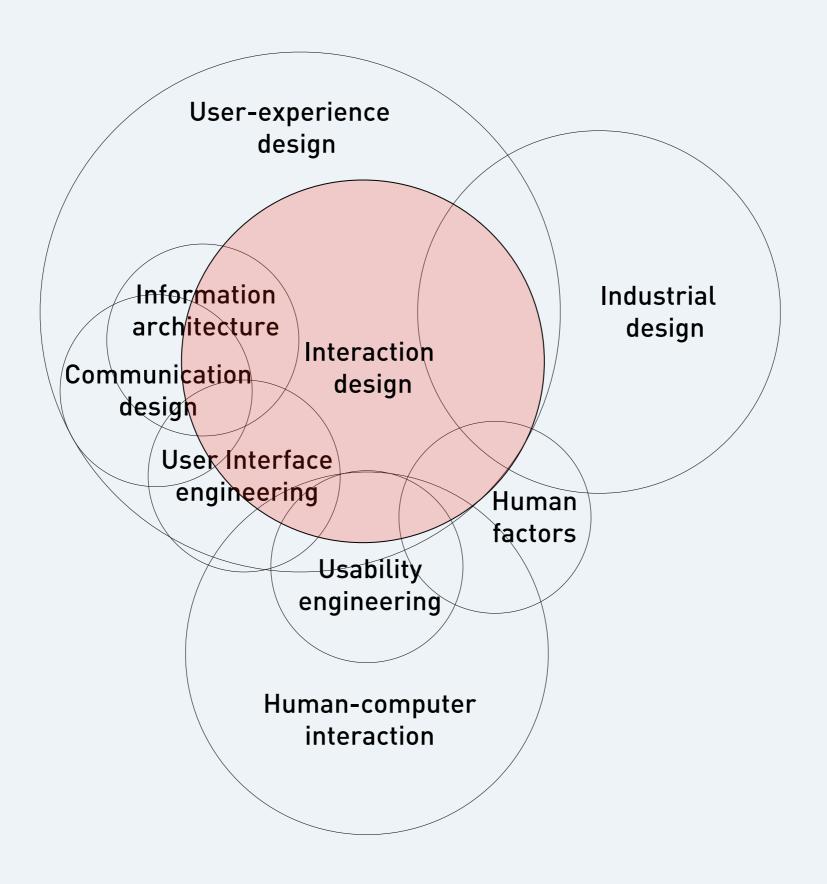
Interaction Design

Prototyping UX - From Sketch to Prototype

Overview:

- Intro & Designprocess Phase
- Values and Levels of Prototyping
- UX Prototyping Techniques
- Prototyping Case Study



User Experience Design



Overview

DISCOVER

DEFINE

Research

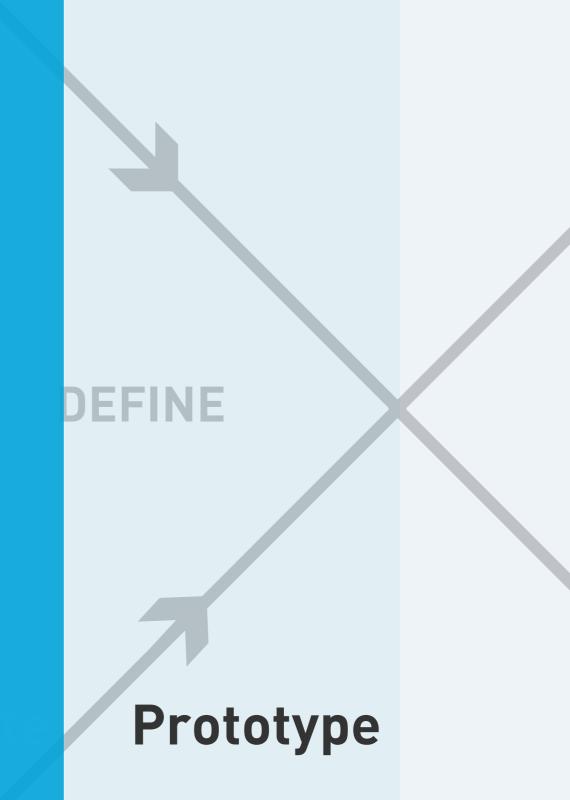
Innovate

Prototype

Overview

Tell a story

Make it tangible



Overview:

