# A3 Reflection & Portfolio

Advanced Interaction Design

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### Part 1: Reflection

My key insight from this project is that I can use good strategies to form enduring products that fit the needs of our target users. This is important for UX designer because as a UX designer I need to identify problems that need to be solved and come up with solutions to those user problems to enrich their user experience. From this project, we interviewed some physical disabled people and I data analysis skills to find our target user needs. However, I found that our process of analyzing user research data for this project was more nuanced than my past projects. We keep the user in mind throughout the design process. We consider their feelings, thoughts, triggers, and more. This is my favorite aspect of the design process because we do have to understand our users a lot more deeply than the average UI designer. We must understand how our users think and act, and we also need to consider human-centered processes. By building my data analysis skills, I made very clear correlations with each person's data and analysis the data. It helped me strengthen my skills in interviewing and analysis to build a good persona. (see sample 1 in the portfolio (page 4) for a good example where I can identify pain points they may face during their commuting). I think this project has challenged and strengthened a range of my personal and professional skills as a UX designer: interview with people, data analysis and design the persona, Affinity Diagram, Journey Map.

One of the skills of an interaction designer is design prototype. By building design prototyping skills from basic sketches to high-fidelity prototype, it took us a long time to process. This is because we need to have some common ideas to deal with prototype. As a team-based project, we design the prototype together. Through collaboration, it becomes very easy to turn a problem into a viable solution, whether it's developing an idea or creating a prototype quickly and easily within time constraints. I'm not good at the creative artistic side of product design, but luckily another team member claims she's really artistic and passionate about the role. By learning the process of designing a prototype, I learned from basic layout design to high visual design. But I'm still not very good at prototyping, sometimes I think the hierarchy is considered poorly. (see sample 5 in the portfolio (page 9 ) as I think the design is not very good).

Talk about all the learning and experience I have learned from this project. I learned how to do usability test for the prototype with target users and this is my second time to do the usability test. I have found usability testing to be an important part of after completing our high-fidelity prototyping and we can get a wider range of reactions, comments and suggestions. Compared with last time, I think the usability test I did this time was much better, because the last time I said it was too small, the user couldn't hear it clearly, and guided their users too much. This time I let the user operate the app as user often does without my help. I let the user talk more than I do so I don't guide the user too much beyond what tasks need to be done. Looking back on my journey, I think it's been a good improvement for me, but I still need to improve further in this area. But overall, I really learned a lot throughout this usability test process.

I expect to continue exploring user experience in my future design practice to explain the field of interaction design, with an emphasis on data analysis and prototyping. I now appreciate that persona, Affinity Map, Journey Map are perfect because interaction designers need to have a deeper understanding of user needs and pain points, strategies and frameworks to ultimately

achieve project goals. Well-designed interfaces and user experiences use the principles of interaction design to locate user needs, their communication purpose and effectiveness, and user needs, degree of interaction, and usability tests. This strategy significantly improves the final result. I will continue to focus on UX design techniques and a human-centred approach. I will focus on the gathering of information and perspective to achieve the final desired outcome. I will continue to improve more related skills.

The following steps I need to improve in the future are:

Overall, I need to improve a lot of related knowledge to gain range of border knowledge of UI. Firstly, I need attend some good UX courses. For example, the course likes Billy Hollis 'UX Design for Developers'. Build a range of skills to develop more of my UX design thinking skills. Secondly, I need to building powerful skills for prototyping in Figma. Like 'Learn Figma: User Interface Design Essentials - UI/UX Design' course. To build strong design prototyping skills, I can also design my own. Thirdly, it was my first time design the Journey Map, I still need to improve related skills, to build good Journey Map. Lastly, the usability test is also another area I need to improve. So before I started, I needed to do a couple of test runs to make sure the testing process went as smoothly as possible. I need to muster up the courage to be in front of the users.

References:

Billy H., *UX Design for Developers.* Linkedin. <u>https://www.linkedin.com/learning/ux-design-for-developers/add-ux-design-to-your-talent-stack</u> ?autoplay=true&u=2129308

Udemy. (2022, July). *Learn Figma: User Interface Design Essentials - UI/UX Design.* https://www.udemy.com/course/learn-figma-user-interface-design-essentials-uiux-design/

### Part 2: Portfolio

# 1. Introduction

For this project, we developed an app called "E-trip". This "E-trip" application helps physical disabled people easily book seats on public transportation such as bus, train and wharf, so that their physical needs can be fulfilled, even at peak times. We also provide a 'barrier-free' as our second function to make their commute journey more fluid. This function makes it easy for people with physical disabilities to navigate the train station, navigating elevators to help physical disabled people to step-free access between floors and ability to change routes. Overall, we designed the application to focus on providing these groups with convenience, convenience and efficiency to address their physical and social issues.

