Pervasive Media Prototyping: Low-fidelity Prototyping

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Recap

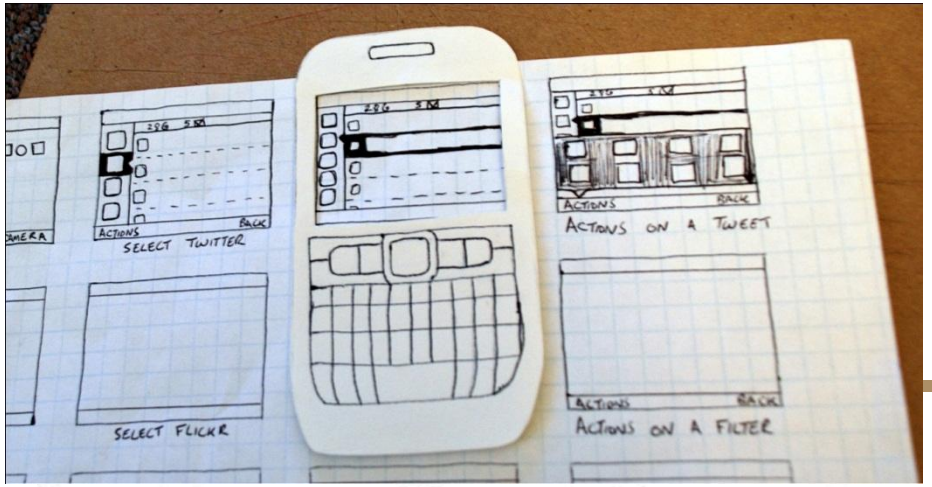
- We have…
  - Design Goal/Statement

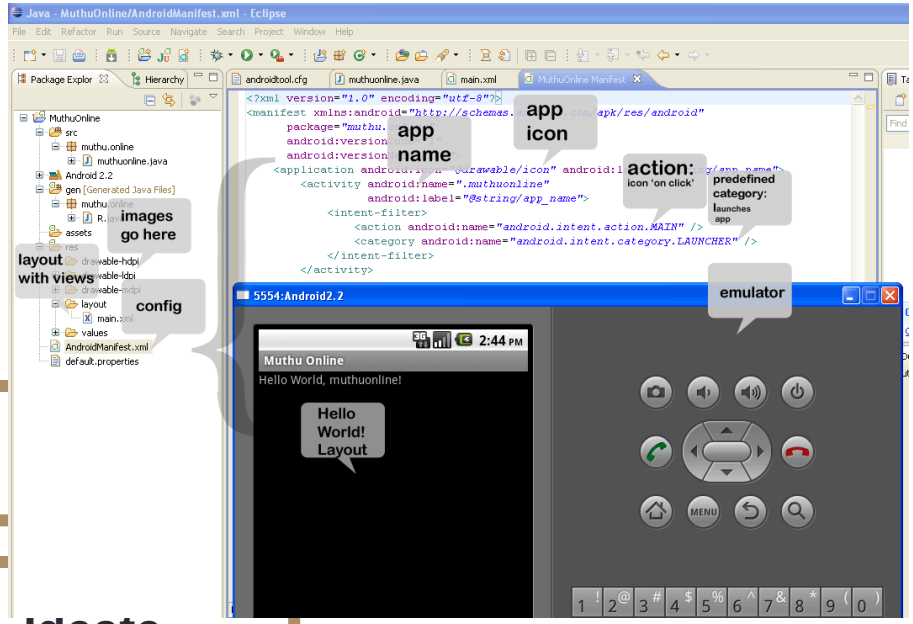
We want to create a new experience for using ***pervasive media*** for ***someone*** to ***do something*** more quickly/interesting/easier in ***somewhere***

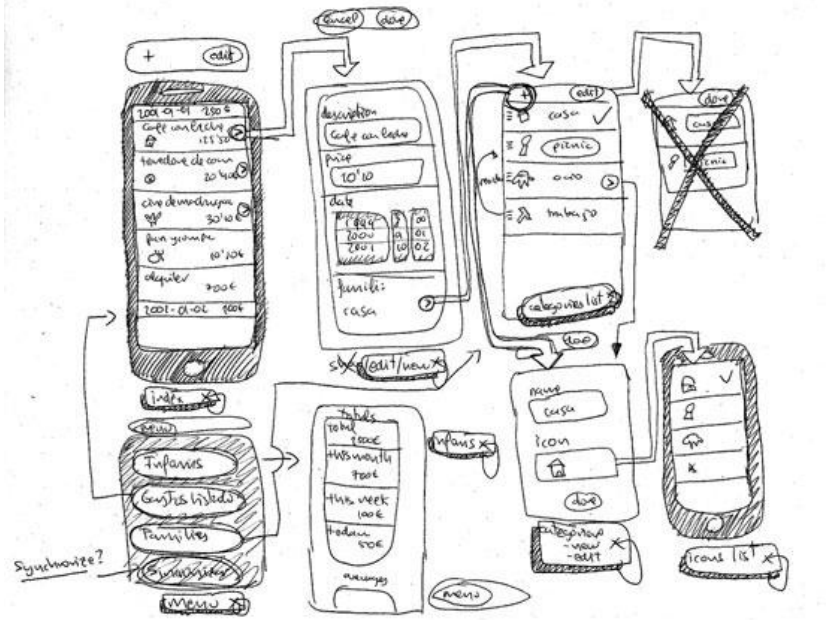
- Analysis of the filed study (observation, interview, report)
- Point-of-View Statement: **user** + **need** + **insight**

