Prototyping
Plan for today

• A quick pass through takeaways from the reading
• Dig in on this week’s prototyping + design critique activity!
Prototyping

“…users can't tell you what they want, but when they see something and get to use it, they soon know what they don't want.”
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
Interactable, higher-fidelity
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
  • If you don’t want that kind of feedback, if you want feedback on elements deeper than aesthetics, consider low-fidelity prototypes
  • 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

• **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
• ...with the result that maybe you’re more willing to criticize yourself and to throw things away when you realize they’re not right
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!
- Lets us get around engineering effort by having a human do the work that our tool will eventually automate
  - Human can be:
    - Compiler, interpreter
    - Program synthesizer
    - Programming environment
    - Program transformation tool
    - …
We’ve talked about lo-fi...

• ...because for today’s purposes, we’re mostly interested in early-stage formative studies

• But of course we want to be getting feedback from users at all points!

• Calling it low-fidelity naturally suggests the existence of high-fidelity...
<table>
<thead>
<tr>
<th>Type</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Low-fidelity prototype</td>
<td>Lower development cost</td>
<td>Limited error checking</td>
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<td></td>
<td>Evaluates multiple design concepts</td>
<td>Poor detailed specification to code to</td>
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<td>Useful communication device</td>
<td>Facilitator-driven</td>
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<td></td>
<td>Addresses screen layout issues</td>
<td>Limited utility after requirements established</td>
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<td>Useful for identifying market requirements</td>
<td>Limited usefulness for usability tests</td>
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<td></td>
<td>Proof of concept</td>
<td>Navigational and flow limitations</td>
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<tr>
<td>High-fidelity prototype</td>
<td>Complete functionality</td>
<td>More resource-intensive to develop</td>
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<td>Fully interactive</td>
<td>Time-consuming to create</td>
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<td>User-driven</td>
<td>Inefficient for proof-of-concept designs</td>
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<td>Clearly defines navigational scheme</td>
<td>Not effective for requirements gathering</td>
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<td>Use for exploration and test</td>
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<td>Look and feel of final product</td>
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<td>Serves as a living specification</td>
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<td>Marketing and sales tool</td>
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Interaction Design: Beyond Human - Computer Interaction by Yvonne Rogers et al.
Let’s do some prototyping!

• In-class prototyping and design critique activity:
  
  • Listed in Thursday’s class slot on the calendar, but this is a two day activity.
  
  • Complete with the group for your final project.