My name is Ziqian Zhang and my group members are Jiapeng Cheng, Wenwen Zhao, Ziyang Huang and Ziyu Ma. We all analyzed user data and developed prototype together.

Summary of skills I showcased in my portfolio

- 1) User research & interview
- 2) Data analysis with my team members
- 3) Persona design
- 4) Affinity Diagram
- 5) Journey Map
- 6) Low- fidelity prototype
- 7) High- fidelity prototype

### 2. Portfolio

### 1) Persona

For this project, one of skills that I've developed is the ability to analyze user research data to identify users that represent our demographics. Annotate the persona by highlight the section where our data analysis led to the content of that section. I combined the background information, goals, and pain points sections of my research data through three interviewees I interviewed, led to the content of this section. The main problem I find with this group is that they have a hard time finding a seat in transport, commuters with physical disabilities find it difficult to get through stations during peak hour due to crowds, making them nervous and afraid of being pushed over. So I identified the main issues in the background information and outline the most common goals and frustrations in the Goals and Pain Points section. However, I outline the frustrations, inconveniences, and even annoyances that the physical disabilities people face and want to solve. I asked related open-ended questions and ask about their commuting experiences (positive and negative), it is helping me identify valuable pain points for this demographics.

#### information is the same. Background Information Background Information As I get older on physical problems is decreasing. I have eye problem fecently, so I was hospitalized for a week found the my eyesight has decreased. I also have a high blood pressure Motivations ire, ~Social relationship with friends and family eed to take care of myself more. members to gives me a sense of orried about I can't travel to different places any connection eed to prepared medicine at anytime during the travel time ~ Have a good lifestyle, like fishing, reading Chunrong Sun I am wish I can get more care physically during commute Id save commuting time to do some meaningful things. and enjoy the life Interests 'Eve problems have cut my y's digital technology is change so fast, I learn new th for a long time, but i still found useful and meaningful for digital technology. When I don't know something. I can qu check it over the phone. happy life for a while'. - Reading books - Walk as exercise - Travel to different places Skills: Age: 56 Gender: Male ant to take the train to work effectively - Basic skills in using mobile phones and Occupation: Worker Maintain a health lifestyle computers To make sure multiple aspects of live more scenically - Use WeChat to communicate with friends Location: Anhui, China and family Nationality: Chinese **Pain Points** - Can use commit app to check the bus - Use Tik Tok to relax Digital technology changes so fast that he cannot learn ne **Relationship Status:** - Use Taobao to buy some items online leath conditions are becoming more serious issue, e.g Married Claim 1.1 I interviewed three people, most goals and

frustrations are the same.

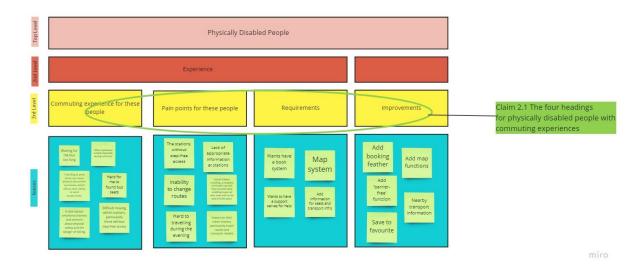
miro

Claim 1.2 Most of the background

Sample1: persona of a physical disability people who has commuting issues.

