INTRODUCTION TO:

Interaction Design

WEEK 04

IXD 5106

01 MOBILE DESIGN

Mobile UX pertains to the personal perception and satisfaction a user encounters while interacting with a mobile application.

UX designers are responsible for crafting a product that is delightful to use and offers a significant and fitting encounter for the user. In the realm of mobile UX design, it is crucial to consider the entire customer journey, encompassing interactions, content, and sound design.

MOBILE-FIRST DESIGN:

In today's mobile-centric world, this approach considers designing for mobile devices first, as it can lead to more focused and efficient interfaces. Developing for mobile devices first, before moving onto larger screens, is based by the shift in behaviour and technological trends.

It encourages designers and developers to prioritize the mobile **content first experience** and **user interaction,** leading to designs that are more *user-friendly and efficient digital products across all devices*.

MOBILE PRINCIPLES

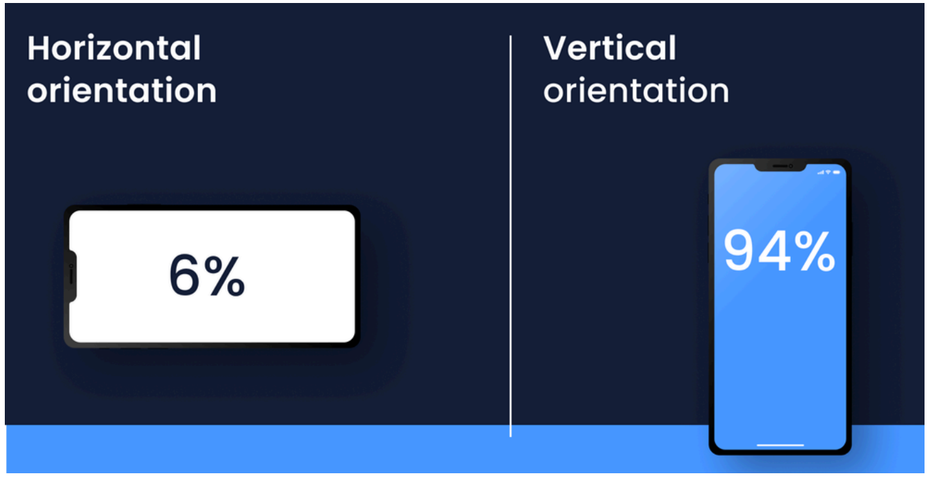
There are several essential principles for mobile UX design:

- **Useful:** The system should meet the users' needs and desires.
- **Usable:** The system should be easy to use and understand.
- **Desirable:** The design should evoke positive emotions and make users want to use the system.
- **Findable:** Users should be able to navigate easily and find important information quickly.
- **Accessible:** People with disabilities should be able to use the system effectively.
- **Credible:** Users should trust the designer and the product.

SCREEN ORIENTATION

Desktop computers have a fixed horizontal orientation, which means the screen is wider than it is tall, and users can't change this.

On smartphones, the screen can be changed to either a vertical or horizontal orientation. Most people (94%) use their smartphones in the vertical position, holding it upright, while a smaller percentage (6%) prefer the horizontal position, holding it sideways.



ERGONOMICS

Ergonomics is the application of psychological and physiological principles to the design of products, processes, and systems. The goal of ergonomics is to reduce human error, increase productivity, and enhance safety and comfort with a specific focus on the interaction between the human and the thing of interest, whether that's a computer desk, stamping machine, or mobile phone.

The field is a combination of numerous disciplines, such as psychology, engineering, biomechanics, industrial design, physiology, interaction design, visual design, user experience, and user interface design.