We want to make some mobile apps
that uses certain features on mobile phones
and helps people.
someone, something, somewhere

Prototype







Ideate

Prototype

Evaluate

Prototype in Design

- Give a quick first impression of the design idea before implementing

Prototypes can help you **solve** design problems, **evaluate** designs and **communicate** design ideas

The Prototyping Spectrum

Low-fidelity Prototyping

Medium-fidelity Prototyping

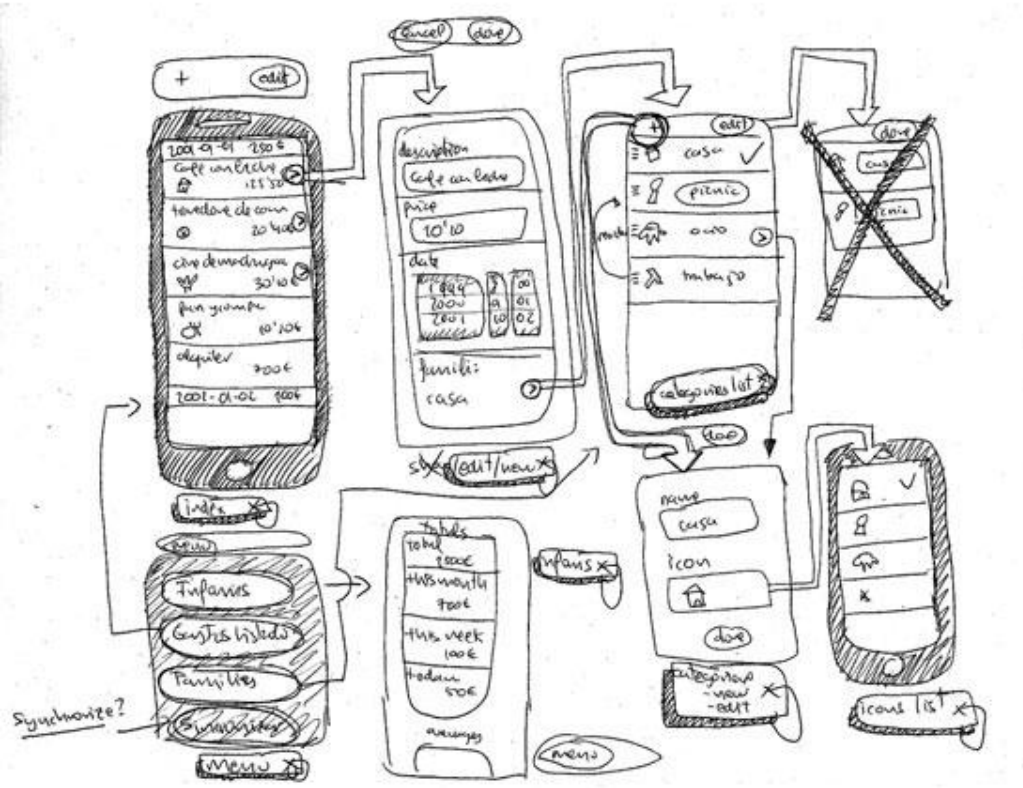
High-fidelity Prototyping

Pros & Cons

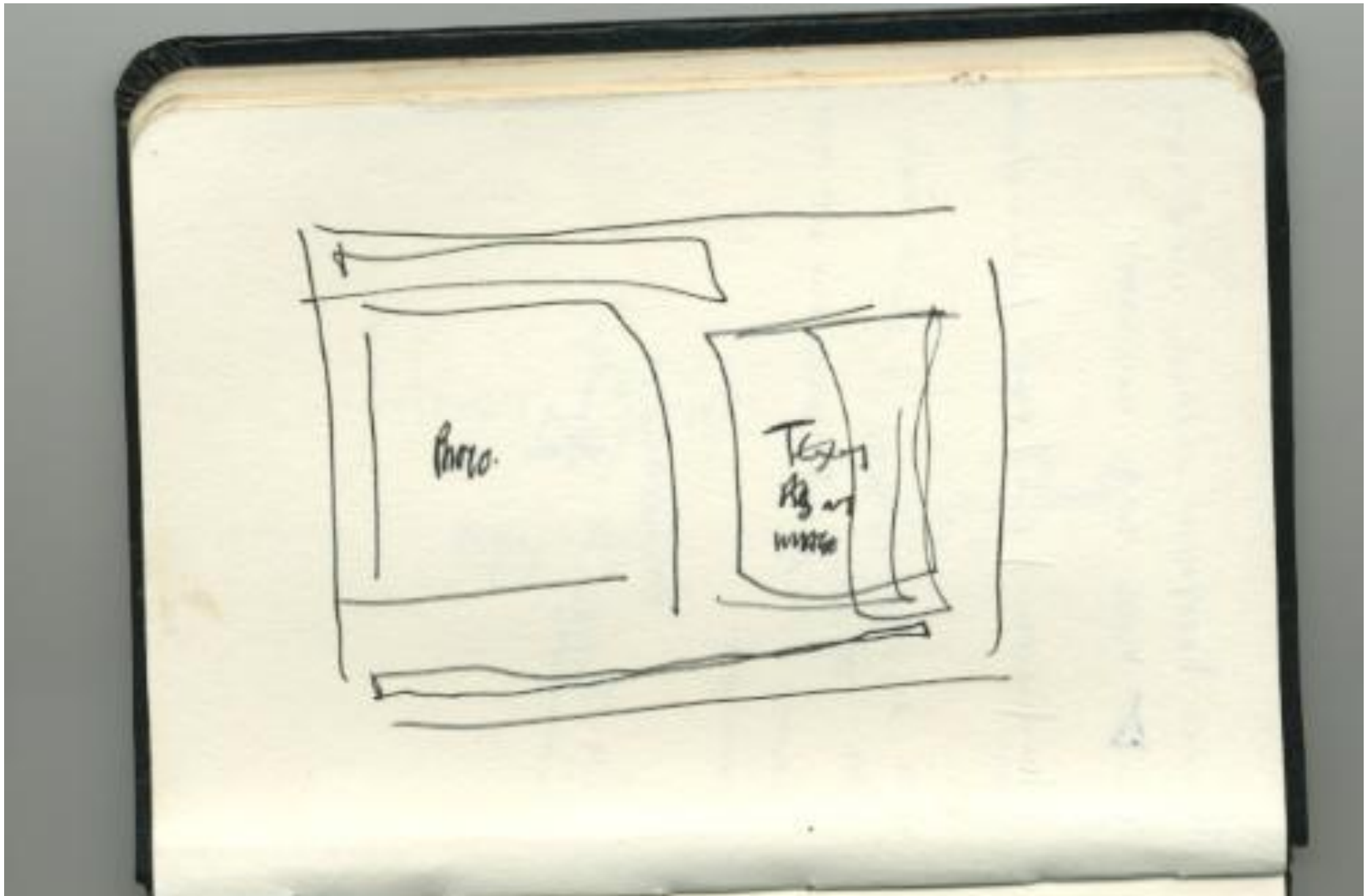
Type of Prototyping	Advantages	Disadvantages
Low-fidelity	• Less time • Lower cost • Lower technical requirement • Evaluate multiple concepts quickly • Useful for communication • Address screen layout issue	• Little use for final test • Fixed navigation flow • Facilitator-driven • Lower level of details
High-fidelity	• Partial functionality • Interactive • User-driven • Free navigation scheme • Use for exploration and test • Marketing tool	• Creation time-consuming • Inefficient for proof-of-concept • Higher technical requirement • Higher cost

