DIEP Final Report

Introduction

During the first semester, I completed three significant projects: The first project, Watching Human, required me to observe people's interactions and emotions within a specific space and organize the insights gained from these observations. The second project, Being Human, addressed the growing dependence on technology in modern society. In this project, I was tasked with designing an app to help make people's lives more human-centered and emotionally fulfilling, emphasizing the importance of reconnecting with humanity. The third project, App360, focused on enhancing the lives of international students. The goal was to design an app tailored to their needs, addressing the challenges they face in their daily lives. This required me to identify and analyze the pain points of international students and develop a solution specifically targeted at this user group.

In the following sections, I will reflect on these projects using the DIEP framework (Describe, Interpret, Evaluate, Plan) to analyze the difficulties, challenges, and insights I encountered, as well as to plan for future directions.

D - Describe

Project 1: Watching Human

For this project, I was required to select a defined space and spend three hours observing how people interact with the environment. During this time, I documented their reactions and emotions. This project aimed to develop our primary research skills and enhance our observational insights. Through this experience, I realized that as designers, we must understand people's needs. To do so, we must immerse ourselves in real-life settings, observe people's actions and emotions, and analyze their responses to objects or events.

I chose to conduct my observation at a downtown café on a Friday afternoon. Over the course of three hours, I recorded people's behaviors, focal points, ordering patterns, and foot traffic using sketches, data visualization, and written notes.

Project 2: Being Human

The context of this project was the increasing reliance on technology, which has distanced people from genuine human connections. The task was to design an app to help people break free from overdependence on technology and reengage with their daily lives.

Before starting, I spent considerable time reflecting on why people become dependent on technology and which aspects of technology they rely on. While technological advancement aims to help humans better embrace their humanity, reducing technology's role to mere convenience undermines its essence. It became clear to me that simply rejecting technology is not the solution, nor can an app entirely resolve this dependence. Instead, I needed to focus on a specific aspect of technological reliance.

One day, while working out at the gym, I noticed I had accumulated a large number of unused materials in my favorites folder. This inspired me to address the issue of "digital hoarding," a form of unconscious dependence on technology that many people overlook. I conducted a survey on this phenomenon and was surprised by the overwhelming number of responses. Using the PACT (People, Activities, Contexts, Technologies) framework, I developed a user persona based on the insights gathered.

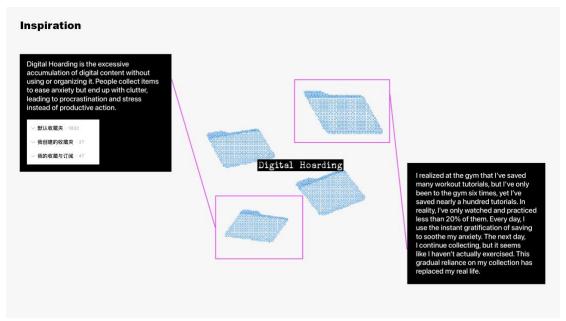


Figure 1: Data Hoarding Syndrome

From this, I designed an app called Do It, which tackles the problem of digital hoarding. Its core functions include managing favorites, setting reminders, and motivating users to act on their saved content.

Project 3: App 360

This project aimed to design an app for international students, with the goal of fostering a sense of belonging among this target group. Building on my experience from the first two projects, I recognized the importance of primary research. Before starting, I interviewed several international students to understand their daily lives, challenges, and needs. I also conducted secondary research by exploring online discussions about the common issues faced by international students.

Combining these findings with my own experiences, I decided to focus on designing around the concept of a humidifier. One common challenge for international students is the psychological strain caused by homesickness and the discomfort of adapting to a new environment. Students come from diverse regions with varying climates and moving to Winchester in southern England can lead to both physical and emotional discomfort due to climate differences.

After thorough consideration, I centered my design on a humidifier that replicates the humidity levels of their hometowns, alleviating both physical discomfort and psychological anxiety. Additionally, the app incorporates elements of human-centered care, ensuring users feel the product is specifically designed to support them as international students.

I – Interpret

Project 1: Watching Human

Before starting this project, I had never conducted such in-depth primary research. My previous research primarily relied on subjective impressions and expanding insights from a single data point, which significantly limited the scope of my work. Through this project, I discovered the wealth of details that can be observed in a single space, such as people's behaviors, emotions, interactions, and the dynamic changes within the environment.

