Task 2 Prototyping

Prototyping is an important part of turning ideas into tangible results. After watching three prototyping videos from Google for Entrepreneurs, I took note of the core points of each approach and plan to apply this knowledge to my design process to improve my prototyping skills.

Sketching

Hand-drawn sketches are crucial in the design process. The larger the project, the more designers need to confirm a variety of options in advance to avoid design direction errors lead to spend time and energy to do useless, this time sketches will greatly reflect its value. Sketch at the beginning of the drawing can be arbitrary, conceptualise the basic concept. Then consider the elements and layout. After the direction has been set, more detailed sketches are drawn to polish the concept. At the same time, wireframes can be simply coloured or shaded to simply simulate the interaction. As mentioned in the video (Figure 1), the use of paper models can also roughly simulate real-world scenarios, further helping designers to validate and adjust their design ideas.



Figure 1

Digital

Once sketched, prototype interactions usually need to be added to simulate the real user experience. Designers use design tools to create high-fidelity drawings of each UI element to ensure the accuracy and detail of the design. The video shows us that through on-the-fly design, each animation has a dynamic effect preview to help users better understand the actual effect of the animation. At the same time of production, the designer in the video is also constantly thinking and exploring more interactive operations (Figure 2) to enhance the smoothness and interactivity of the user experience.



Figure 2

Native

Native prototyping has its advantages, firstly, when writing code to build a web page, developers are able to preview the effect of changes instantly, which greatly saves time from design to implementation. Additionally, when writing code, developers can naturally build a responsive web layout, i.e. a design that adapts to different device screen sizes. Therefore, using native prototypes not only speeds up the development process, but also improves productivity. However, native prototyping requires designers to have certain programming skills, which can be a challenge for designers without a technical background.

Another useful resource about prototyping

This video focuses on how to enhance the interaction design of an app to make it more in line with the user's behavioural patterns and way of thinking. The first is that the design should take into account the needs and capabilities of different users and provide personalised interactions. At the same time, designers need to consider the applicability of the product in different devices, operating systems and cultural contexts (Figure 3).

In addition, the interaction design should fulfil the user's needs with the least number of operational steps. Simplifying the task flow not only improves the user's efficiency, but also reduces the cognitive load of the user during the process (Figure 4).



Figure 3



Figure 4

Figures



Figure 1

Google for Startups (2016). Rapid Prototyping 1 of 3: Sketching & Paper Prototyping. YouTube. Available at:

https://www.youtube.com/watch?v=JMjozqJS44M.



Figure 2

Google for Startups (2016). Rapid Prototyping 2 of 3: *Digital*. YouTube.

Available at:

https://www.youtube.com/watch?v=KWGBGTGryFk.



Figure 3

uxpeak (2024). This Video Will Take You From Junior to Senior UX/UI

Designer. [online] YouTube. Available at:

https://www.youtube.com/watch?v=YIN28RNChI0 [Accessed 10 Jan. 2025].



Figure 4

uxpeak (2024). This Video Will Take You From Junior to Senior UX/UI

Designer. [online] YouTube. Available at:

https://www.youtube.com/watch?v=YIN28RNChI0 [Accessed 10 Jan. 2025].