Low-fidelity Prototyping

- Sketching
- Paper Prototyping

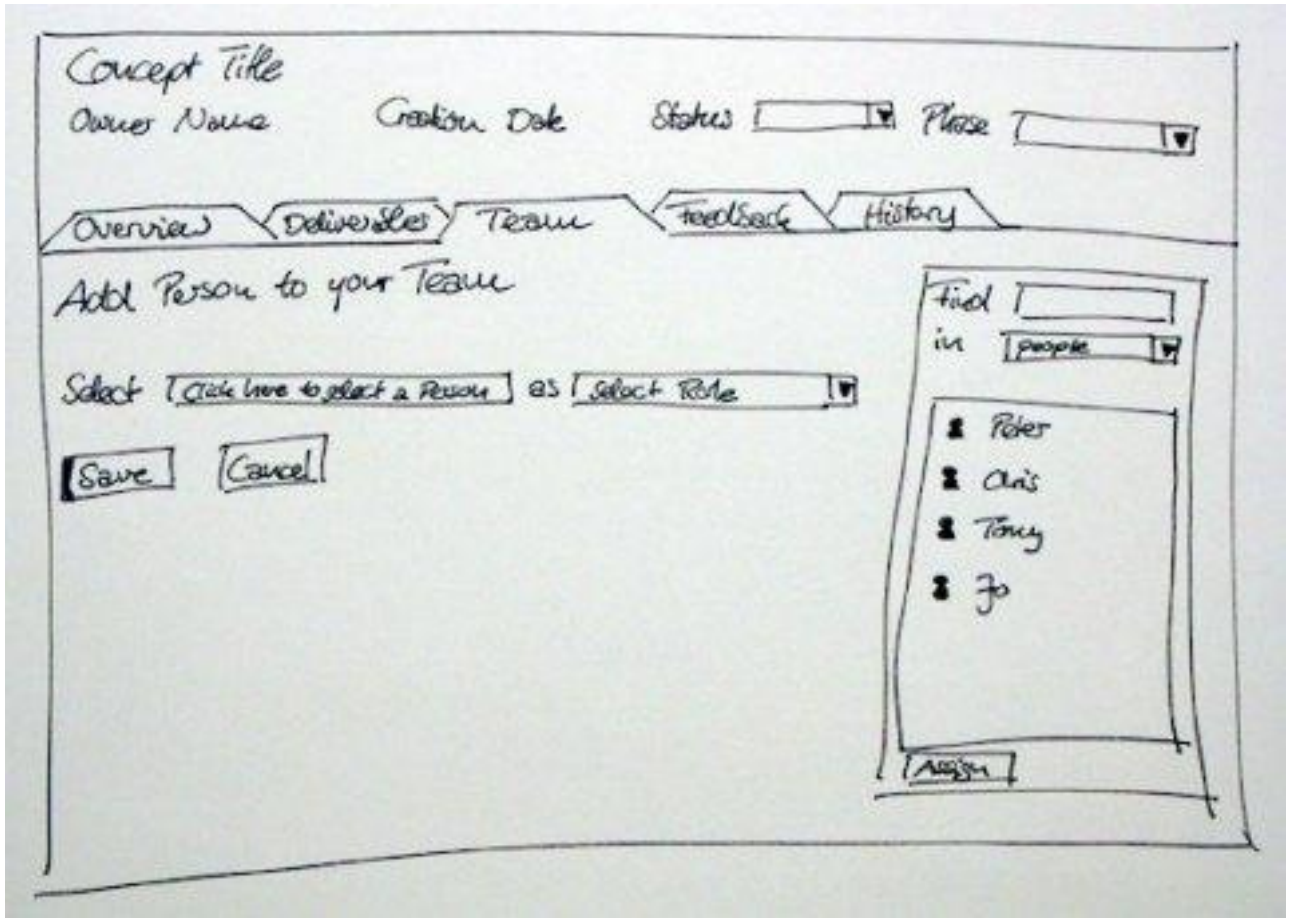


Everyone can sketch!



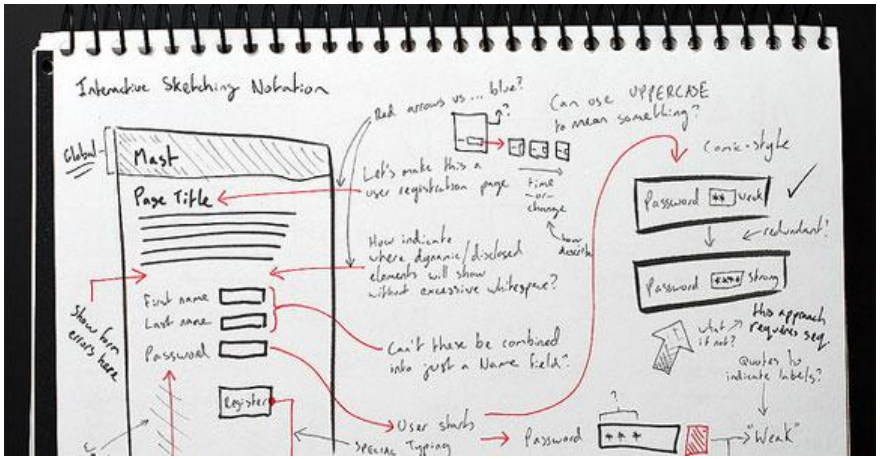
What is Sketching Prototype?

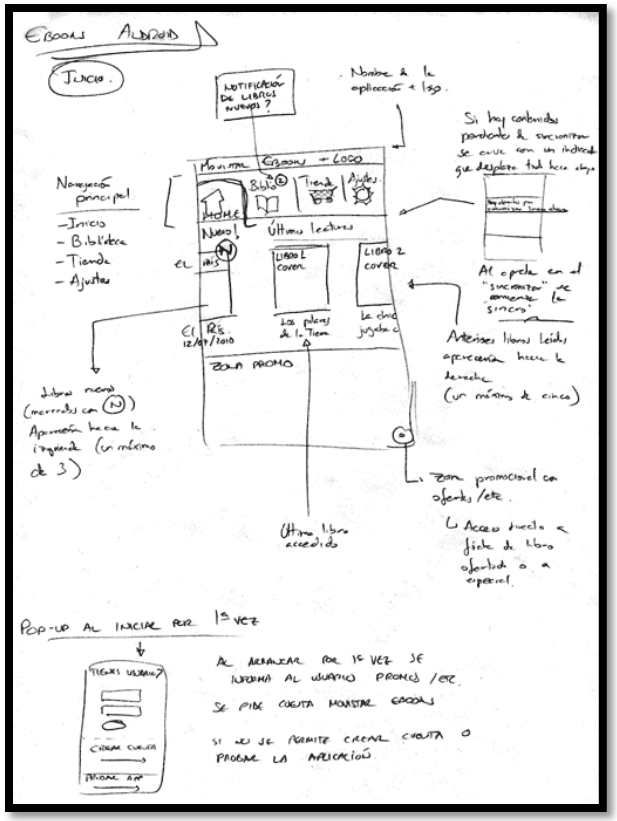
- It can be really rough.



