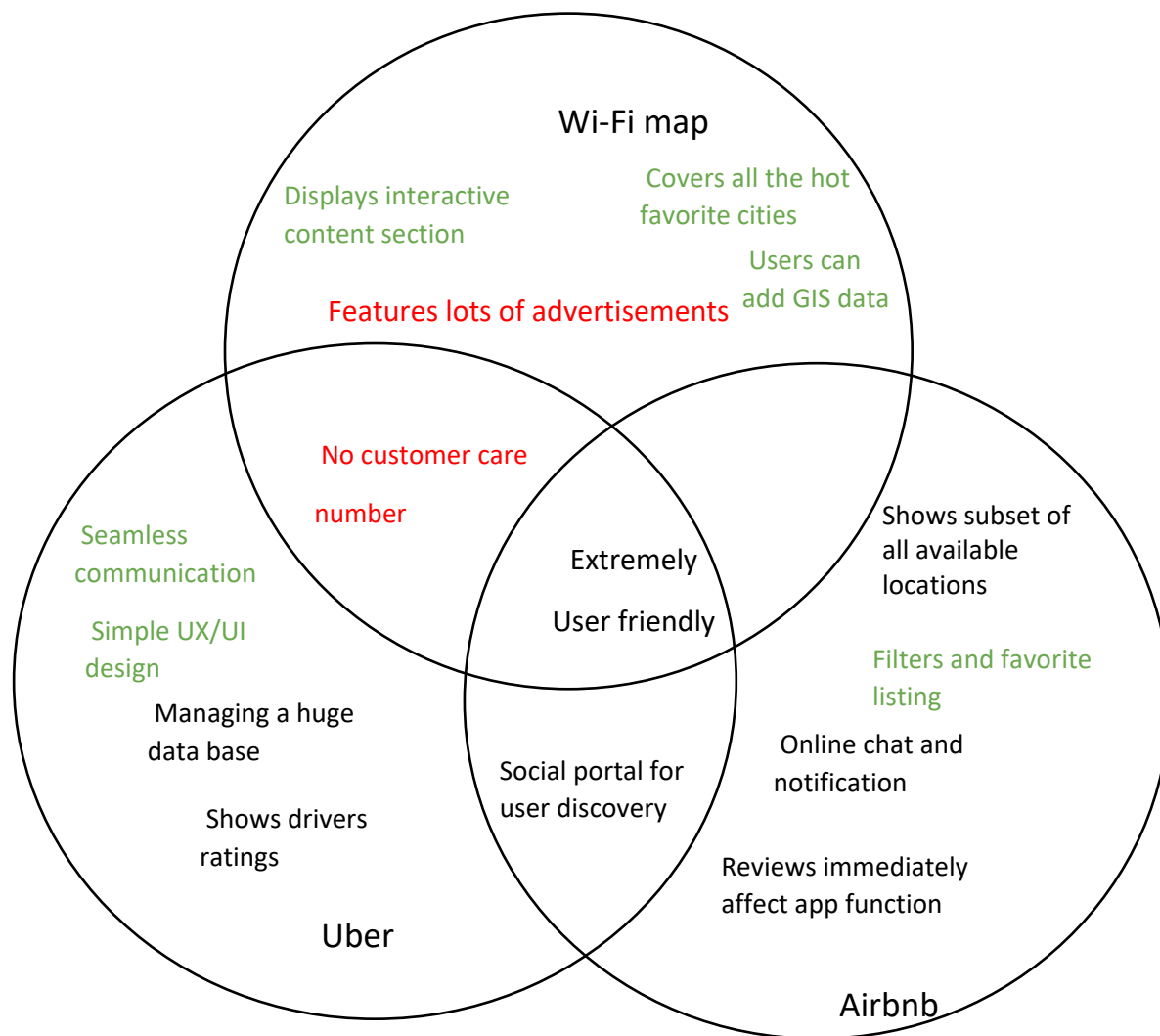
2.3 Wireframe

Here are our first attempts at wireframes. Our graphic designer has considered the functionalities the group has brainstormed above. These wireframes are just a rough template/design that demonstrate what the app may look and function like. Some frames were inspired by a lot of different mobile apps such as google maps, instagram, and the national toilet map app.