ERGONOMICS TYPES

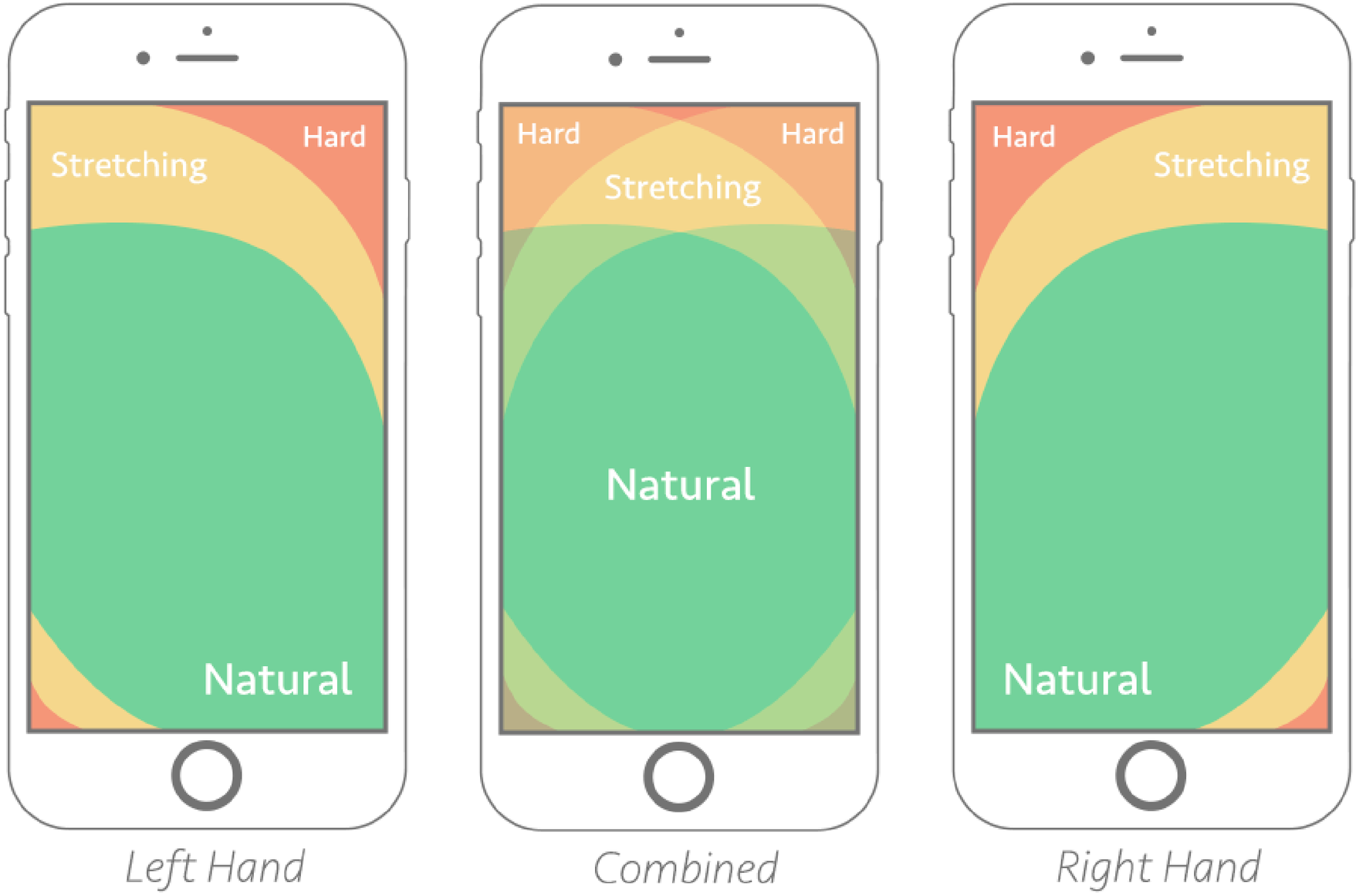
There are several types of ergonomics:

- Physical ergonomics - Designing interaction with equipment and workplaces (and playspaces) to fit the user.
- Cognitive ergonomics - Designing products and services while keeping mental processes, such as memory, reasoning, and decision-making in mind.
- Organizational ergonomics - Design and optimization of business systems, including their organizational structures, policies, and processes.

SCREEN SIZE-DESIGNING FOR THE THUMBS!

To ensure that the mobile app or website is easy to use with one hand, designers can use techniques such as:

- Placing important buttons and elements where the thumb can reach them.
- Using gestures for navigation to reduce the need to reach for buttons.
- Keeping the layout consistent across different screen sizes.
- Avoid placing important buttons or elements at the top or bottom of the screen, as they are harder to reach with one thumb.