### 2) Affinity Diagram

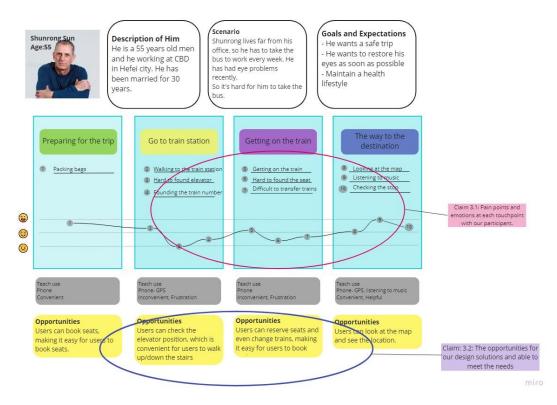
In order to get key insights into how we can support more positive experiences for people with physical disabilities in commuting. I used the Affinity Diagramming method to draw useful findings from my research data about communing. It helped me break our minds and allow us to solve many complex problems. First, we propose our design solution only booking system. After we did Affinity Diagramming, we're thinking about more features to make travel safer for people with disabilities. We reviewed our notes and found that people with disabilities have a lot of difficulty in train stations, so we came up with new design solutions to help these groups of people. Since our target group is people with physical disabilities. Therefore, we identified the issues they might face during their commuting, found that normal experiences for them and how we can improvements their communing experience, so we set up four headings for this affinity diagram to make it easy for us to brainstormed ideas and how we design solutions to meet their needs. I could use the research data to get into the four headings I designed.



sample 2: The Affinity Diagram of a physical disability people who has commuting issues to outline the issues.

### 3) Journey Map

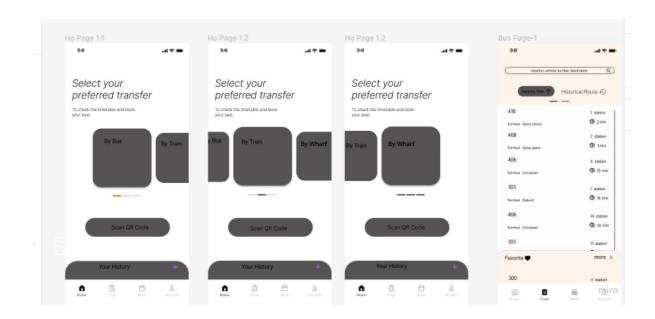
To gain key insights on how we gained participants' points of view and user experience for commuting experience. I used the Journey Map method to draw useful founding for understanding and addressing our participant needs and pain points to allow us to solve related problems about their commuting experience. By designing a Journey Map, it gives us a visual sense of the journey and reflects the commute journey of our participant. It helps us interpret what users think when they achieve their goals. It allows us to see a timeline of the user's thoughts and emotions, it also creates a narrative and it helps us understand every touchpoint with our participants. After we've analyzed persona and Affinity Map, it's a good way to make a Journey Map to set up user scenarios that describe a series of commuting events. However, by designing the Journey Map, it allows us to come up with good solutions to meet the needs and expectations of users and find where they need to improve the design and reduce their pain points gaps about their commuting experiences.



Sample 3: The Journey Map of a physical disability people who has commuting issues we outline the emotions/ feelings/opportunities.

# 4) Low-fidelity prototype

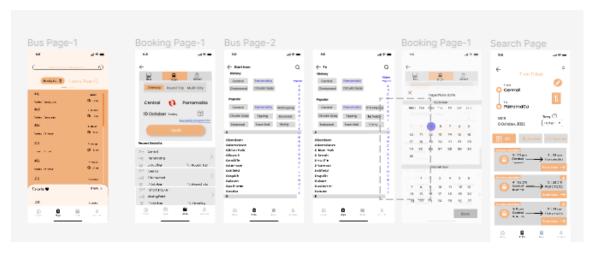
After we completed the data analysis with our participants and we used persona, Affinity Map, and Journey Map to analyze participant needs. So, we move on to the next prototype design. We started the process of thinking about how to make a prototype and address the problems needs. After we agreed with all our design ideas, we started to draw early mockups using Figma. It is a useful tool that allows us to get a basic wireframe that outlines the blueprints for our app UI screens. After we've designed our low-fidelity prototype, it is a good way to check and test functionality, allowing us to make improvements to high-fidelity prototypes.



Sample 4: The low-fidelity prototype I designed for this project.

### 5) High-fidelity Prototype

After we got basic feedback on the low-fidelity prototype, we started designing the high-fidelity prototype. Before we start prototyping, we start thinking about our visuals and setting up the user flow. Based on that info, we started designing the high-fidelity prototype. This is a useful tool that allows us to meet the needs of the participants and to be able to make the final design in terms of detail and functionality. After we've designed our high-fidelity prototype, it is a good way to usability testing of the product for target users to validate it and be able to spot any problems or failures before placing it on the market. Feedback can be leveraged by using a prototype that is closest to the final product in detail and functionality. It allows us to make improvements and changes to meet the needs of our target users.



Sample 5: The high- fidelity prototype we designed for this project. (Counting from the right side, all five were designed by me)