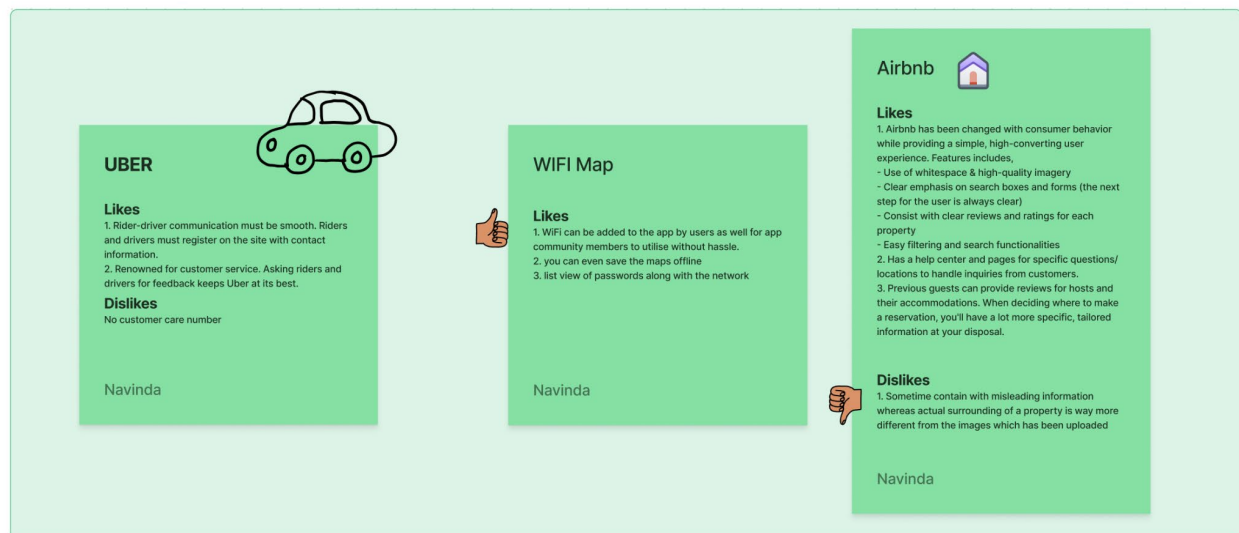
2.4 Competitor Analysis

While our group have considered the unique functionalities, just for our app, we also recognize prior industry work. Our competitor analysis allowed us to learn from relevant mobile apps in the industry as well as best-in-world, such as Airbnb, Uber, and WiFiMap.



All three apps have appealing ways to use them. When you open their mobile app, the bright colors and fonts will jump out at you. Users have a consistent experience because the navigation buttons are easy to see, since the user experience is important for app-based businesses, we can keep that in mind when making our proposed app. The WiFi map app features an interaction section, in which users can communicate with one another about the quality of the available WiFi connections ("WiFi Map Review; Forget the No WiFi Zone - TechEngage" 2018). Moreover Airbnb has always responded publicly to negative feedback and

worked expeditiously to resolve them. since it is preferable to be proactive in preventing future problems rather than reactive each time, also Airbnb offers many thousands of listings all over the world; nevertheless, the app will never show a guest too many properties at the same time (“Why Do People Choose to Stay with Airbnb?,” n.d.). If you look into Uber, you will see that: After the ride is over, you will be given the opportunity to provide (anonymous) feedback and rate your driver on a scale from one to five stars (Goetz 2019). They may enhance their services using this information in order to make each ride a five-star experience. Similarly, we can also include this facility in our suggested app so that users can rate the cleanliness of the individual restroom.



3.0 Requirements

3.1 Functional Requirements

3.1.1 User requirements

1. The user should be able to check the ratings and reviews of bathrooms given by previous users.
2. The user should be able to customize the design of the app to their liking, such as having the app on dark mode.
3. The user should be able to receive a text-to-speech instruction to help users navigate easier.
4. The user should be able to see details surrounding the bathroom they picked to know what condition/state the area is in. (Crowded due to a parade? Construction site? Road accidents? etc)
5. Users should be able to add shortcuts such as adding their favourite toilet.
6. Users should be able to see the opening hours. (Is it open 24/7 or what time do they close and what are the cleaning hours)
7. Users should be able to see what our policy is when they login and they should be able to accept it.
8. The user should be able to see if the facility is in a public building or in a park by using icons or images.
9. The user should have an option to add a missing facility within a few clicks.
10. The user should have an option of sharing the location of the map with other users.
11. The user should be able to recenter the map with the help of one click.
12. There should be a link or small button option at the bottom (Left or Right) which would take them to a web page which would have all the legal info.
13. The user should be able to leave feedback with just one click.
14. There should be an option of clearing all the toilet data such as from fav. (Just in case the user is moving to a different location.)