Left Hand *Combined* *Right Hand*

MULTI-TOUCH INTERACTION PRINCIPLES

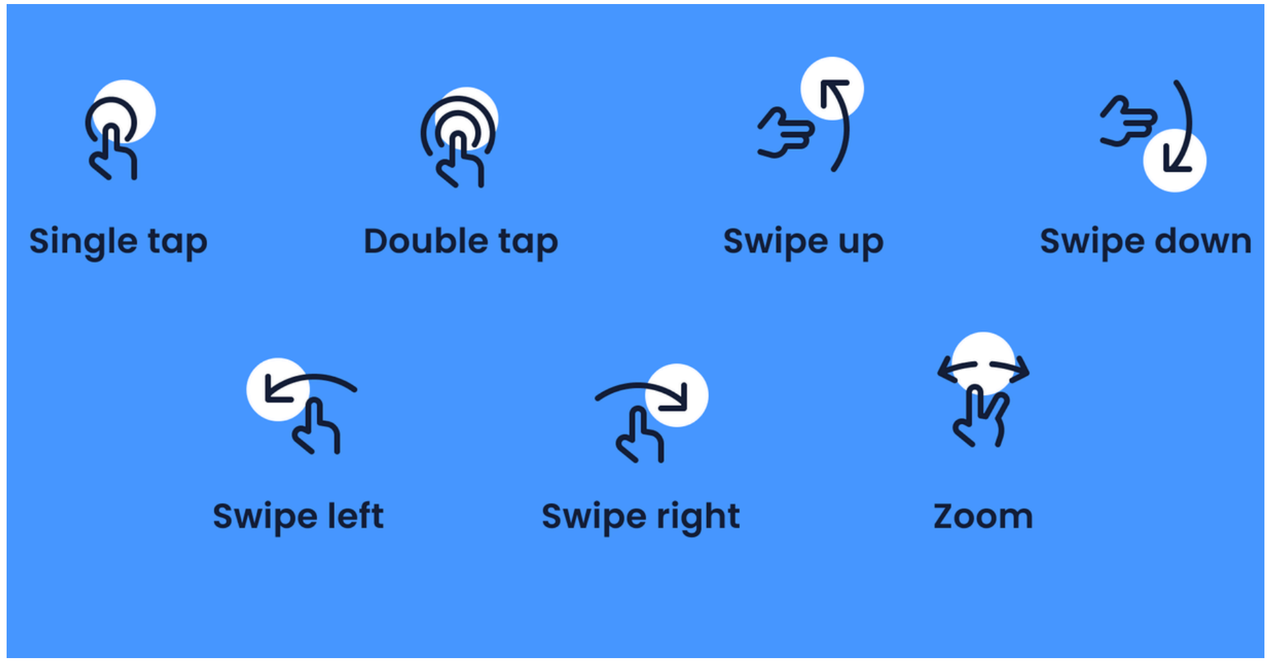
1) Gesture-Based Interactions- Gestures are the primary means of interacting with multitouch interfaces. These include taps, swipes, pinches, and other finger movements that allow users to perform various actions.