- Intro & Designprocess Phase
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For the Designer:

Exploration

Visualisation

Feasibly

Inspiration

Collaboration

For the End User:

Effectiveness / Usefulness

A change of viewpoint

Usability

Desirability

For the Producer:

Conviction

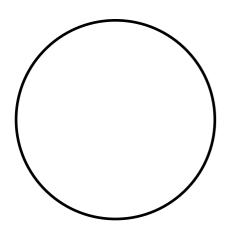
Specification

Benchmarking

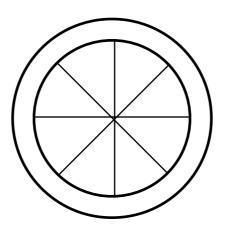
It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them.

Steve Jobs

Fidelity v. Resolution



low resolution low fidelity



high resolution low fidelity



high resolution high fidelity

Low Fidelity

High Fidelity

Open Discussion

Sharp Opinions

Prompting Required

Self Explanatory

Quick and Dirty

Deliberate and Refined

Early Validation

Concrete Ideas

Low Resolution

High Resolution

Less Details More Details

Focus on core interactions Focus on the whole

Quick and Dirty

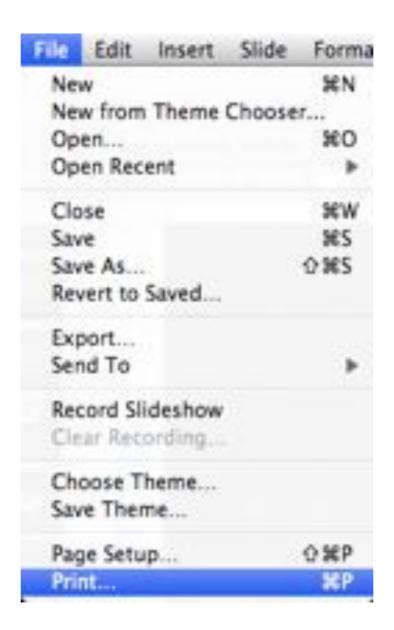
Deliberate and Refined

Early Validation Concrete Ideas

1st Iteration low-res/low-fi



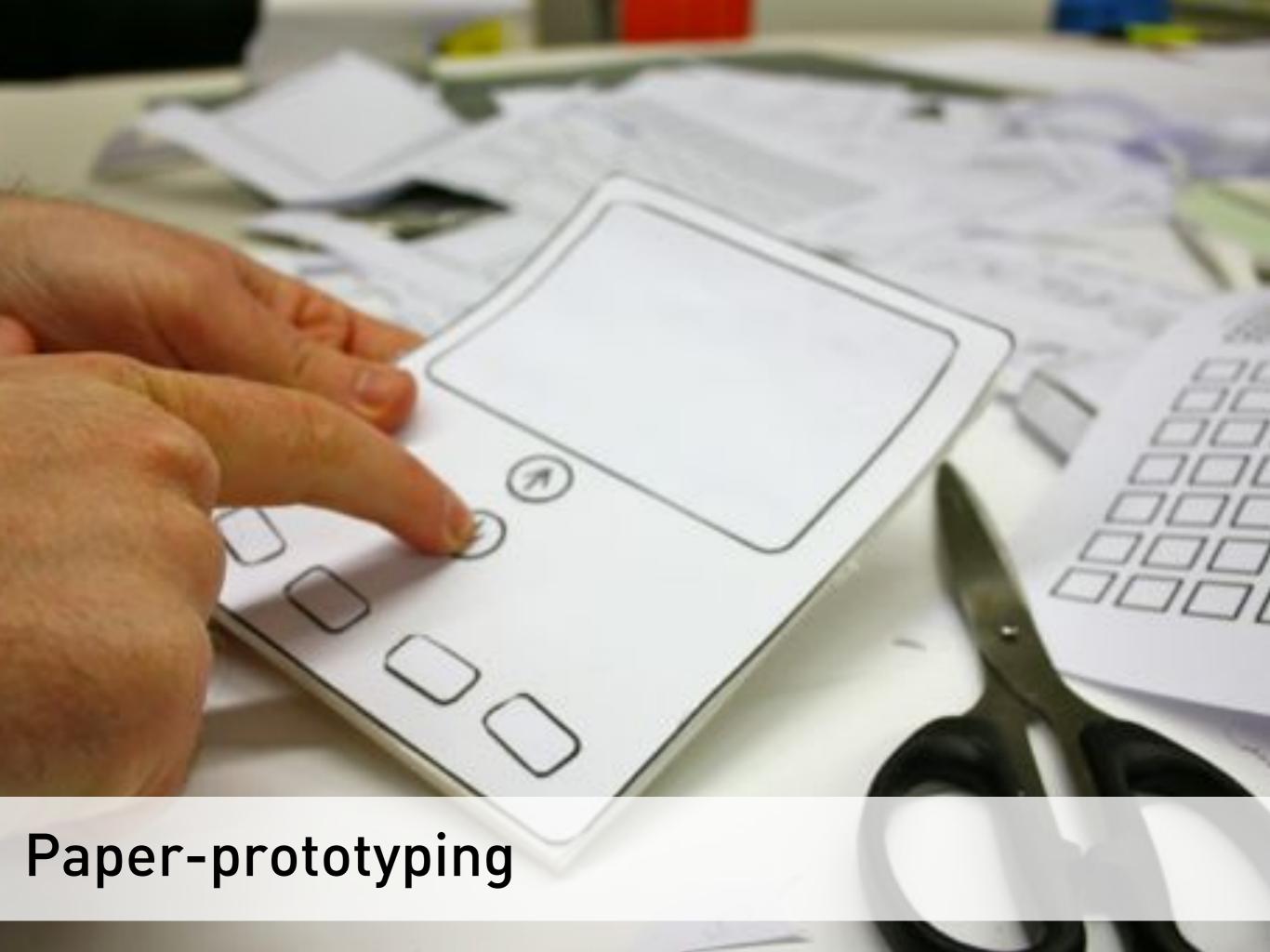




A principle for setting priorities: users will use 20% of the features of your product 80% of the time. Focus the majority of your design and development effort (80%) on the most important 20% of the product.

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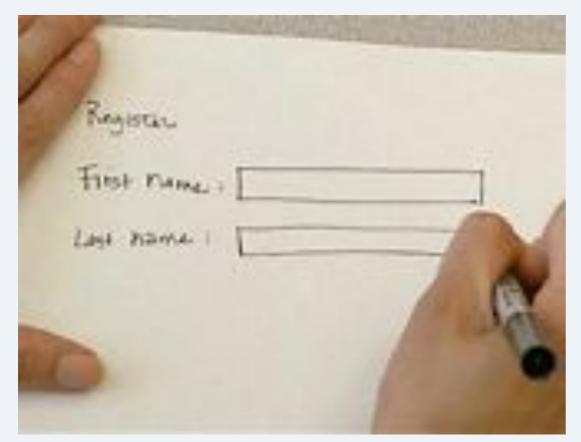
What is it?

Paper prototyping is a widely used method in the user-centered design process, a process that helps developers to create products/screen based applications that meets the user's expectations and needs.

It is **throwaway prototyping** and involves creating rough, even hand sketched, drawings of an interface to use as prototypes, or models, of a design.

