## **02 PROTOTYPING**

The video describes three types of prototype designs: sketch prototypes, digital prototypes, and code prototypes. Different prototype designs can be used at various stages of product development to more efficiently visualize the product concept.

Sketch prototypes are ideal for the early stages of product development, focusing on the question of "what to design." They can be quickly created with paper and pen, making it easy to capture ideas on the spot. Additionally, sketch prototypes are highly effective for immediate communication, as they help quickly convey design thoughts and concepts, allowing team members to better understand the design intent and facilitating the sharing and discussion of ideas. This accelerates the development of early concepts.

Digital prototypes are an evolved version of sketch prototypes, addressing the question of "how the design is presented." Compared to sketch prototypes, digital prototypes refine interface design and interaction logic, and add visual design elements that more closely resemble the final product.

Code prototypes go a step further, addressing the question of "how to implement" and verifying technical feasibility. Prototypes created through coding can simulate real interactions and functionality, allowing users to experience an interface and features similar to the final product. This provides the most accurate user feedback, which helps guide the product development direction more effectively.

Prototype design plays an irreplaceable role throughout the entire product development process, from initial conceptualization to final technical validation. At different stages, we can select the most suitable prototype design to efficiently advance the design, validate ideas, and ultimately deliver a successful product.

## Book:

The resource I chose is a book, a practical guide on prototyping titled *Prototyping: A Practitioner's Guide* by Todd Zaki Warfel, which I found in the library.

This is a comprehensive, practical, and hands-on guide to prototyping. It introduces the theoretical foundation of prototyping and its key role in user experience design. The book provides a detailed prototyping process, including how to start from the initial conceptual phase, use low-fidelity prototypes for concept validation, and gradually iterate to high-fidelity prototypes. It also systematically explains all aspects of prototyping and includes rich real-world case studies to help us understand the application of prototypes in different projects. Through its clear structure, easy-to-understand language, and practical examples, it helps us grasp the core concepts and methods of prototyping. Additionally, the book introduces a variety of commonly used prototyping tools, helping us learn about these tools and select the most appropriate one based on project needs to improve work efficiency.