Assessment 3

Sprint Participation & solution Group work

Design Workbook

Team Name: Team 4

Project Topic: Mt Coot-tha Botanic Gardens

Team Members & Roles

Name:	Student ID:	Roles:
Tirivashe Ushamba	14155597	Documentation Interviewing Presenter
Simran Mulchandani	14384250	UX Design , Prototype testing
Daniel Uponi	14102996	Prototype testing, Presentation
Jihyung Park	14294832	UX Design, Prototype testing

Summary of the Design Thinking Processes:

Empathy: not less than 150 words

List of interview questions

1. What is the current way to give information about the garden?

2. Are you looking to develop an app only or improve how the garden looks digitally? What core features are you typically looking for in the botanical garden app? Are you more interested in maps, plant databases, or guided tours??

3. Do you have specific Colours you would like to be maintained such as the Brisbane council blue and yellow colour in the application? Are there any other features or functionality that you would like to see included in the app beyond navigation?

4. Are you comfortable with having information about the plants in the app or would you rather have it next to the plants?

5. Which sites do you have as unique and believe visitors should see when they visit the garden?

6. Are you open to the idea of having paths for the disabled getting a specific color on the application map?

7. It seems like the garden is not wheelchair accessible, is there any way or will there be any modifications in the future to help people with wheelchairs visit the garden and experience the beauty of the garden conveniently?

8. Are golf carts available in the garden to assist older people or those who have difficulty walking when visiting the area?

9. Do you want an application or web-based app where people can just use the website to access information instead of downloading the app?

10. Do you have convenience features would you like to see added?

11. What relevant activities do you have for children?

12. In your years of working in the gardens so far, what do you think is the main motivation for people to visit a botanical garden? Do you think they come to learn about plants, to appreciate nature, or for some other reason? Do you want the App to teach visitors about plants and the history of the plants in detail?

13. Have you used any botanical garden apps in the past? If so, what features did you find most useful or frustrating?

14. How easy do you find it to navigate apps on your mobile device? Would you prefer a simple, intuitive app design or a more complex, feature-rich app?

15. How important is the visual appeal of the app to you? Would you prefer an app with lots of images and videos or one that focuses more on text-based information?

16. Do you have any specific accessibility needs that you would like the app to address? For example, do you need text-to-speech or high-contrast settings?

17. How important is social sharing to you? Would you like the app to include features that allow you to share your experiences at the garden on social media?

- Notes and Insights of at least 3 interviews

Simple, intuitive, and easy-to-navigate user interfaces (UIs) are essential. The app will be more engaging and enjoyable to use with a clear, visually appealing design and high-quality images. To provide relevant information to users based on their location, the app should leverage location-based services. For example, the app can provide users with information about nearby exhibits, plants, or events in real time as they walk through the garden. The app should be designed to be accessible for all users, including those with visual or auditory impairments. This can include features like text-to-speech functionality, high-contrast designs, and closed captioning. The app should integrate with social media platforms like Facebook and Instagram, allowing users to share their experiences and photos with friends and family. This can help to increase the visibility and awareness of the botanical garden.

- Images/sketches produced during this process

- Describe major insights from the empathy process

The digital map should be interactive, allowing users to zoom in and out, pan, and tap on specific locations for more information. Additionally, it should include a search function that allows users to quickly locate specific plants or areas. To ensure everyone has access to the information they need, the botanical garden app must support multiple languages.

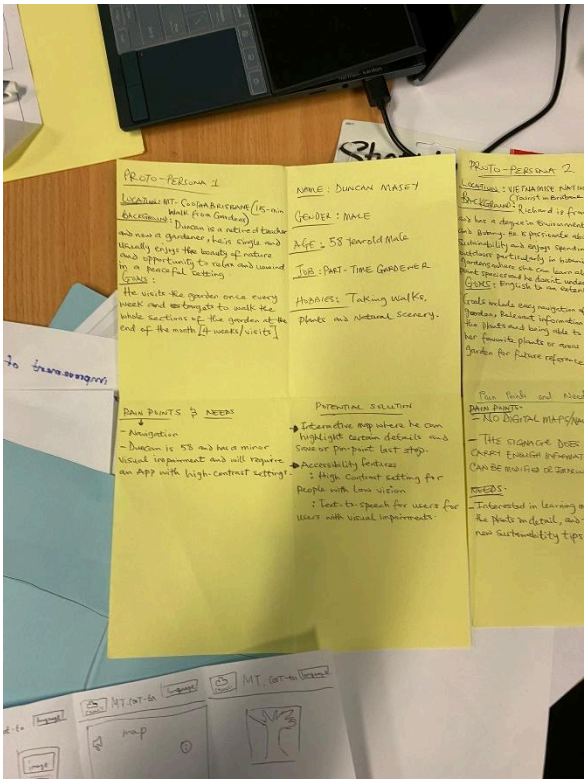
Define: not less than 200 words (excludes empathy map, character profile, POV madlib and POV want ad)

