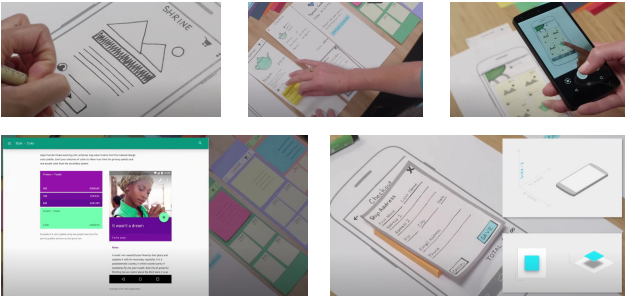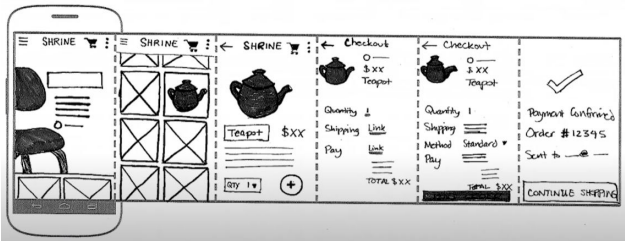# PROTOTYPING

Sketching & paper prototyping
(*Low Fidelity*)

When to use?
Images are better than text, and when we want to make key decisions quickly and express all the initial ideas in our minds, we can use this lightweight way of communicating our ideas through user flow visualization because it is not limited to the material used, a piece of paper or a post-it note will do the wire frames, just sketching the user flow and steps, exploring the various layouts, and showing the basic structure of the application.

3 benefits of paper prototyping
1. key user interactions, after rough drawing you can draw some high fidelity sketches, you can use the paper model to simulate the interaction, so that the user better understand the interaction process between the screen interface, and then record interactions can be more intuitive to help us think about, such as buttons images and other details, and finally print or copy existing content , in order to explore the interaction between the screen and natural transitions
2. Explore elevation and shadows, because we are experimenting with paper, so we need to pay attention to how layers form shadows.
3. Purposeful use of color, create a complete material design palette, keep the uniformity of materials and colors, such as a common main color for the application bar or background and other components, and another 2-3 accent colors to attract the user's attention and highlight the content.
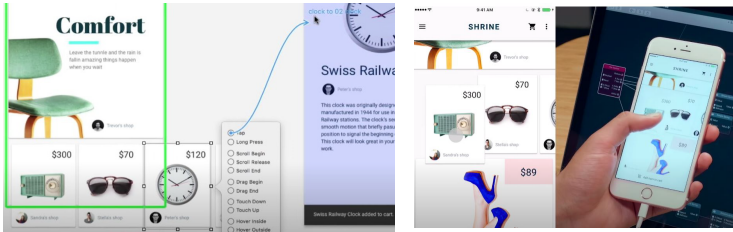
Digital prototyping
(*High Fidelity mock-ups*)

Building a basic flow to explain an abstract interaction experience, a process of exploring ideas, explaining the details of the design, running user behavioral tests and studies, and constructing the corresponding look and behavior - similar to the final application experience without the use of expensive time.

Principle work flow
Import static interactive interface images - Dynamic effects such as scrolling, clicking - Toggle between screens - Each interface works and interacts with each other - Adaptive to the screen, whether it's a computer or a cell phone - Real-time updates
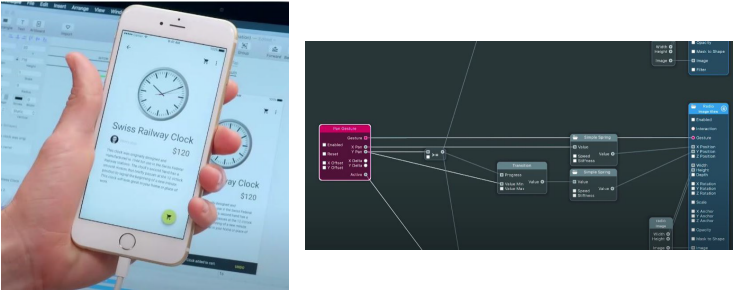
Secondary Research
After user testing, a more intuitive approach with gestural interactions, such as dragging an image, or shaking the phone to trigger a share function, is again investigated, starting by connecting a series of patches together to create functioning prototypes, a patch can take in a value through its inputs and then output the modified value, set up the expression and mnemonic of each command, how you want it to move with the gesture, and then link them together instead of just clicking on each button and navigation bar.
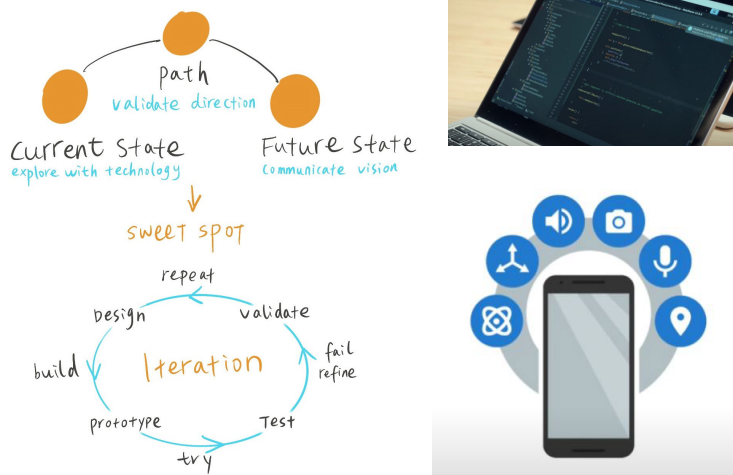
Native prototyping
(*Make a design that is actually a real-world experience*)

Write some code by hand, use real devices, real data and real users to accomplish it, and finally turn the idea into a real product and try to sell your idea.

The hackers mentality
Exploring, taking a lot of risks and shortcuts in the code, good way to try out specific libraries and frameworks and assess. good prototyping Good prototyping means low commitment and can be changed at any time. The focus is on how to take the opportunity to explore and experiment, and it requires us to think about the user experience and reaction. The benefit is to get a real experience of how the user reacts to the layout animations and the process, and to gather valuable feedback, because good user experience is not only about the look and feel and functionality, but it also needs to be accepted in the market and invested in the usage.

Explore Iterations
Resonate with users, evaluate core important elements for specific operability, because some of the features we think are important may not be used by users, so we need to keep testing and trying and modifying, and ultimately need a compelling story to sell our design idea, communicate it to stakeholders and users, explain our design vision and be able to get them to invest in it, through feedback and proof. The data accumulated is valuable and persuasive.

Click to open

User - centered product and prototyping

Prototyping is an extremely valuable step in the design thinking process. Putting the user at the heart of the process requires you to test your designs on real users—and prototypes make this possible without spending loads of time and money.

An example of this would be the prototype of a mobile based on VR website. By establishing visual details through an appearance model, you can test font, color, and other design elements just as they would appear to the visitor on an actual website.

A new prototype is created with each iteration of an idea until the final prototype closely resembles what the final product will become. Prototypes can be physical or virtual.