3.1.2 System Requirements

1. The system should have an up-to-date database of bathroom locations, it should be detailed and accurate.
2. The system should be able to log missing toilet info in a separate database table so that administrators can see the info.
3. There should be an option for users to jump back to the previous version.
4. The system should give users the option to connect/login by using other accounts such as continue with Google/login with Apple.
5. The system should assign a uni id number on the backend side to identify the number of users using the app.

6. The system should provide a unique profile picture based on the initials from the users.
7. The system should provide basic info if the user is having issue for example searching or uploading info (Error: The network system requirements should be users should have a better network connections such as 3G or better)
8. The system should easily be able to scan the map and download the offline map info in the accessibility depository.
9. The system should provide the bathroom availability, cleanliness, and pictures of the bathroom based on user feedback.
10. The system should be able to process a large number of requests, searches, and logins simultaneously.
11. The system should provide a staff support option if users encounter anything unusual.
12. The system should be able to display results quickly and efficiently without any delays/lag.
13. The system should be fast and effective in a way that it uses less resources from the app such as RAM and Storage key options.
14. The system should have minimum waiting time when users search for the different toilets using filters.
15. The system should be able to encrypt the database table using Advanced Encryption Standard (AES) should be used for securing the back-end database which could be 128-bit 192 & 256 bit.
16. The system should isolate the user who is providing false information when it comes to uploading updated toilet information.

3.2 Non-functional requirements

Usability: The app should be easy to use, quick to navigate, visually appealing design, and provide concise instructions for users. Display primary use (finding toilets) as the first thing when users open the app and secondary uses under the menu tab on the top left.

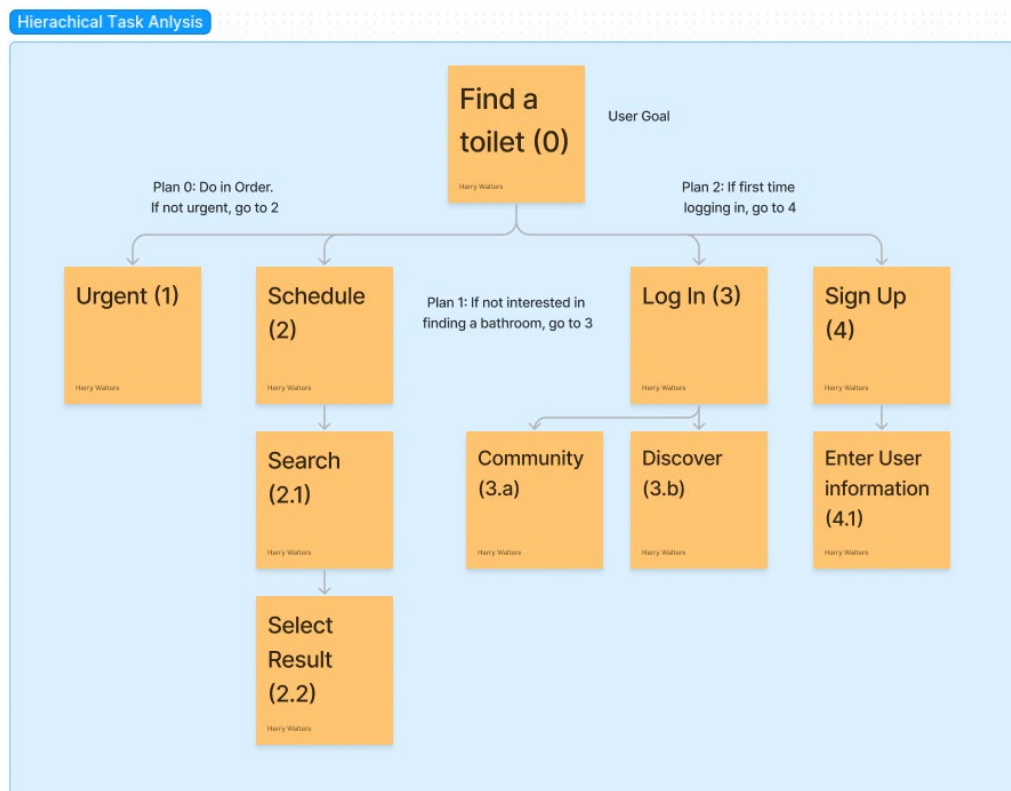
Reliability: The app should be reliable and available at all times, announce duration of maintenance or updates, perform a full-backup weekly and recovery mechanisms if there is a system failure or data loss.

