

# PROTOTYPING

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Prototyping in UI/UX is one of the most crucial steps in the design process. It allows designers to create interactive simulations or mockups of digital products (like apps or websites) to visualize how the final product will look and work before actual development begins.

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## What is Prototyping in UI/UX?

Prototyping is the process of creating a preliminary version of a product that helps test and validate ideas, features, and user flows.

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## Why Prototyping is Important

- Visualizes ideas clearly for stakeholders and developers.
  - Saves time and cost by identifying issues early.
  - Improves user experience through early feedback.
  - Supports usability testing to ensure intuitive design.
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## Interaction Panel Overview

This panel is used to **add interactivity to UI components** in prototyping tools like **Figma**. It lets you define how users move between frames/screens based on actions like tapping, hovering, etc.

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### Trigger

#### ► What it is:

This defines the **user action** that will activate the interaction.

 **Options include:**

- **On tap** – Triggers when the user clicks or taps.
- **On drag** – When the user drags the element.
- **While hovering** – When the cursor hovers over the element.
- **While pressing** – While the user holds down a click/tap.
- **Mouse enter / Mouse leave** – For mouse pointer movement.
- **Key/gamepad** – Triggers via keyboard or controller.
- **After delay** – Triggers automatically after a time delay.

 **In the image: On tap**

This means the interaction will occur **when the user taps or clicks** the element.

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◆ **Action**

► **What it is:**

This specifies **what happens** when the trigger is activated.

 **Common actions:**

- **Navigate to** – Move to another screen/frame.
- **Open overlay** – Show a modal or popup over the current frame.
- **Swap overlay** – Change the current overlay.
- **Close overlay** – Dismiss the overlay.
- **Back** – Go back to the previous screen.
- **Scroll to** – Scroll to a specific element on the same screen.
- **Change to** – Switch between variants in a component.

 **In the image: Navigate to**

This means, once tapped, the app will **move to another frame or screen**.

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◆ **Destination**

► **What it is:**

This is the **frame or screen** where the user will go after the interaction.

📌 **In the image: Desktop - 7**

The destination is a frame named **Desktop - 7** (probably another page of the prototype).

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◆ **Animation**

► **What it is:**

Defines **how the screen transition looks**—whether it's instant or animated.

✓ **Options include:**

- **Instant** – No animation, immediate switch.
- **Dissolve** – A smooth fade between screens.
- **Move in / Move out** – Slide from one side.
- **Push** – Pushes the current screen out with the new one sliding in.
- **Slide in / out** – More dynamic animations for transitions.
- **Smart Animate** – Animates shared elements between frames.

📌 **In the image: Instant**

This means the transition to Desktop - 7 will **happen immediately without animation**.

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◆ **State (Expandable Section)**

► **What it is:**

Used for components with **variants** (e.g., a button that changes style when active).

✓ **Lets you:**

- Control **which variant** of the component to switch to.
- Define interactions like "**Change to: Hovered**" or "**Change to: Pressed**".

## In the image:

It's collapsed (› State), meaning no variant behavior is set yet.

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## Top Right Buttons

- + – Add another interaction for this element.
  - X – Remove or close the interaction panel.
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## Types of Prototypes

### 1. Low-Fidelity Prototypes

- Sketches or wireframes
- Paper-based or digital
- Focus on layout and concept

### 2. Mid-Fidelity Prototypes

- Digital mockups with limited interactivity
- More detailed than low-fidelity

### 3. High-Fidelity Prototypes

- Almost look and feel like the final product
- Highly interactive
- Used for real user testing and developer hand-off