History

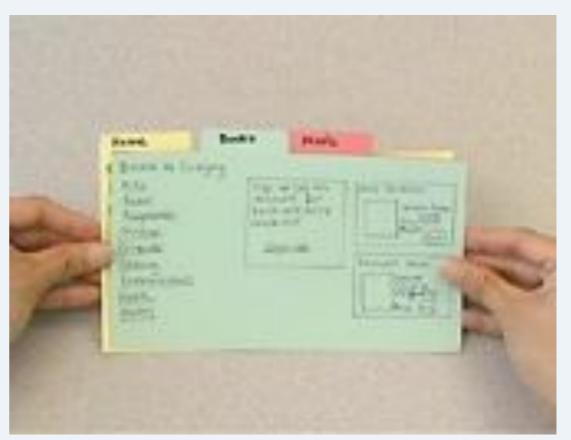
Paper prototyping started in the mid 1980s and then became popular in the mid 1990s when companies such as IBM, Honeywell, Microsoft, and others started using the technique in developing their products.



Paper prototype of a typical form-filling screen



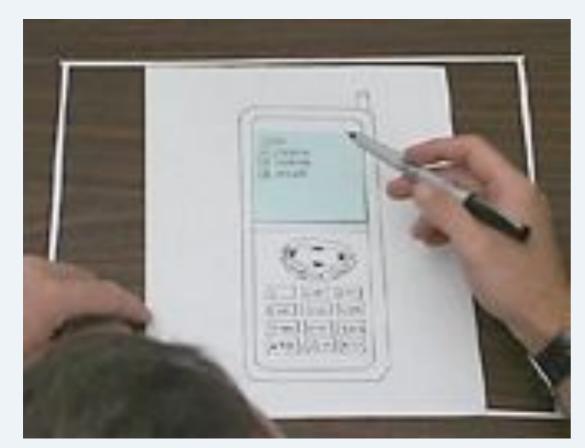
User test of a low-fidelity paper prototype of a website



Paper prototype of a tabs-based design



Typical set-up of the usability laboratory for a test session with a paper prototype



User test of a device-based interaction

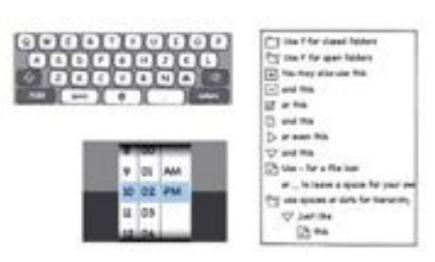


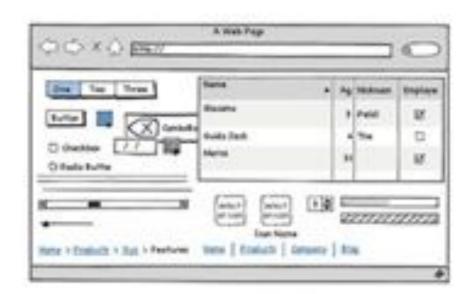
Testing hardware user interfaces: mockup of a kiosk.



User test of a high-fidelity paper prototype of a homepage.