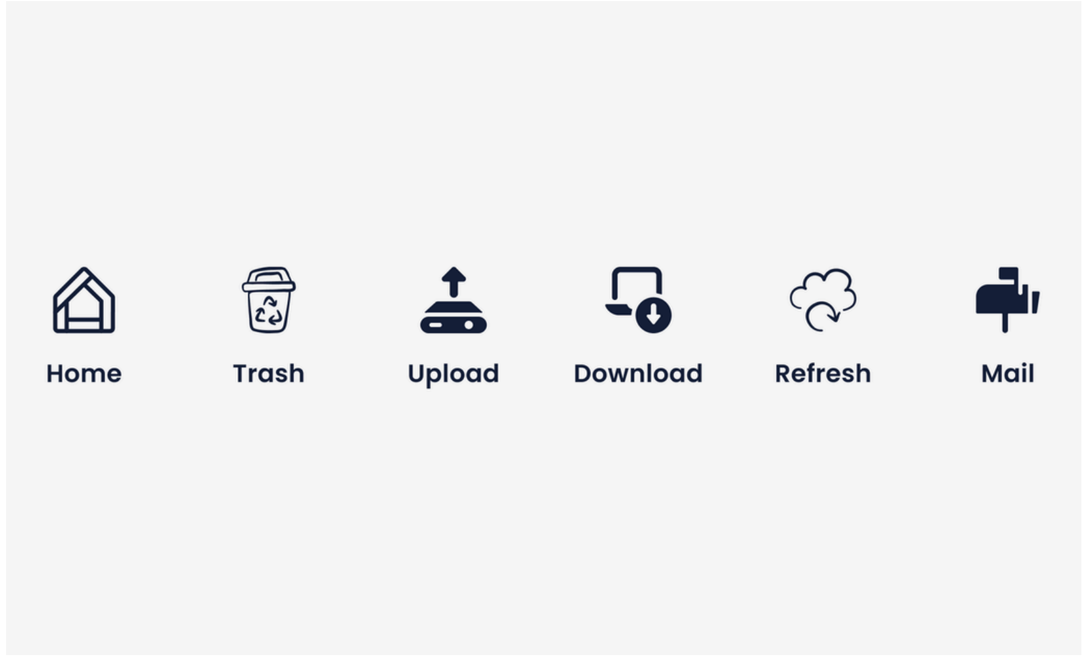
2) Direct Manipulation- This refers to the ability for users to directly manipulate objects on the screen using their fingers. For example, users can directly zoom in and out on a map by using the pinch gesture.

3) Feedback- Feedback can come in the form of visual cues, such as highlighting an object when it is touched, or haptic feedback, such as vibrations when a button is pressed.

4) Simplicity- The more complex an interface is, the more difficult it is for users to understand and use. smaller screens and require users to perform actions with their fingers. It is essential that designers keep interfaces simple and easy to use.

GESTURES & SYMBOLS





ENVIRONMENT

Desktop: People often use desktop computers for important tasks like working in an office or shopping online.

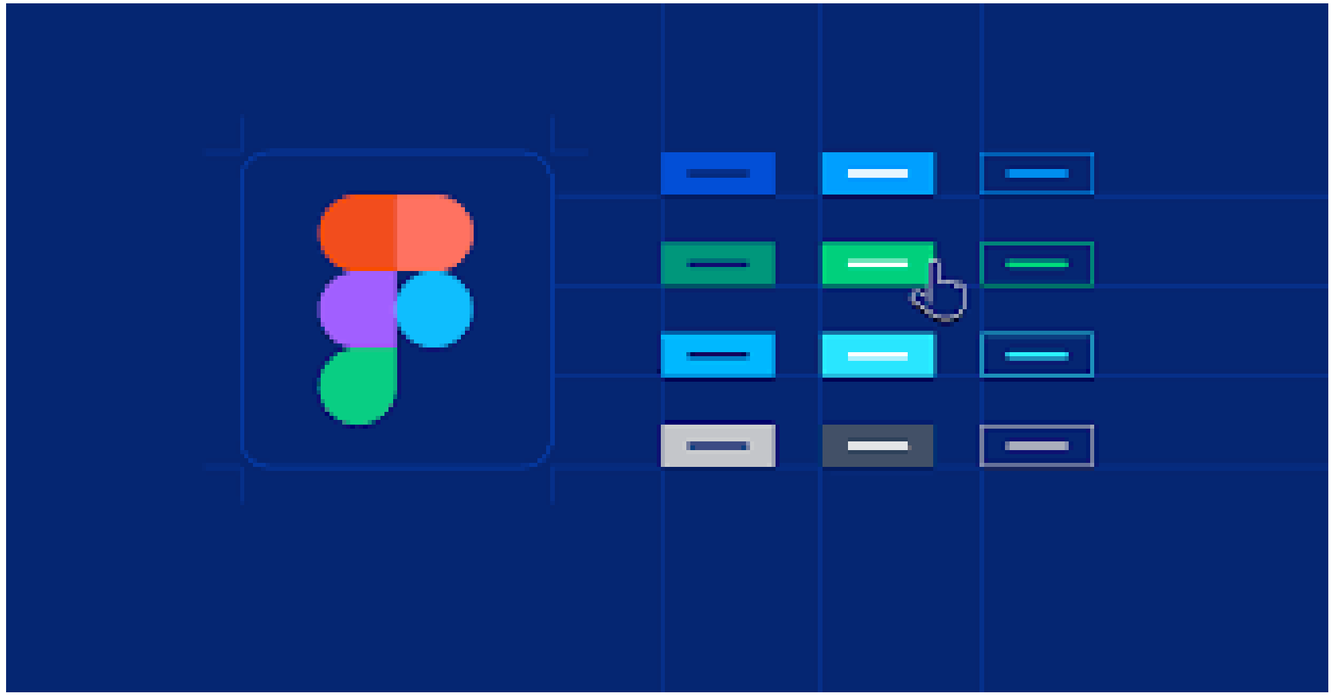
Smartphone: Mobile phones offer more personalized features compared to desktops.

