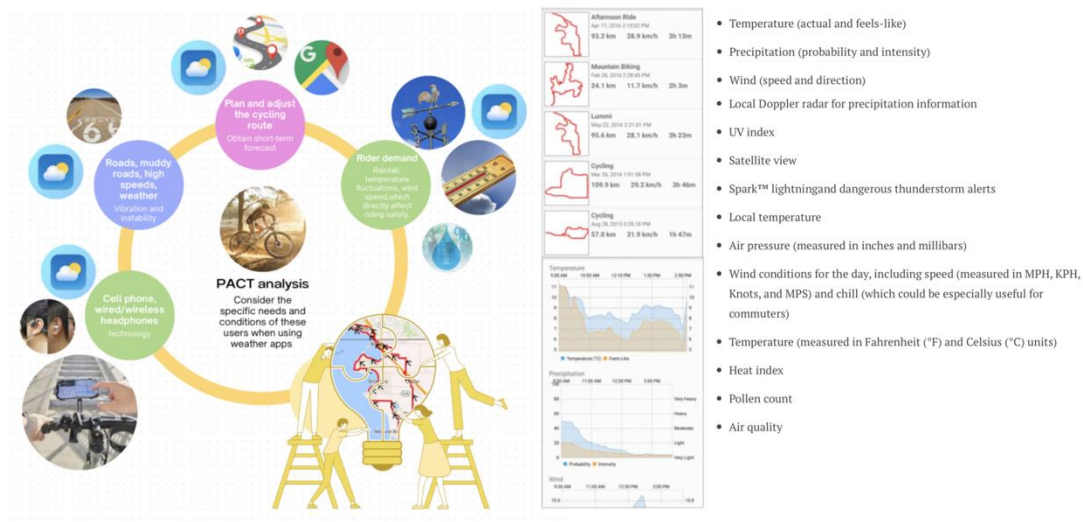


As a design student specializing in the field of communication design, I explored the possibilities and utility of design in depth in one of the module's more complete projects, "Unique Weather Forecast App for Cyclists". This process has given me a deep understanding that our core task as designers is to understand and fulfill specific user needs, especially those that are not adequately addressed by existing products. And I learned that even in a competitive market, there are opportunities to create unique and useful products through careful market research and user insights. For example, in the project "Unique Weather Forecast App for Cyclists", it was easy to find out from the preliminary research that almost all navigation apps in the market have the function of viewing and broadcasting short-term weather forecasts, so it would not be a bright spot to simply make a similar software. Therefore, in order to realize the USP, the first step is to go deep into the user groups, in the interviews with various groups of cyclists to understand the shortcomings of the current cycling navigation weather forecast and can continue to develop the function. After interviewing twenty cyclists, we found that 20% of them suffer from pollen/plant allergy during cycling, which makes their preparation before cycling tedious, such as checking the local pollen index, previewing whether there are any allergens in the route in advance, wearing masks and carrying all kinds of medications. By analyzing the percentage of cyclists in this group, it is clear that this specific group of users is a large market and is not limited to cyclists. Analyzing the existing cycling apps, there is no software that combines the pollen index, pollen source and weather analysis to provide corresponding information for users to obtain. Therefore, the analysis of pollen index and weather can be completely used as the USP of the cyclist weather app, and it also meets the needs of cyclists so weather in the design brief. After determining the direction, we analyze the connection between pollen's impact on people and weather, and summarize the impact factors such as wind direction, air pressure, humidity, etc. through drawing "mind map of factors affecting pollen" and searching related literature, among which wind direction and humidity (rain or not) are the most important two points. After determining the pollen source location (gps) and weather information from weather forecast websites, the algorithm (pollen source gps, wind index, humidity index) broadcasts real-time pollen index information for cyclists. Choosing a highlight direction (USP) to delve into is more in-depth than previous divergent thinking training programs and highlights the key to shaping this brand (USP), but also triggers thinking that can be applied to other applicable markets, such as data analytics and services, climate education and popularization of the sciences, socialization, and tourism, among other markets.



