



# Human Computer Interaction

## Chapter 8: Prototyping

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# Taxonomy of Prototypes



Horizontal vs. Vertical Prototypes

Low-Fidelity vs. High-Fidelity Prototypes

Non-Functional vs. Functional Prototypes

Evolutionary vs. Throw-Away Prototypes

## Horizontal Prototype

- Displays “breadth” of functionality
- No back end” support, e.g. database link

## Vertical Prototype

- Full functionality
- Performance of a “slice” or small part of the system

## Full Prototype

- Full functionality
- Lower performance than production software

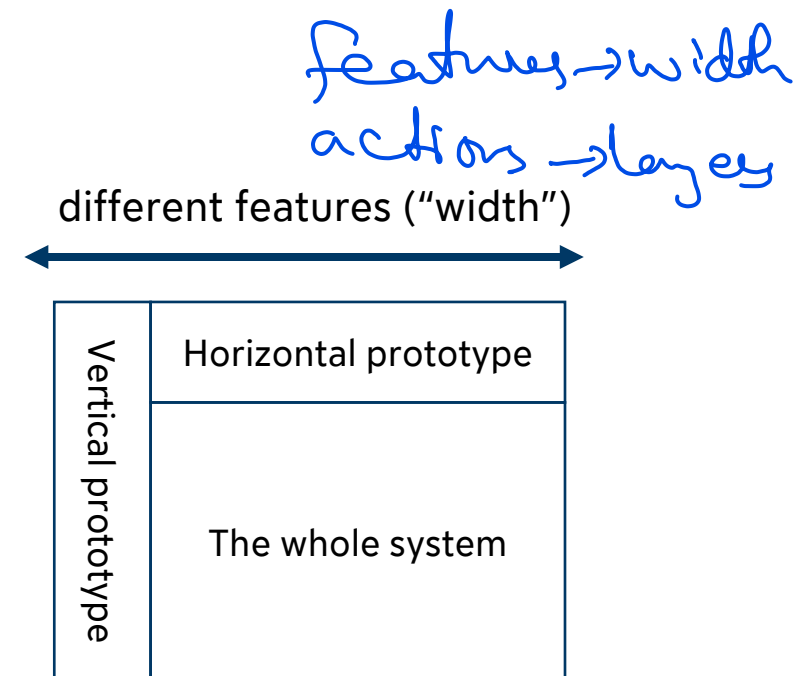
→ 2 2 2 layers  
(no backend)

→ front & back.

→ performance of slice.

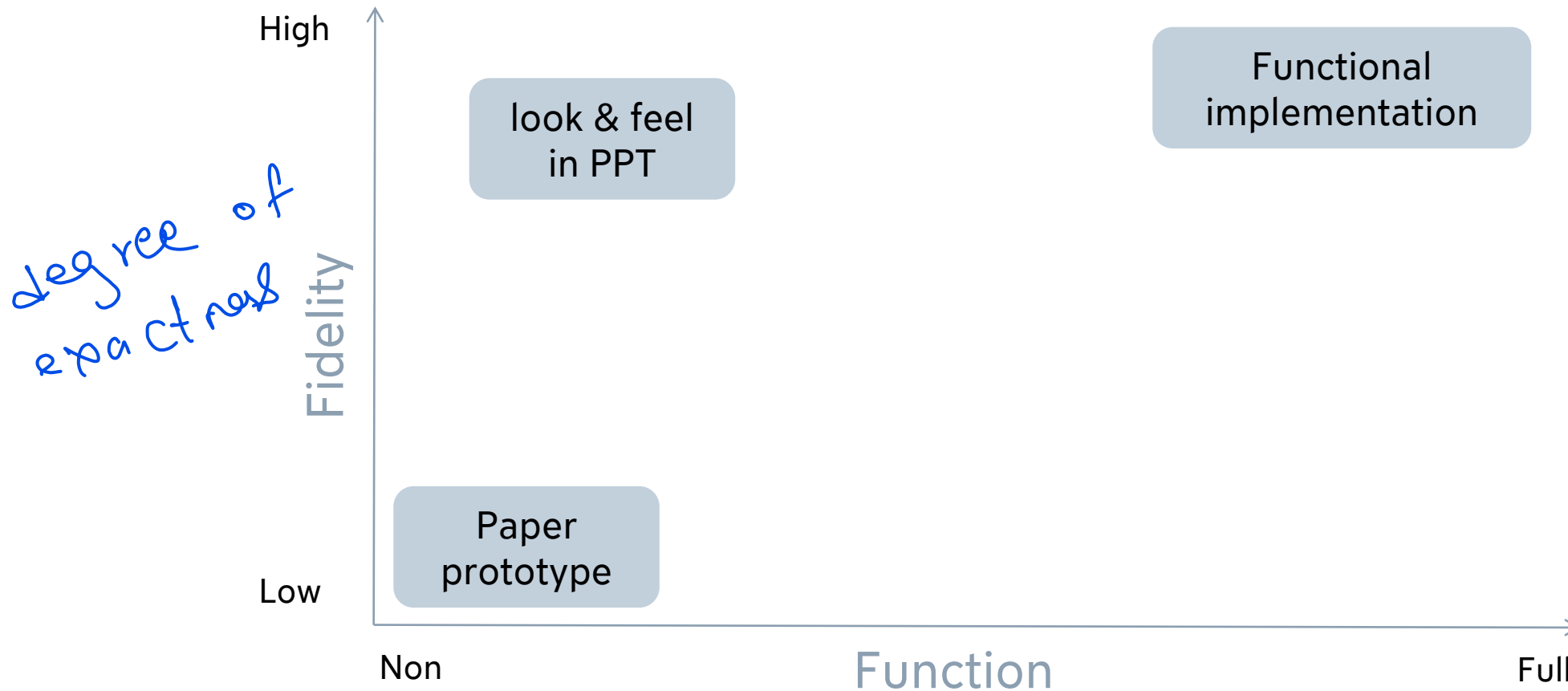
→ Entire.