I recorded the number of people entering and exiting the space at different times using tables, illustrated people's activities in the café with sketches, and visualized their movements across various areas with data charts. These multidimensional documentation methods provided me with a new understanding of research techniques and reinforced the importance of adopting a comprehensive perspective to capture details in design.

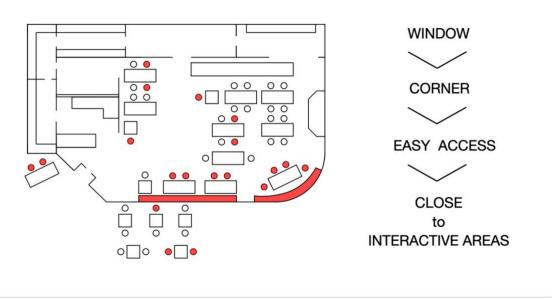


Figure 2: Heatmap

Project 2: Being Human

This project helped me further develop my ability to apply the PACT framework (People, Activities, Contexts, Technologies) for analysis. After gaining inspiration from the phenomenon of "digital hoarding," I conducted extensive primary and secondary research. The large volume of survey responses allowed me to deeply analyze people's attitudes and behaviors toward this issue.

By leveraging the PACT framework, I developed a clear user persona, which laid a solid foundation for the subsequent app design. This experience demonstrated that thorough analysis and a well-constructed framework not only clarify the design direction but also ensure the solution effectively addresses specific user needs.



User Centred Design

A simple framework

Particular PEOPLE carry out particular ACTIVITIES in particular CONTEXTS using particular TECHNOLOGIES.



Figure 3: PACT

Project 3: App 360

Unlike the first two projects, this one had a well-defined target audience and a specific design medium. The primary challenge was integrating research findings into the design while fostering a sense of emotional connection and belonging for users. When I decided to use a humidifier as the medium to alleviate both physical and psychological discomfort for international students, I realized the importance of incorporating thoughtful details to convey the app's care and purpose.

To achieve this, I added prominent language and region selection options during the app's initial setup, ensuring a personalized and inclusive experience. Additionally, I focused on emotional design, enhancing the visual and interactive elements to create both comfort and positive emotional engagement. This project deepened my understanding of the significance of emotional design in user experience and how to convey warmth and care through design (Li, 2024).



Figure 4: Conceptual diagram for project 3

E - Evaluate

During the first semester, I gained a wealth of essential design knowledge and practical skills. For instance, I learned how to use data visualization to process research findings, applied the PACT analysis model for structured thinking, and incorporated empathy into emotional design. These tools helped me gradually develop a systematic design mindset. Not only did they clarify my design process, but they also enabled me to analyze user needs and scenarios more comprehensively. However, through practical application, I realized there are still areas where I need significant improvement.

Firstly, I struggle with divergent thinking when generating ideas. During the research phase, I often find it challenging to come up with diverse concepts, as subjective thinking tends to limit the variety and innovation of my design solutions. Additionally, during the convergent phase, my tendency to procrastinate significantly affects project progress, and my ability to synthesize information needs further development.

Secondly, although my understanding of the PACT model has deepened, I have yet to fully integrate the "Context" and "Technology" dimensions in practical projects. For example, in the *Do it* project, the technical aspect lacked depth, which resulted in the final design not meeting its full potential. These challenges have made me realize the need to further enhance my skills in technological application and holistic thinking to create more innovative and practical designs in the future.

P- Plan

In the first semester, I learned how to conduct research, analyze data, and apply theoretical knowledge to practice. These skills are crucial for a designer and mastering them has significantly enhanced my creative thinking. Therefore, in future design projects, I will focus on effectively applying what I have learned. Additionally, I will work on overcoming the tendency to view problems subjectively. By adopting a more dialectical approach, I will be able to see multiple perspectives, which is vital for the core of design. I firmly believe that, through continuous experimentation and practice, today's mistakes will eventually become the foundation for me to become the designer I aspire to be.

Reference

Li, B. and Sun, S., (2024). Interdisciplinary Research on APP Interface Design and Perceptual Design. *Journal of Design*, [online] DOI: 10.12677/design.2024.96798. Available at: https://www.hanspub.org/journal/paperinformation?paperid=103510 [Accessed 15 Jan. 2025]