Preliminary research on users (by myself)

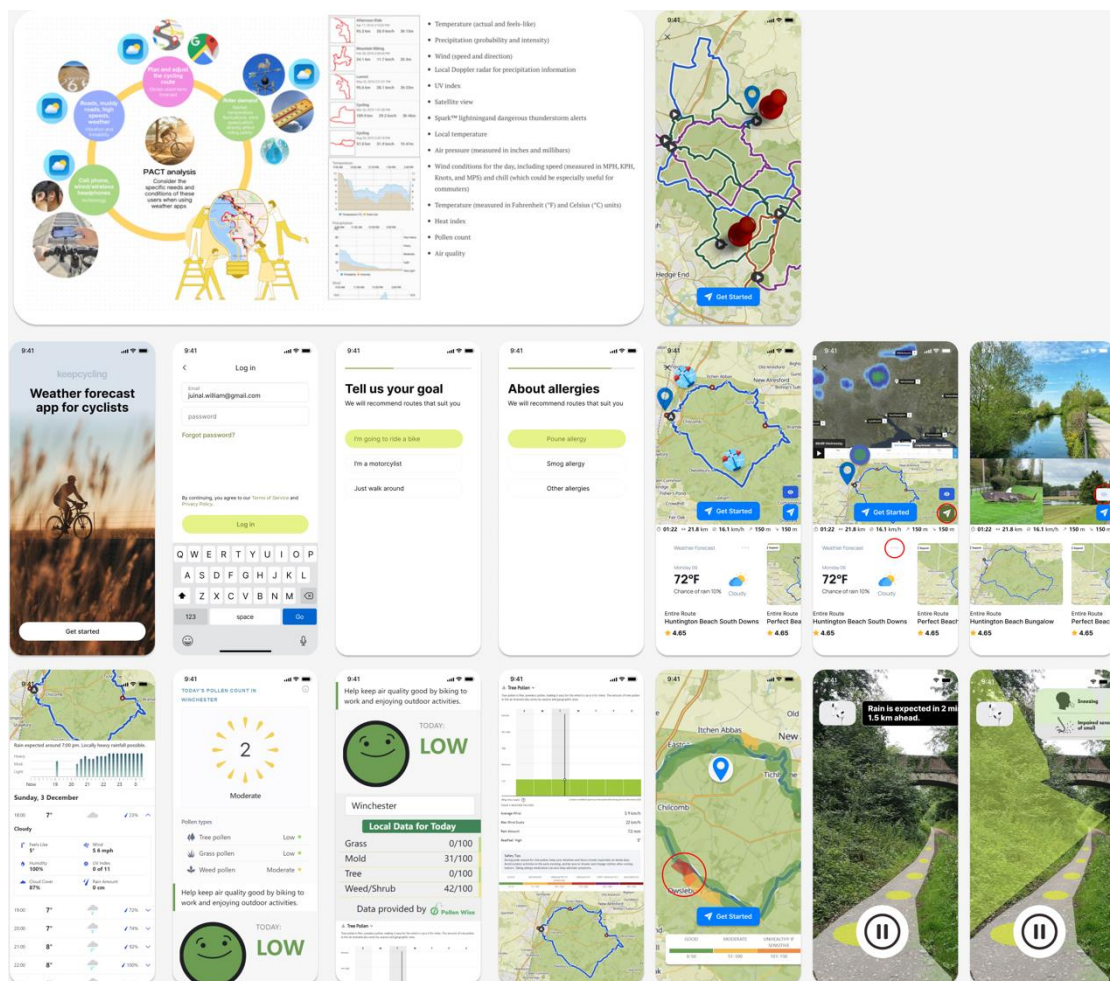
Innovation is not just about the pursuit of novel technology or design, but also about a deep understanding of the user experience and a precise grasp of market needs. For example, in Donald A. Norman's *The Psychology of Design*, Norman emphasizes that design should be user-centered, focusing on user experience and needs, not just technology and functionality. The success of any software system depends, significantly, on how well it fits the needs of its users and its environment during the development process, normally identified in a process called requirement engineering (2009 : San Diego, Calif.). This echoes my project experience of designing a truly useful app by gaining a deeper understanding of cyclists' needs, such as pollen allergy issues.

I also encountered challenges during the development of the project. One of the biggest challenges was how to translate complex data, such as pollen index and weather information, into a user-friendly and intuitive interface design. I realized that technology and data are not the end goal in themselves, but rather tools that serve to improve the user experience. Use standard interactions for your software's platform. Don't be creative here, because consistent interaction is required for intuitive UI. For basic commands, avoid using advanced interactions with which your target users aren't likely to be familiar. Make sure that shortcuts (which require special knowledge) aren't the only way to perform an action (McKay, E. N. 2013). Therefore, I paid special attention to a clear and concise visual presentation and an easy-to-use interface layout to ensure that users can easily access and understand the information they need. However, due to time constraints, the interface is still not simple enough, and the density of content on the page is too high, which tends to cause riders to get irritated before a ride. Modern UI uses more self-explanatory labels and instructions than classic UI. However, the goal isn't to have more text but rather to have less but much better text. Usually this boils down to using more useful, relevant, purposeful text, adding a word or two as needed to add clarity, and removing unhelpful, mechanical text and repetition. If I had more time I would have seen the elements in the software more simplified and functional.