What is Sketching Prototype?

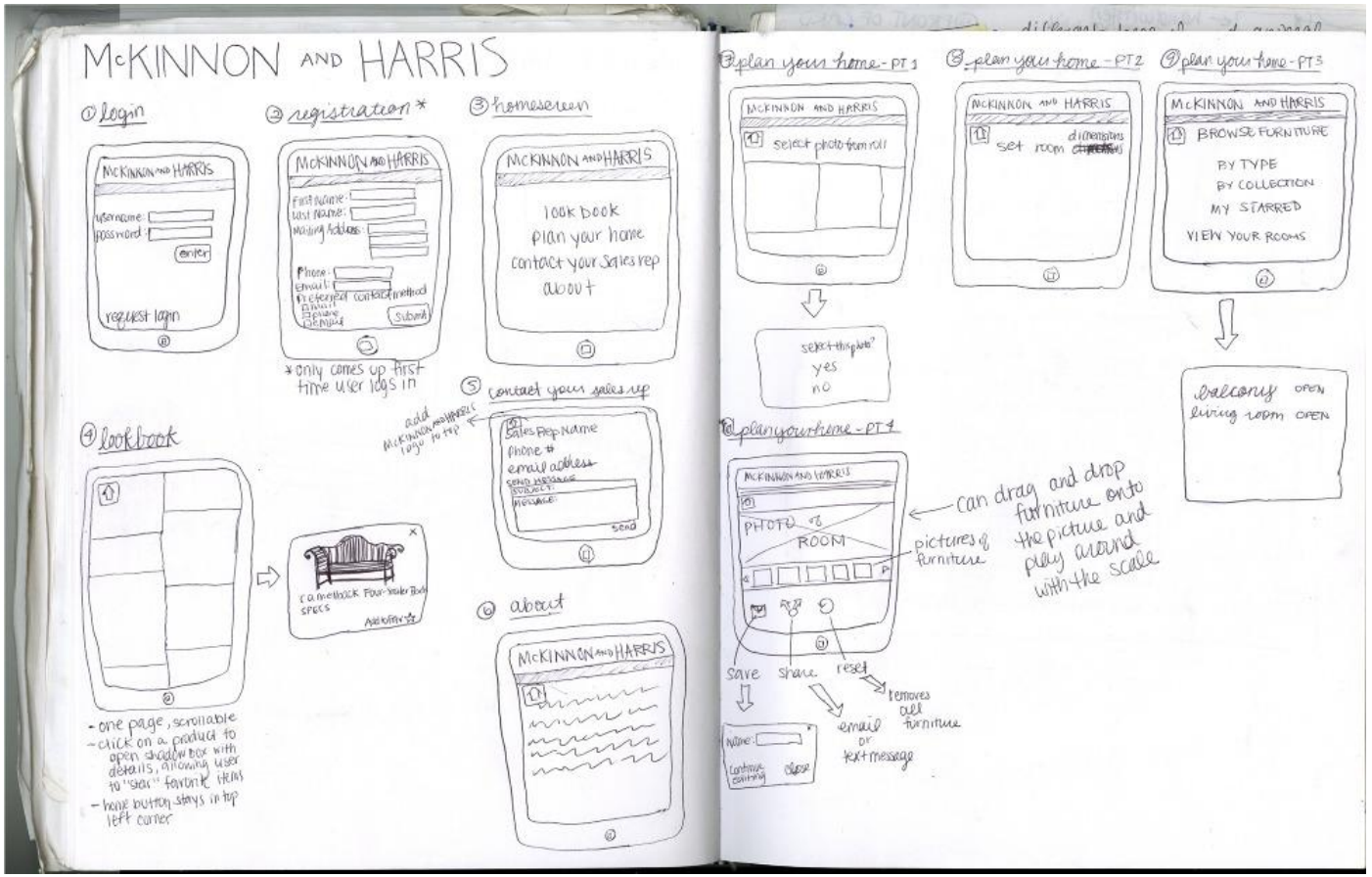
- Sometimes you need to put text description