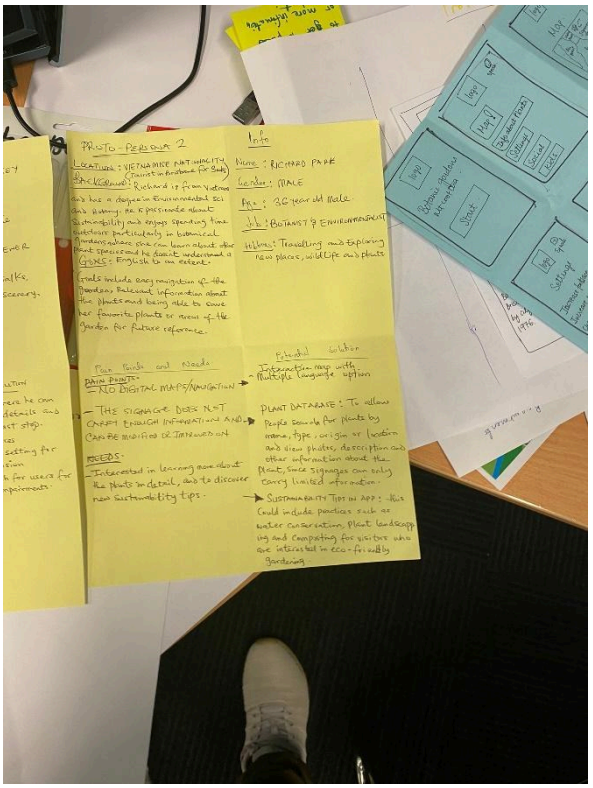
- Describe the methods used by your team in the define design thinking process

With the use of story sharing, saturation as design thinking processes we were able to define our problem. Story share allowed every member to voice out how they were defining the problem. Form there we then conducted user research which helped us understand the needs and goals of the potential application users. We also managed to conduct survey and interviews on botanical garden visitors so that we could get feedback on their experience and what they would like to be improved.

User personas allowed use to identify the different potential users we were going to have. Form the user personas we had we then managed to make solutions that would address the needs of each user. We created the user personas based on the empathy map we had.

- Create an empathy map, a composite character profile, a POV Madlib and a POV want ad for your project







The topic was already given to us by the client. Our goal was to focus on improving the digital aspect of the Mt cootha botanic Garden. The group then focused on improving navigation around the garden with the use of an application and information boards for users who are not interested int he use of the application.