Page density is too high, has been improved (by myself)

Also I realize it is important to try to integrate technologies across disciplines. Experimenting with new mr technologies to meet the immediacy of the information received by the user, Tim Brown in Designing for Innovation suggests that interdisciplinary collaboration is the key to innovation. Tim Brown in Design for Innovation suggests that interdisciplinary collaboration is the key to innovation, so this is reflected in the theory and practice of combining meteorology and interaction design with mr technology, which demonstrates the importance of in-depth user research and interdisciplinary collaboration in solving complex problems. However, in designing products there is a need for constant iteration and adjustment based on user feedback. This suggests that design is a dynamic process that needs to adapt to changes in the market and technology.



All pages of Project 3 (by myself)

I also recognize the importance of continuous iteration and adjusting the design based on user feedback. Even though the project is complete, I understand that product development is a continuous evolutionary process. In the next semester I plan to continue to collect user feedback, optimize and update the app to adapt to the development of technology and changes in user needs. This will not only improve my design ability, but more importantly deepen my understanding of how to solve practical problems through design. Therefore, in the next semester, my target design style will be as follows: user-centered design, focusing on user needs and experience, and choosing to study the specific needs of the target group in depth. Innovative, by identifying the shortcomings of existing products in the market (e.g. the lack of comprehensive pollen information in navigation apps) and striving to innovate and provide unique solutions. Practicality, emphasizing the utility of practical applications, such as combining weather and pollen indexes with cycling navigation to meet the actual needs of cyclists. To have exhaustive research, focus on data and field research during the design process, such as collecting information by interviewing real users. Of course as a designer, the heart is the most important thing, keep the belief of human-centered, user-centered, focus on improving the quality of life of specific groups. Attention to detail, showing a deep understanding and concern for the details of users' daily lives by focusing on detailed information such as the pollen index. Pragmatic attitude towards technology, viewing it as a tool for solving practical problems rather than a self-contained goal. Openness and adaptability, demonstrating an openness to adjust the design based on user feedback and market research.

This course, this master's degree will benefit me in the future, currently I want to become a community service designer, for example, the importance of a deep understanding of user experience as we mentioned above, I will apply user-centered design thinking to policy development. This means that I would gain a deep understanding of the public's needs and issues before developing any policy or service. Through opinion polls, open forums, and social media interactions, I can gather public input to ensure that policies and services effectively address the public's real problems. And I will design and utilize mobile applications and online platforms to provide more convenient public services, such as community shopping, healthcare, entertainment, etc. Adhering to the user-centered principle, I will make the people's life more convenient while ensuring that it is acceptable to them.

I will advocate and practice cross-sectoral collaboration in the conduct of business. Facing complex societal challenges, such as environmental protection, public health, or urban development, requires the knowledge and expertise of multiple sectors. I will utilize the teamwork and communication skills I have learned in interaction design to facilitate effective communication and collaboration between different departments. There is also the use of my skills in research and analytics to promote greater reliance on data in the government's decision-making process. This includes using data analytics to assess the impact of policies, as well as using statistical methods to anticipate and address future challenges.

Continuous iteration and improvement will also be important in the future, and I will continue to seek opportunities for improvement and innovation. Continuously iterating and optimizing services based on public feedback and technological advances, the ease of operation of

various community applications HO online platforms, and ensuring that government or community services are always modern and efficient.

In my personal life, this knowledge will also be of great benefit. I can apply user-centered thinking to solve family and community problems, data analytics skills to make more informed personal decisions, and teamwork skills to improve relationships and community engagement. My knowledge in the field of Interactive Communication Design will not only guide me in my future career as a community service designer, but it will also profoundly impact many aspects of my personal life, helping me to become a more effective and insightful individual.

Reference:

McKay, E. N. (2013) *Ui is communication : how to design intuitive, user centered interfaces by focusing on effective communication*. Amsterdam: Elsevier, Morgan Kaufmann.

Human Centered Design (2009 : San Diego, Calif.) and Kurosu, M. (2009) *Human centered design : first international conference, hcd 2009, held as part of hci international 2009, san diego, ca, usa, july 19-24, 2009 ; proceedings*. Berlin: Springer (Lecture notes in computer science, 5619).