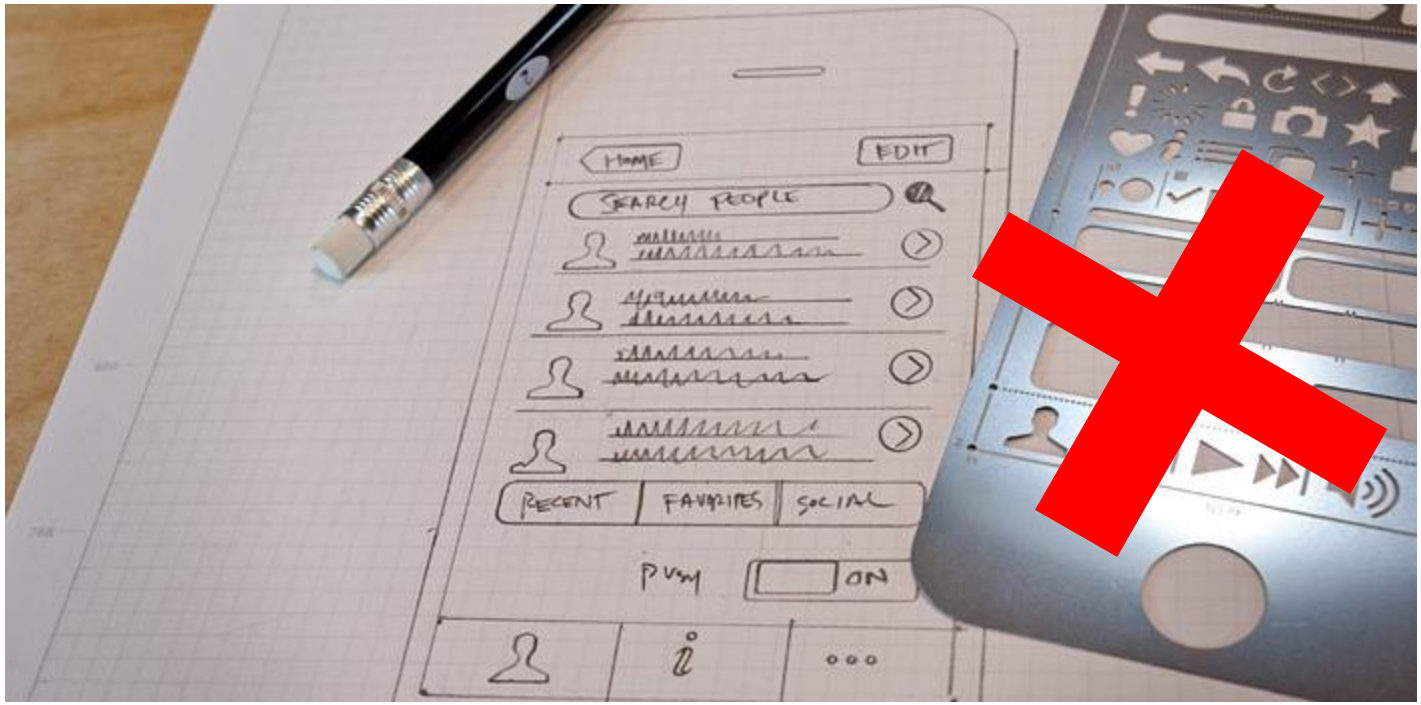
What is Sketching Prototype?

- It can show the flow of interaction.



What is **NOT** Sketching Prototype?

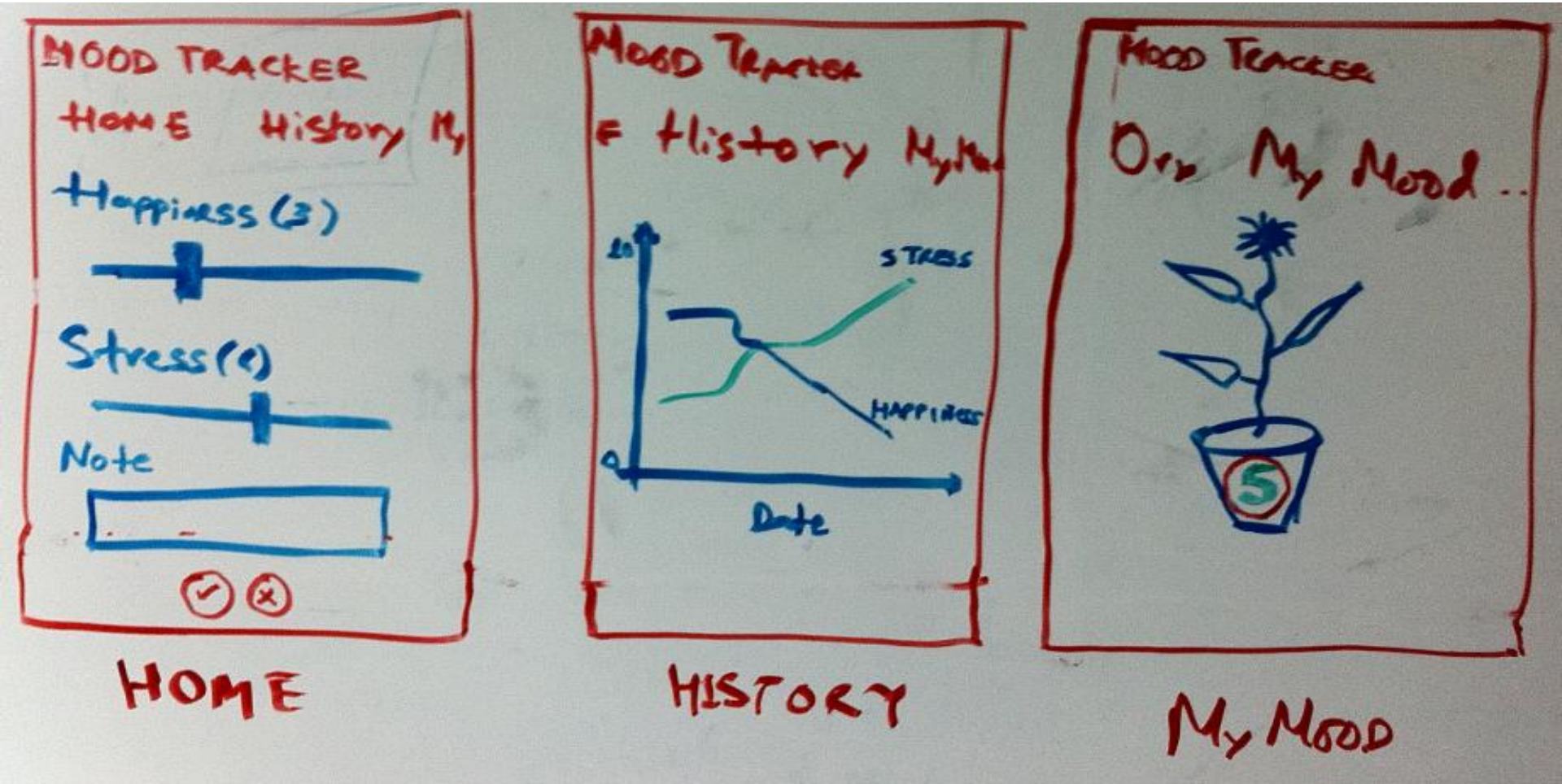
- Anything takes you more than 3 minutes to draw…
- Anything that requires more tools than pen and paper…