→ slower



# Low-Fidelity vs. High-Fidelity Prototypes

## Non-Functional vs. Functional Prototypes



## Low-fidelity prototyping

- Paper and post-it prototypes
- Wizard of Oz

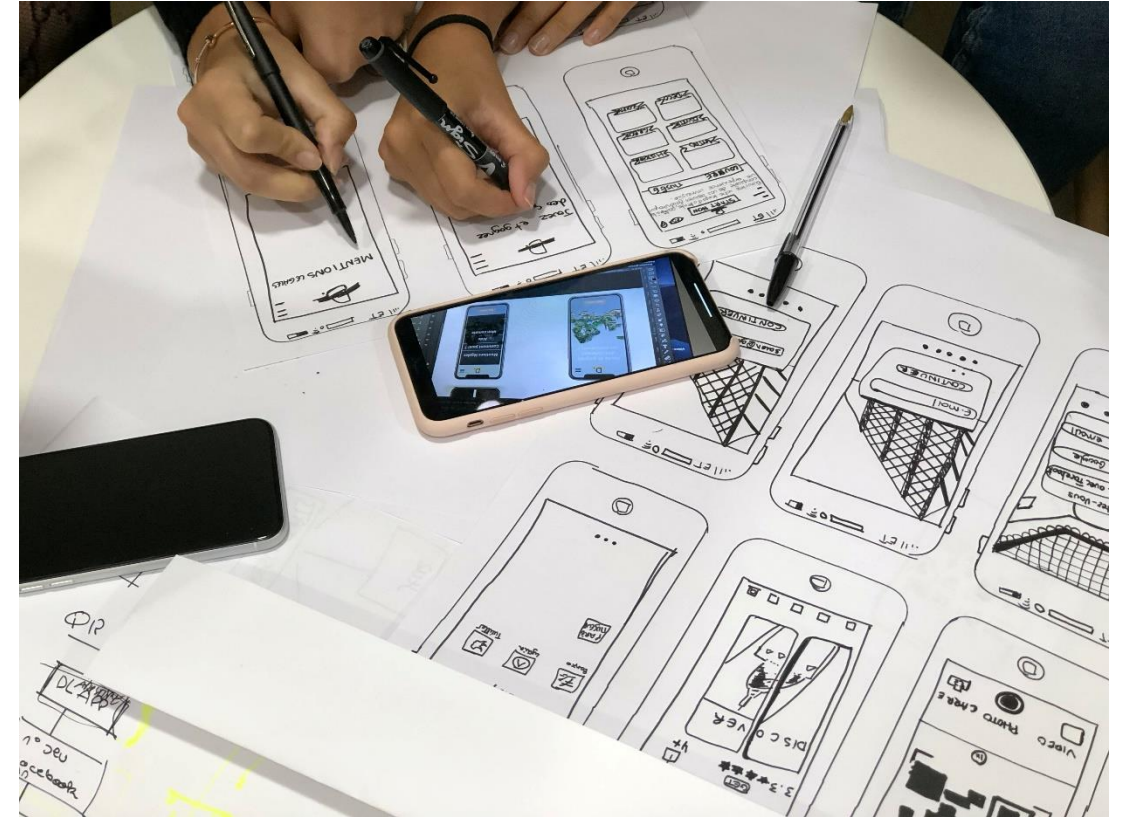
## Medium-fidelity prototyping

- Facade tools
- Storyboarding
- Storyboarding tools: SILK, Denim

## High-fidelity prototyping

- Interface builder tools

Photo by [Amélie Mourichon](#) on [Unsplash](#)





## Two major kinds of prototyping:

### Throw-away

*→ rapid prototyping*

("rapid prototyping")

- Requirements gathering
- Testing specific aspects

### Evolutionary prototyping

*→ rapid App dev*

("rapid application development")

- Delivery of prioritized functions incrementally
- With an evolving design

*priority  
→ Step by step*





**Thank you  
for your attention**