### **Task 7 DIEP Final Report**

## Describe

Since the course material and projects have been so rich this semester, I have greatly benefited from them. From the initial user research to the complete APP design later, each step brought valuable learning experience, and I gradually grasped how to complete each part of the work systematically. Especially in the part of prototyping. My previous perception was biased, and I often regarded it as a simple task, even sometimes skipping the wireframe drawing and going directly to the production of high-fidelity images. However, after watching the videos in RRR Task2, I have a deeper understanding of prototyping. I realised that prototyping is not only diverse, but also crucial. It can help us detect and fix potential problems at an early stage, as well as provide strong support for subsequent design optimisation.

So, in Project 2, I decided to try to follow the methodology in the RRR Task2 video, not only drawing wireframes, but also simulating interaction scenarios using pieces of paper, which resulted in the discovery of quite a few interaction holes. By following this method, I saved a lot of time in remodifications and was really able to appreciate the importance of prototyping as a tool for improving products.

#### Interpret

Now I understand that prototyping is a key step in the early stages of a project. It is a simple interaction method that uses lines and graphics to draw a framework diagram of a product to represent the interaction logic and dynamic interaction experience of the product. For example, a quote from the opensource design website PIXSO serves as a definition, 'Prototyping consists of three parts: wireframe, prototype, and mockup, which are subdivided into high-fidelity and low-fidelity prototypes (Pixso, 2024).

My renewed understanding of prototyping has had important implications for my subsequent design work. Firstly, it changed my understanding of the design process: the prototyping process is from sketching on a piece of paper, step by step, to creating a clickable multi-page prototype. For me, prototyping is no longer an optional design step, but a tool that helps me identify problems before I start production, so that I can avoid reworking and modifying these problems during the actual development process, thus saving time and cost. For example, I can get the idea of an interaction scene done much faster by just sketching it out with a simple pen and paper, rather than going through the process of creating a complete and complex high-fidelity diagram. In addition to this, my interaction logic can be clearly depicted in a constantly modified wireframe location, which is ultimately produced as a low-fidelity diagram. Prior to this, I was always in a hurry to produce high fidelity graphics and wanted to see the final result earlier, so I neglected the need for prototyping, which kept me in a state of logical confusion, and even made it go against my original design intention. By paying more attention to prototyping in Project 2, it not only helped me clarify my design ideas, but also greatly improved the efficiency of the project. For example, by drawing wireframes and user flow diagrams in Project 2, I found some problems with the buttons that didn't make sense, which might have been overlooked if I had jumped directly to the high-fidelity design stage.

Secondly, prototyping is now not only a process of validating design ideas for me, but also a process of continuous improvement and excellence. Before this I had the notion that prototyping was a one-off process. I find that every step of prototyping is helping me to identify problems and keep on revising and optimising. For example, when drawing wireframes, I could erase unsatisfactory parts many times, modify various types of layout and interactions, and keep experimenting until I was satisfied. In my future projects, I will pay more attention to each step of prototyping, so that I will not be so eager to pursue the final result that I neglect the logic and usability of the design.

### Evaluate

In addition, this realisation is important because it made me start to pay attention to user research and user testing. I learnt to conduct multiple rounds of user testing during the design process, which can verify in advance whether the relevant features of the product satisfy users' needs before the actual development, so as to adjust the direction in time and avoid deviating from the product's goals. For example, in Project 2, I conducted user testing after the first interaction prototype was made, and I received some feedbacks about the lack of obvious colour contrast and complicated interaction flow. Based on this feedback, after several adjustments, I managed to make the interaction smoother and simpler. In the past, I was more concerned about the aesthetics and end result of the design, but now I realise that the core of the design is to solve the user's problem and satisfy their needs. In the second week's lecture, Tutor mentioned that "User-centred design means understanding what your users need, how they think, and how they behave and incorporating that understanding into every aspect of your design. incorporating that understanding into every aspect of your process (Csdn.net, 2024)". Through user research and feedback, I can better understand the needs and pain points of my target users and make targeted adjustments in the design process.

Although I have reawakened the importance of prototyping, I still have some problems in producing projects. Should I focus on the comprehensiveness of prototyping, especially when time is limited, or should I focus more on efficiency?

There is no doubt that prototyping helped me identify a lot of problems, but at the same time I have to admit that the project cycle lengthened as a result of prototyping. For example, in Project 2, user research and user testing alone took up most of my time, because often the feedback from user testing was not so easy to standardise or solve immediately. For example, in Project 2, even though I found some interaction problems through user testing, new problems would surface every time I tweaked it, so much so that it made my later schedule suffer. In addition, I always make low-fidelity images and can't help but add more details to them, so that they end up being extremely similar to high-fidelity compositions. I know that low-fidelity images are just for quick validation of design ideas and I don't have to strive for perfection too much, but in real-world situations, I would always keep revising the details, causing my efficiency to become low.

These questions started to cause me to think, is it necessary to follow every step of the prototyping process when time is limited? Is it possible to flexibly adjust the design process according to the actual situation at my discretion? These are questions that have always been difficult for me, and ones that I would like to explore in the future, as I hope to balance the comprehensiveness and efficiency of design.

## Plan

Through this semester's in-depth understanding of prototyping, I have not only grasped the basic concepts of prototyping but also learnt how to apply this theoretical knowledge to real-world projects, which will have a far-reaching impact on my postgraduate studies and future career.

In my courses and projects in the following semesters, I will pay more attention to the prototyping step, from wireframes to high-fidelity designs, and ensure that every design decision meets the user's needs through repeated testing and optimisation. In addition to this, I should also balance the design process, for example if I am in a position to ensure that I have enough time for in-depth prototyping, then comprehensive prototyping is crucial, I will focus on the comprehensiveness and rigour of the design logic as this will effectively help me to identify potential problems early on and optimise the user experience.

In the future, if I work as a UI designer, I think prototyping will be a core part of my workflow. I will use the skills I have learnt on the course to ensure that

designs are fully validated at the early stages of a project, rather than hastily jumping to the high-fidelity design stage. I believe this will enable me to more effectively communicate design concepts to team members, clients and even end-users, facilitating consensus building.

Overall, through the study of prototyping, I have gained a deeper understanding of the design process and user requirements, which not only enhances my design skills, but also provides a solid foundation for my future career and personal development.

# References

Pixso. (2024). *Veterans teach you prototyping: ideas + tutorials + tools.* [online] Available at: https://pixso.cn/designskills/yuanxingshejijiqiao/.

Csdn.net. (2024). *The Nine Pillars of Successful Web Teams.* [online] Available at: https://blog.csdn.net/ztmaster/article/details/1694390.