POV Madlib and a POV want ad

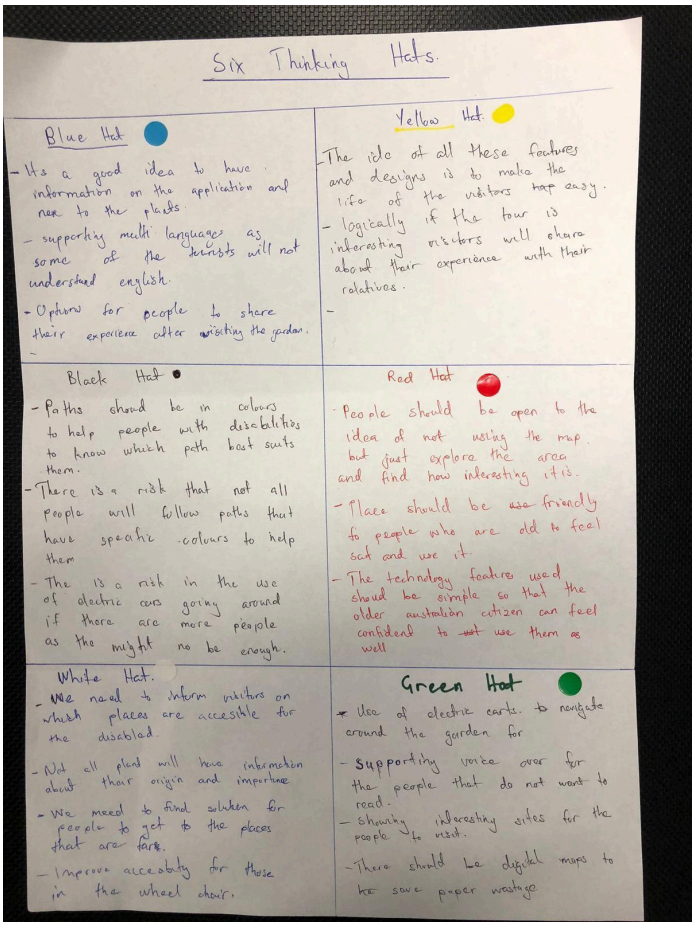
User	Need	Insight
An disabled person who uses a wheelchair	To experience what the garden has to offer without getting worried about using paths that lead to stairs or steep climbs	We need to suggest a solution that helps them go around the garden. The group managed to come up with use of different colours to highlight the paths they should use.

Ideation: not less than 200 words

- Describe the ideation methods used by the team to generate ideas

The team used brainstorming to generate ideas on how to solve the problem we had. Brainstorming involved each team member coming up with many ideas in a short amount of time. We then shared our different ideas. There was no criticism of other people's ideas, so every person felt free saying out their ideas. From the list of ideas, we had managed to come up with the group refined the ideas as some of them were similar. We also had to pick solutions that could be developed in the time frame we had.

- Images/sketches produced during the ideation



- Describe the methods used by the team to select what to prototype

With the use of the six thinking hats the team managed to improve the ideas that we had managed to come up with during brainstorming. The six thinking hats allowed us to evaluate how our solutions were linked to the problem we had. This then gave the group a chance to see the advantages and disadvantages of every solution proposed.

After a careful analysis of the solutions using the six thinking hats we then used zen voting to pick the solutions were going forward with. Zen voting allowed every member to express

their opinions by the use of sticker dots to select their favoured solution. As each member is limited to the number of sticker dots, they will have to pick their own opinion without the bias of others.

Each team build 1 prototype idea in each iteration, each team conduct at least 2 user tests in each iteration.

Prototype and Test (Iteration 1) not less than 200 words

- Images of prototype



- Describe notes and insights from user testing

    - What did participants value the most?

      From test the liked the idea that we implemented the use of different languages as the garden gets visitors that are not familiar with the English language as well.

    - What got them excited?

      The use QR codes to scan information about the plants.

    - What would convince them about the idea?

The use of QR codes meant less use of boards to give out information and also more information can be posted on the page they will be reading as compared to writing up the information on a board.

- Which parts would participants like to improve?

We got advice that our navigation needed to be improved as this was the main reason for having this project.

- What did not work?

The explanation on how we were going to implement our 3D map was not clear.

