Paper Prototyping
(Lo-Fi Prototype)
Paper prototypes are great for...

• Evaluating mental model, language and functionality choices
  – Does the general flow of things make sense to your user?
  – Do they recognize what they can do and how?

• Getting honest feedback
  – If you show someone a highly polished thing, they often don’t want to tell you it stinks.
  – Kindergarten nostalgia?
Paper Prototypes are not so great for...

• Highly dynamic interface elements
  – Animations
  – Gestural interfaces (sometimes).
    • It’s worthwhile to try here, but sometimes you’ll get the sense that people haven’t really absorbed the idea you are trying to communicate.
    • iPhone swipe motion
  – Games (sometimes)
    • Tracy Fullerton: Prototyping via board game to get balance and flow worked out.
    • Wii sports?
Good Paper Prototype

• Accurately captures the tasks that you intend to test.

• Users should be able to click the buttons, interact with the menus, scroll....whatever your interface needs to do.
Good Paper Prototype

• Concentrate on supporting the tasks you will be testing, not arbitrary actions
  – if your task will ask people to look up the details for a given event, you need the details for that event, not all events

• But, **everything** the user will naturally see should be **fully** fleshed out.
  – No squiggly lines; use actual text

• Should look like you didn’t put a lot of effort into it... even though you probably did.
What about software tools?

• This paper was written in the dark ages. Are there alternatives?
  – Research: DENIM (Lin et al., CHI 2001)
    • http://www.ibiblio.org/openvideo/video/chi/chi01_01_m1.mpg
  – Industry:
    • Sketchflow
      – http://www.youtube.com/watch?v=qcPXwbrWtyw&feature=related
    • Balsamiq
      – http://www.balsamiq.com/
• Paper is pretty flexible and mutable. I’m not sure anyone has made anything more efficient.
Balsamiq

Components for Web, Application, and Mobile Interface Design
What about software tools?

• Transition to higher fidelity
  – As you lock in things later in the design process, it’s nice to be able to give a sense of how it’s really going to look. Some tools support that nicely.

• Collaborative Design
  – Paper makes it easy to combine sketches from multiple people. A lot of the current tools are really optimized for a single user.
Example

• https://www.youtube.com/watch?v=GrV2SZuRPv0
Example: Programming Completion Puzzles

• Paper Prototype...
Lo-Fi Hybrid Prototype
Lo-Fi Hybrid Prototype

Congratulations!
You've correctly solved the puzzle!
Close Puzzle
Final Design

The animation, Yeti Baseball, is all mixed up!
Using only the pieces you need, put the animation back in the correct order.

- tiny yeti | turn to face | big yeti
- Do together
  - big yeti | nod
  - tiny yeti | nod
- tiny yeti | move | BACKWARD | 0.5 meters

- big yeti | power swing

- tiny yeti | fly away

- big yeti | wind up swing