

Prototyping

Building quick, incomplete versions of an idea, from a paper sketch or a cardboard mock-up to something that works, to answer a design question before developing the idea.

In Spanish

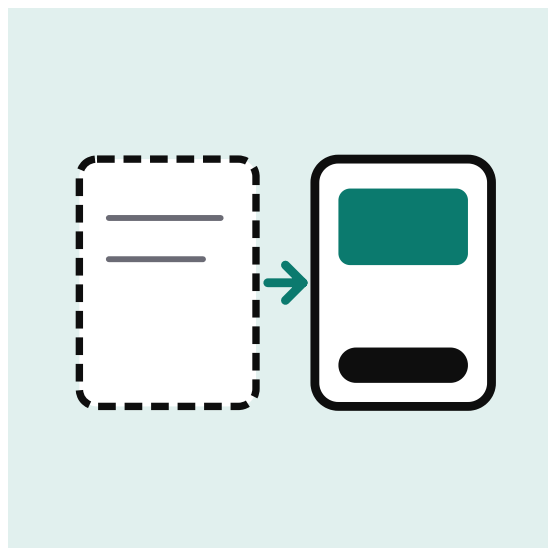
Prototipado

Origin

Houde and Hill (1997)

Output

Prototypes, from a sketch to something that works



What it's for

It helps you make mistakes cheaply: finding out something doesn't work before building it for real, while fixing it still costs little.

Key elements

Role

Does it do what the person needs?

Look and feel

How does it look, sound and feel to use?

Implementation

Can it be built, and how?

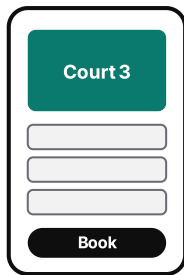
Low or high fidelity

A rough prototype is cheap and changes in minutes; a polished, interactive one lets you test details, but costs more.

An example

An app for booking a time slot at a sports center.

A look-and-feel prototype



How does it look?

No steps to test

Polished, full-color screens, but with no step that can be tested. **Answers how it looks.**

A role prototype



Paper sketches

Does it work?

Paper sketches with the steps for booking, tested with a person. **Answers whether it works.**

What matters is not how finished a prototype looks, but what question it answers.

How it's done

1



Choose the question: whether it works for people, how it looks or whether it can be built.

2



Build the minimum that answers it: paper, cardboard, mock-up, wireframe or code.

3



Test it and decide what to change.

Applications in design

✓ When to use it

When you have a specific question about an idea and want to answer it before investing in developing it.

✗ Avoid

Polishing the look when you don't yet know if the idea works.

👁 Don't fall for it

A very polished prototype makes people comment on the color rather than the idea.

Connections

Builds on

■ Desirability, feasibility, viability

Related to

■ Sketching	■ Bodystorming	■ Contextual Design
■ Crazy 8s	■ Design thinking	■ Interaction design
■ UX design	■ Tangible interaction	■ Role playing
■ Lean Startup	■ Lean UX	■ LEGO® Serious Play®
■ Wizard of Oz	■ Mockup	■ Experience prototyping
■ Desktop walkthrough	■ Design speed dating	■ Design sprint
■ Storyboard	■ Usability testing	■ Wireframe

Authors and works

1997	Stephanie Houde and Charles Hill	Proposed classifying prototypes by the question they answer: role, look and feel, or implementation.
1996	Jim Rudd, Ken Stern and Scott Isensee	Compared the advantages and limits of low- and high-fidelity prototypes.

Sources

Original sources

- Houde, S., & Hill, C. (1997). What do prototypes prototype? In M. Helander, T. K. Landauer, & P. Prabhu (Eds.), Handbook of human-computer interaction (2nd ed.). Elsevier.
- Rudd, J., Stern, K., & Isensee, S. (1996). Low vs. high-fidelity prototyping debate. interactions, 3(1), 76–85.

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