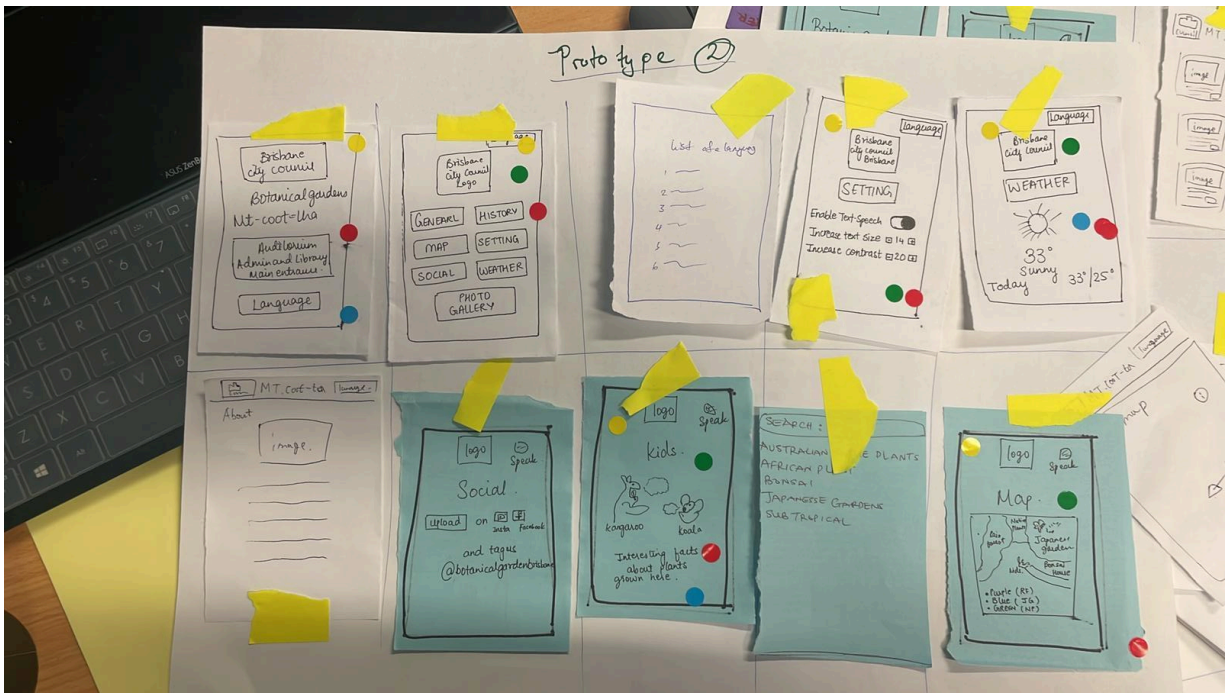
- What needs further investigation?

We had to investigate how we were going to make the 3D map work better. From the testing, we were given pointers on how we should improve the security for the plants that are rare as they have been getting stolen.

- How to integrate feedback and insights in the prototype in the next iteration?

We are going to gather all the feedback and analyse how we can improve each and every feature talked about. Because of the limited time we had the group decided to prioritize the different features we had.After prioritising them we then refined the ones we were going to develop before testing the new prototype.

Prototype and Test (Iteration 2) not less than 200 words



- Describe notes and insights from user testing

    - What did participants value the most?

    The Idea of the 3D map was now clear and they liked it as it meant easy navigation around the garden.

    - What got them excited?

    The use of different colors to show a route that could be used by the disabled allowed got them excited as it solved the accessibility issues that were not being addressed by the current map that was in use.

    - What would convince them about the idea?

    With the use of different colors on paths, the disabled can get to enjoy their experience without having to worry about getting to stairs or a steep climb they cannot go up.

    - Which parts would participants like to improve?

    We got advice on the use of chat gpt as a plugin to help users research more about the plants they would have seen as they tour around the place.

    - What did not work?

    The use of a virtual tour around the place was not a good idea it coil lead to people seeing the whole garden from their homes yet they need to be encouraged to visit the garden.

- What needs further investigation?

We need to include features such as audio output for users that are blind and cannot read.

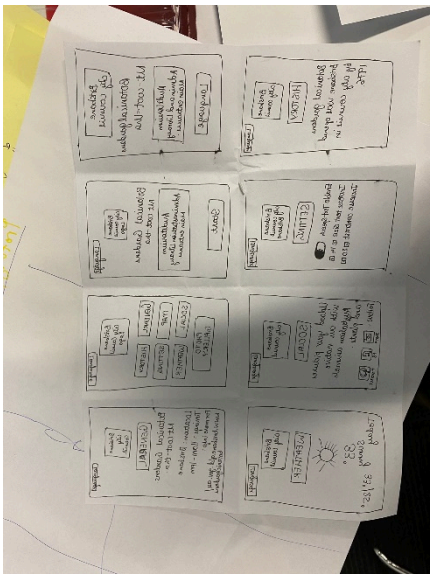
- How to integrate feedback and insights in the prototype in the next iteration?