If you want your app to be accessible to users wherever they are, it's important to design it in a way that is easy to use outdoors. Use high-contrast colours in your app's design to make sure users can read everything, even if the sun is shining on their smartphones.

BREAK TIME!

COMPONENTS

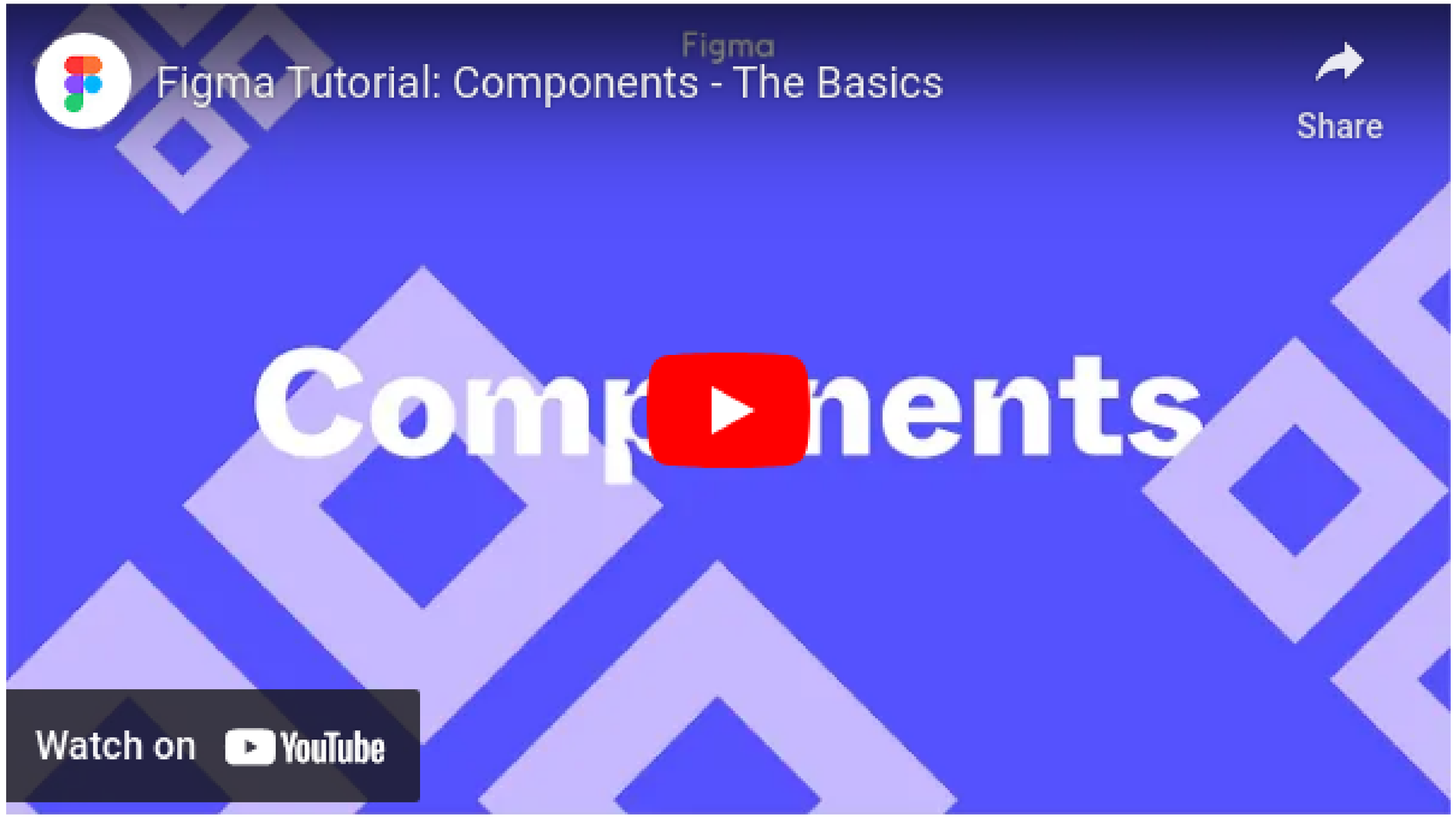
Components are reusable elements that maintain a consistent design throughout various projects. They can be formed from layers or objects in your designs, such as buttons, icons, layouts, and other elements.