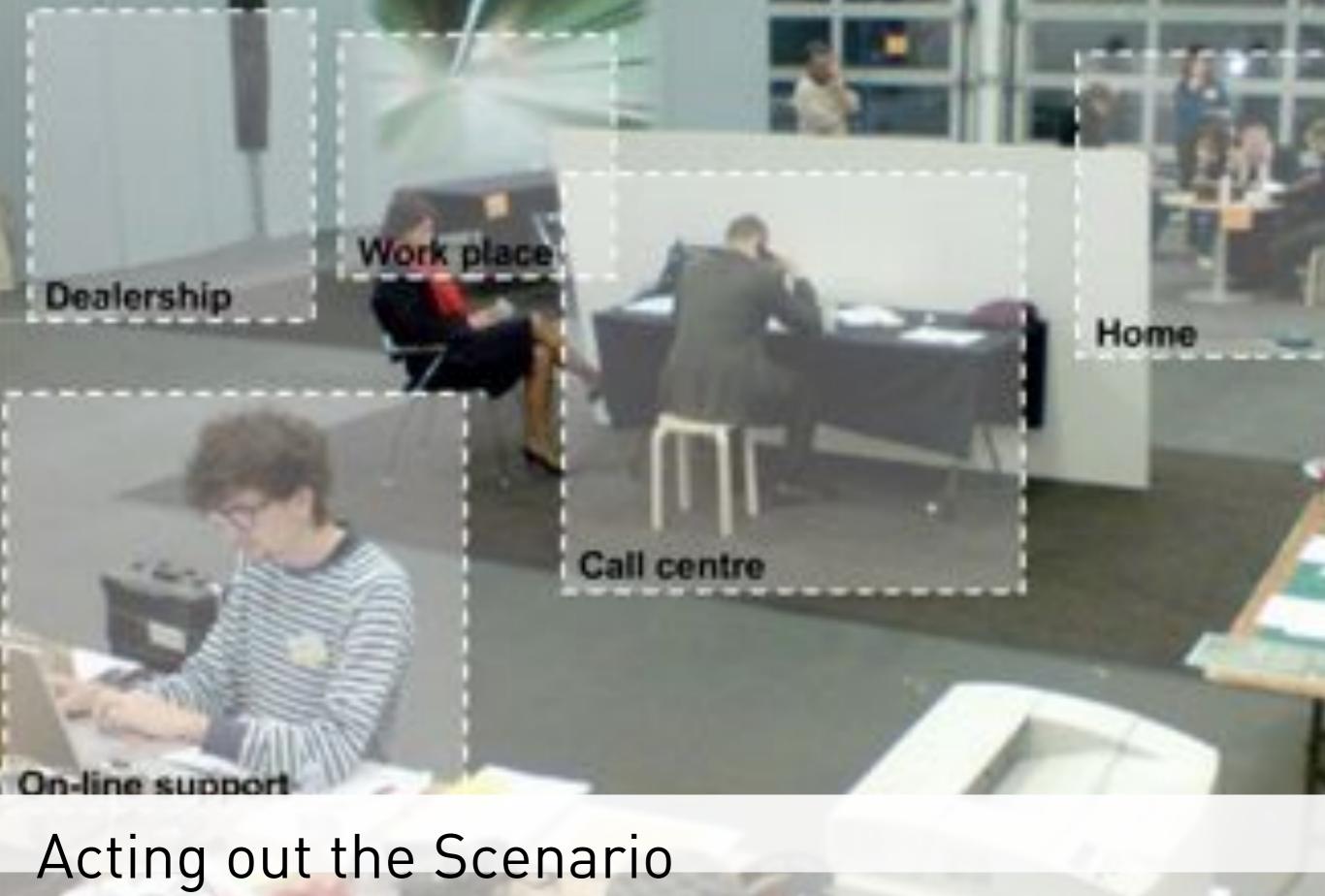




http://www.balsamiq.com/products/mockups

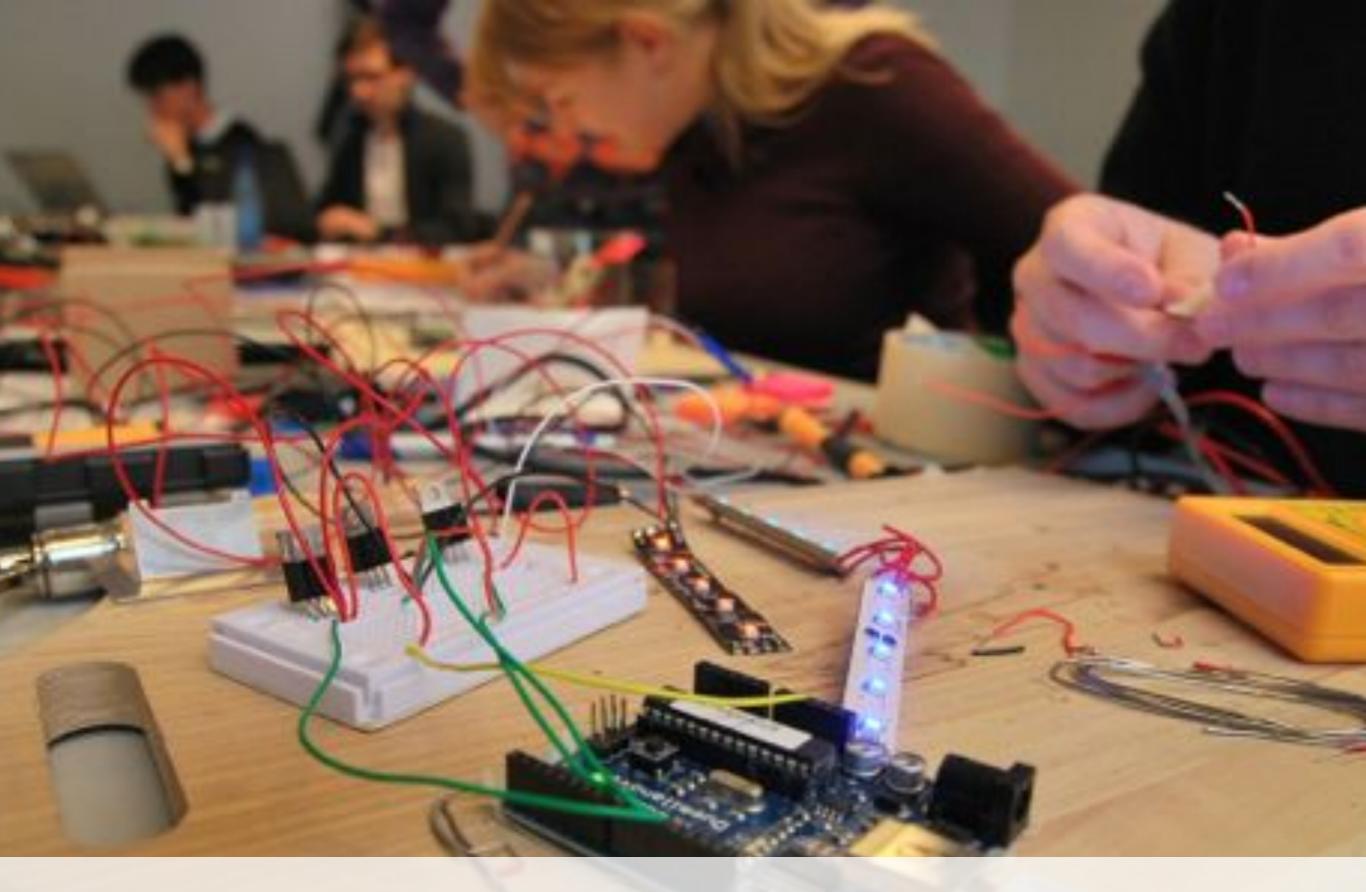


Video-prototyping





Quick Kiosk Mock-up

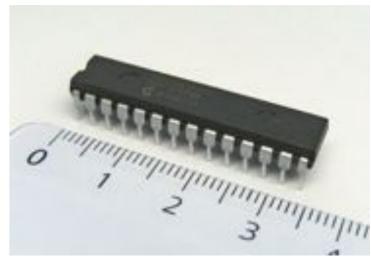


Sketching with Hardware









basic stamp bx 24 basic atom pic

higher level lower level











Assembly



Atmel AT Mega 328

Raspberry PI







Thermistor

Bend Sensor

PIR Sensor



Force Sensor



Potentiometer



Magnet Switch



Distance IR Sensor



Touch QT Sensor



Ultrasound Sensor

References (books)

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Publisher: The MIT Press; 1 edition (October 1, 2007)

ISBN-10: 0262134748

Bill buxton: sketching the user experience

Publisher: Morgan Kaufmann (March 30, 2007)

ISBN-10: 0123740371

Don norman: the design of everyday things

Publisher: Basic Books (September 17, 2002)

ISBN-10: 0465067107

Kevin mullet: designing visual interfaces

Publisher: Prentice Hall PTR (December 15, 1994)

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