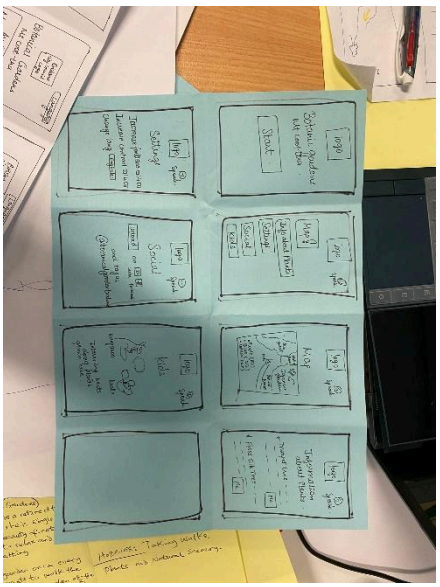
We'll compile all the comments and consider ways to enhance each mentioned feature. The group chose to prioritize the various characteristics we had because of the short time we had. Prioritizing them, we then improved the ones we planned to develop before putting the fresh prototype to the test.

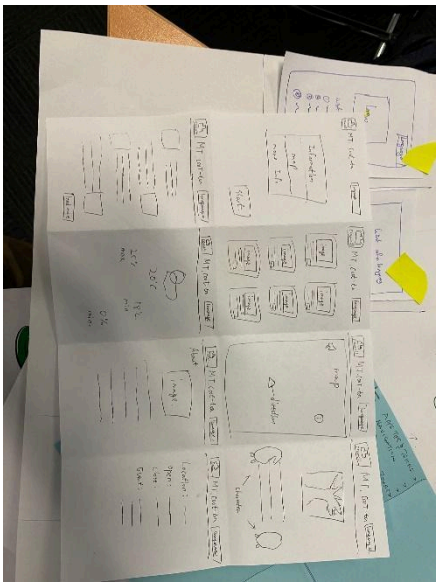
Final prototype

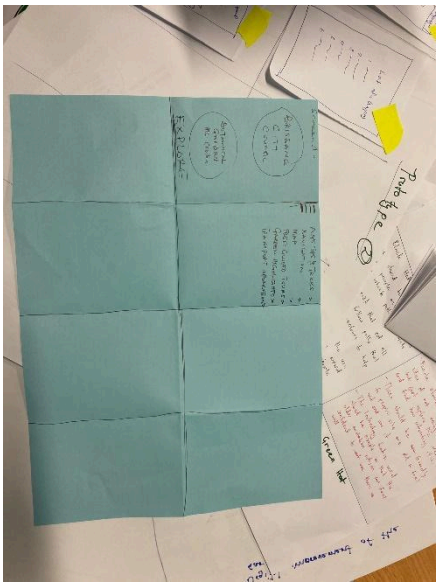
https://marvelapp.com/prototype/88e2d73

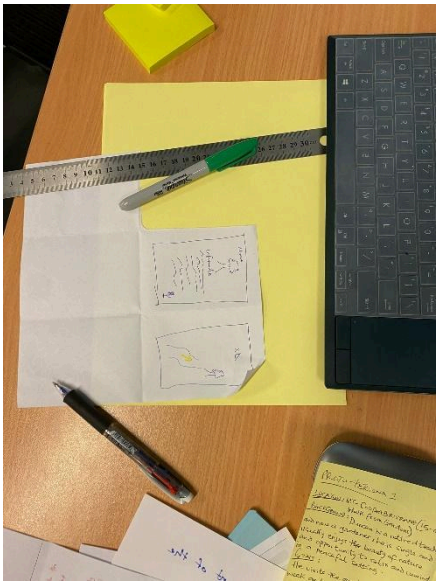
Appendix: any photos, sketches & notes produces during sprint

