Prototyping

CS294-184: Building User-Centered Programming Tools UC Berkeley

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Plan for today

activity!

• A quick pass through takeaways from the reading • Dig in on this weeks prototyping + design critique

Prototyping

they don't want."

Interaction Design: Beyond Human - Computer Interaction by Yvonne Rogers et al.

"...users can't tell you what they want, but when they see something and get to use it, they soon know what

Prototype Roles

Make you think harder, plan more thoroughly about what you want to build
Help you solicit feedback on the thing you plan to build

Low-vs. High-Fidelity Prototypes

https://blog.adobe.com/en/publish/2017/11/29/prototyping-difference-low-fidelity-high-fidelity-prototypes-use.html#gs.l1tk0k

paressable botton.

A. Open the and Log-in 2. pesister and 2.

3. Perom your home screen

4. place to your home screen

5. Der Journhome screen

USER MOTH KATION

NOUT FIELD.

HELLO SOPHIE!

BODSTERS

BILLS MAD TOPUS





https://blog.adobe.com/en/publish/2017/11/29/prototyping-difference-low-fidelity-high-fidelity-prototypes-use.html#gs.l1tk0k

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Interactable, higher-fidelity

https://blog.adobe.com/en/publish/2017/11/29/prototyping-difference-low-fidelity-high-fidelity-prototypes-use.html#gs.l1tk0k



Low-Fidelity Prototypes

- Claims you may hear about low-fi prototypes:
 - People love to give you feedback on font size and if your icons make sense to them
 - than aesthetics, consider low-fidelity prototypes
 - If you don't want that kind of feedback, if you want feedback on elements deeper Also if it looks like you drew it in crayon and didn't sink a lot of time into it, people are more willing to criticize, which is what you want
- Personally haven't found research-backed evidence of the above • (Send me your references!)
- But...lots of evidence that you get just as much/just as good feedback from low-fi, and they're faster and cheaper to make, faster to tweak and change

Low-Fidelity Prototypes

- good feedback from low-fi, and they're faster and cheaper to make
- ...with the result that maybe you're more willing to realize they're not right

• **But**...lots of evidence that you get just as much/just as

criticize yourself and to throw things away when you



Consider this familiar situation: a generates scores of comments on sub- their work to production. development team spends weeks designing an interface. They draw sketches on the board, discuss each point in detail, and finally specify a design. The design is either coded into the application language or simulated with a software prototyping tool. The result is finally shown to users for approval, in a session that

jects ranging from the basic metaphor to the choice of background color. The team just barely has time to incorporate these comments into a revised design before committing



by Marc Rettig

Now consider a different situation, one I have witnessed first-hand over the past few months: a development team spends weeks designing an interface. During the first few days, they construct a paper prototype of their initial thinking about all aspects of the design, and test it with typical representatives of the user commu-

A nice resource on the case for low-fi prototypes

• With good arguments for the claims mentioned on prior slides

Wizard-of-Oz Prototyping

- Like what we did the very first day of class!
- the work that our tool will eventually automate
 - Human can be:
 - Compiler, interpreter
 - Program synthesizer
 - Programming environment
 - Program transformation tool

• Lets us get around engineering effort by having a human do

We've talked about lo-fi...

- early-stage formative studies
- all points!
- high-fidelity...

• ...because for today's purposes, we're mostly interested in

But of course we want to be getting feedback from users at

• Calling it low-fidelity naturally suggests the existence of

Туре	Advantages	Disadvant	tages	
Low-fidelity prototype	Lower development cost Evaluates multiple design concepts Useful communication device Addresses screen layout issues Useful for identifying market requirements Proof of concept	Limited err Poor detai code to Facilitator- Limited util requiremen Limited use Navigation limitations	For checking led specification to driven lity after nts established efulness for ests al and flow	
High-fidelity prototype	Complete functionality Fully interactive User-driven Clearly defines navigational scheme Use for exploration and test Look and feel of final product Serves as a living specification Marketing and sales tool	More reso develop Time-cons Inefficient concept de Not effectiv requiremen	urce-intensive to uming to create for proof-of- esigns ve for nts gathering Interaction Design: Beyo Interaction by Yvonne R	onc log

d Human - Computer gers et al.



Let's do some prototyping!

In-class prototyping and design critique activity:

https://docs.google.com/document/d/ <u>edit</u>

<u>1vWzZWg8l_kOexNltuEDX0-K1m8DeqnuveSLKzCc6Eqc/</u>