Sketching prototype is **rapid**, **freehand** drawing that we do with no intention of its becoming a finished product.

Sketch Prototyping

- Separating design from the processing of making



Sketch out…

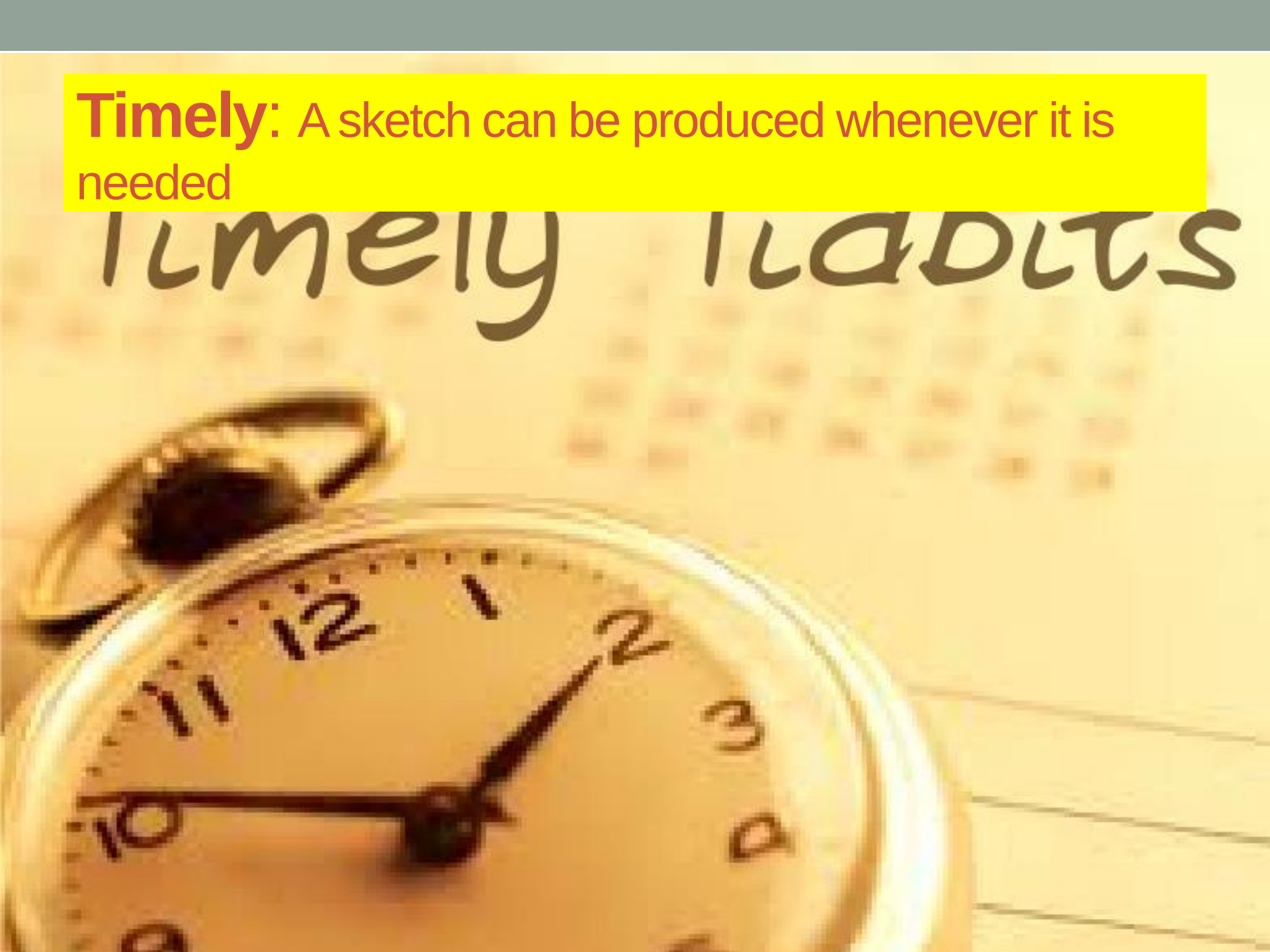
- The Usage Scenarios (comic style)
- The flow of interaction
- Different pages of functionalities
- etc…