Security: The app should have security measures to protect user data, prevent unauthorized access, any malware intrusion by encrypting its data and having security protocols. Providing caution messages to users that the app will never ask for personal information about the user.

Performance: The app should be responsive, efficient, accurate, fast, and convenient. There should not be any crashes or errors whilst also handling a large number of data and requests from users using the app.

4.0 Hierarchical Task Analysis

We're faced with a sort of chicken-and-the-egg problem. Our HTA informs the wireframes, but the design of our wireframes can change how we analyse the hierarchical user structure. Here are our first attempts at the HTA.



5.0 UI/UX Glossary and Weblinks

1. (UX) Wireframe - The app's visual representation, user interface that displays the structure and content of the app. <http://uizard.io>
2. (UI) Typography - Arranging written language legible, readable, appealing, and attractive. <https://www.typewolf.com/>
3. (UI) Iconography - Using symbols and icons to represent concepts and actions of the interface. <https://m3.material.io/design/iconography/basics.html>

6.0 Evidence

6.1 Meeting Minutes 22/3

GROUP NAME	GEE-OH-THREE
DATE	22/03/23
TIME	5:46-7:19pm
LOCATION	Online Via Whatsapp

PRESENT:

Ola Malek, Hans Wong, Kuldeep Talatia, Harry Walters

APOLOGIES:

ABSENT:

Navinda

DISCUSSION:

As a group we are willing to split the IP evenly.

Tasks that have been done:

- Workshop 2-PainPoints has been submitted
- Workshop 3-Requirements has been added to the google drive in folder workshop 3

Tasks to do:

- Collaborate on Figjam for workshop 3
- Start to create assignment 1 document

TASK	WHO	DUE	COMPLETE
Best-in world competitor analysis	Navinda	27/3/23	
Requirements	Kuldeep, Hans	27/3/23	
Hierarchical	Harry	27/3/23	
Evidence	Ola	27/3/23	
Wireframes	Ola	27/3/23	
UI/UX glossary and weblinks	Hans	27/3/23	

6.2 Meeting Minutes 27/3

GROUP NAME	GEE-OH-THREE
DATE	27/03/23
TIME	2:00-3:00pm
LOCATION	Curtin Library room 524

PRESENT:

Ola Malek, Hans Wong, Kuldeep Talatia, Harry Walters, Navinda (Online)

APOLOGIES:

ABSENT:

DISCUSSION:

Harry said Hans eyes look beautiful

Tasks to do:

TASK	WHO	DUE	COMPLETE
Best-in world competitor analysis - Add references	Navinda	28/3/23	In progress
Requirements - Hans put it in the figjam - Will elaborate on his figjam	Kuldeep, Hans	28/3/23	complete
Hierarchical	Harry	28/3/23	complete
Evidence	Ola	27/3/23	yes
Wireframes	Ola	27/3/23	complete
Assignment 1	team	23/4/23	Work in progress
Format the document	Ola	27/03/23	complete
References - Include intext references	Harry	28/03/23	complete

References

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<http://www.conscious.travel/10-reasons-why-airbnb-is-an-awesome-conscious-travel-enterprise/>.

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Goetz, Lisa. 2019. "4 Reasons Why Riders Choose Uber." Investopedia. November 17, 2019. <https://www.investopedia.com/articles/markets/063016/4-reasons-why-riders-choose-uber.asp>.

"Why Do People Choose to Stay with Airbnb?" n.d. <https://www.modul.ac.at/index.php?elD=dumpFile&t=f&f=9405&token=b1c2e98f9345d5fa7e27859086428f3874ee9dc8>.

"WiFi Map Review; Forget the No WiFi Zone - TechEngage." 2018. September 11, 2018. <https://techengage.com/wifi-map-app-review/?amp>.