COMPONENTS

A component has two key parts:

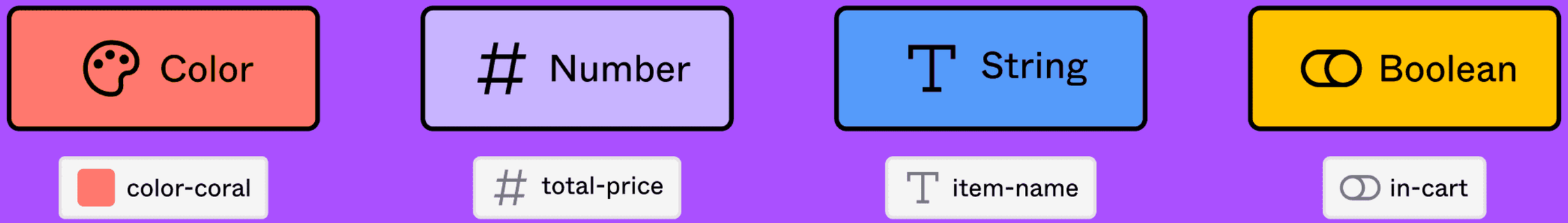
- The **main component** outlines its properties.
- **Instances** are duplicates of the components that can be reused in designs. Instances are connected to the main component, allowing them to receive any updates made to the component.



Link: https://www.youtube.com/watch?v=k74IrUNaJVk&list=PLXDU_eVOJTx5LSjOmeBYMuvaa4UayfMe4

Figma


variables


Color
Number
String
Boolean
color-coral
total-price
item-name
in-cart

VARIABLES

Variants allow you to create multiple versions of a component with different property values (e.g., text, colour, or layout) and switch between them easily. This can help streamline the design process and make it more efficient.

Variables allow us to create, store and use reusable values like text strings or colours throughout Figma. BUT! Variables can only support one raw value - so you will still want to use styles when referencing multiple values at once.

VARIABLE TYPES

Within Figma today, four types of variables are supported: colour, number, boolean, and string types.

Colour: refers to any variable that supports a colour definition, and this can be applied to either the fill or stroke

Number: these are used to assign a numerical value to a variable definition. Once created, these types can be applied to text layers, corner radius values, min and max widths or heights, and padding or gap spacing values.

TYPES OF VARABLES CONT.

Boolean: allows us to assign booleans (true or false statements) to a variable with the starting value as the default value when created.

Ex. Boolean variables allow for the control of layer visibility, such as the ability to choose to display an image or container when within desktop-sized layouts but to hide it when designing for mobile.

String: allows for creating specific strings of characters to be made and used throughout components and within designs. This variable type can be applied to any text layer.

LETS JUMP INTO FIGMA!