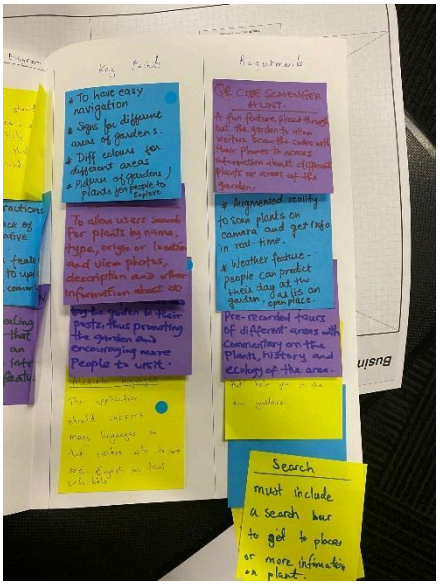


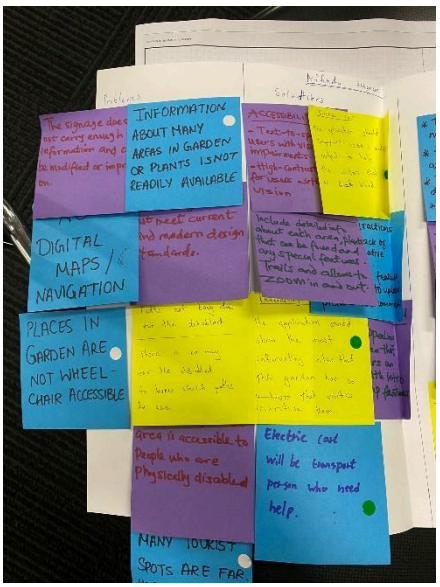


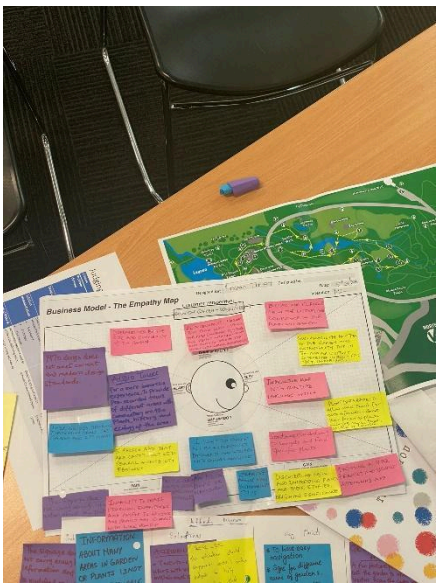


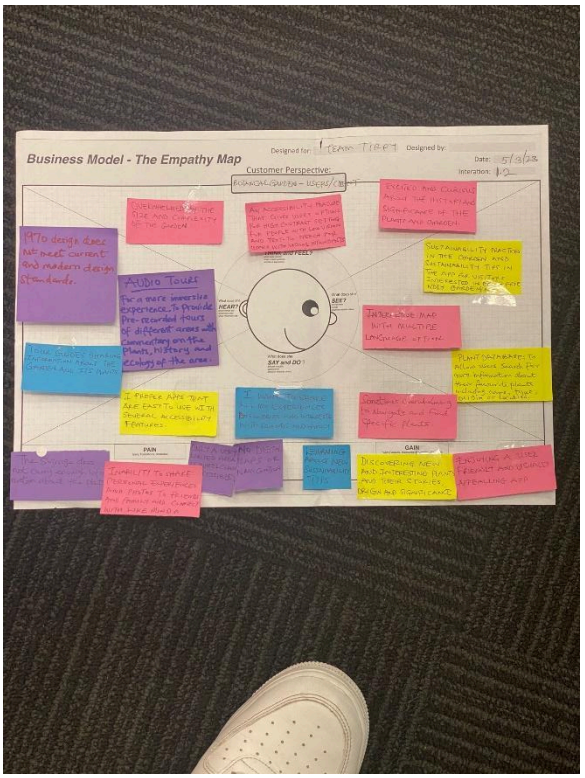





To have easy navigation
Signs for different areas of garden's.
Diff colours for different areas (garden) / Pictures of plants for people to explore
To allow users search for plants by name, type, origin or location and view photos, description and other information about etc
Search
must include a search bar to get to places or more information on plant


INFORMATION ABOUT MANY AREAS IN GARDEN OR PLANTS IS NOT READILY AVAILABLE
DIGITAL MAPS / NAVIGATION
PLACES IN GARDEN ARE NOT WHEEL-CHAIR ACCESSIBLE
Area is accessible to People who are Physically disabled
Electric car will be transport person who need help.
MANY TOURIST SPOTS ARE FAR


Business Model - The Empathy Map


Business Model - The Empathy Map
Customer Perspective:
1970 design does not meet current and modern design standards.
AUDIO TOURS
PAIN
GAIN