It is widely used during **brainstorming**!

Sketch Benefits

Fast: A sketch is quick to make, or at least gives that first impression.

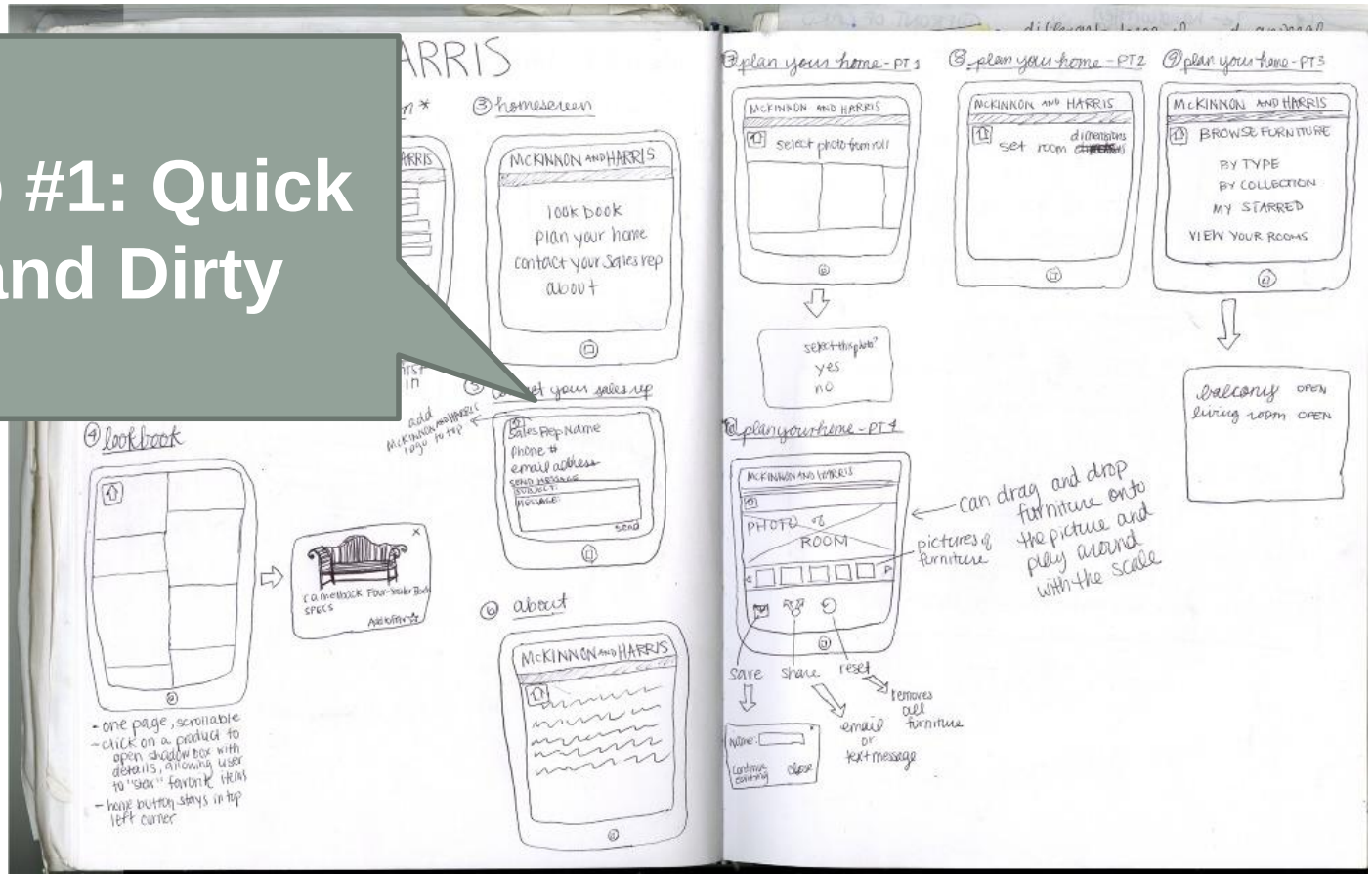
Timely: A sketch can be produced whenever it is needed



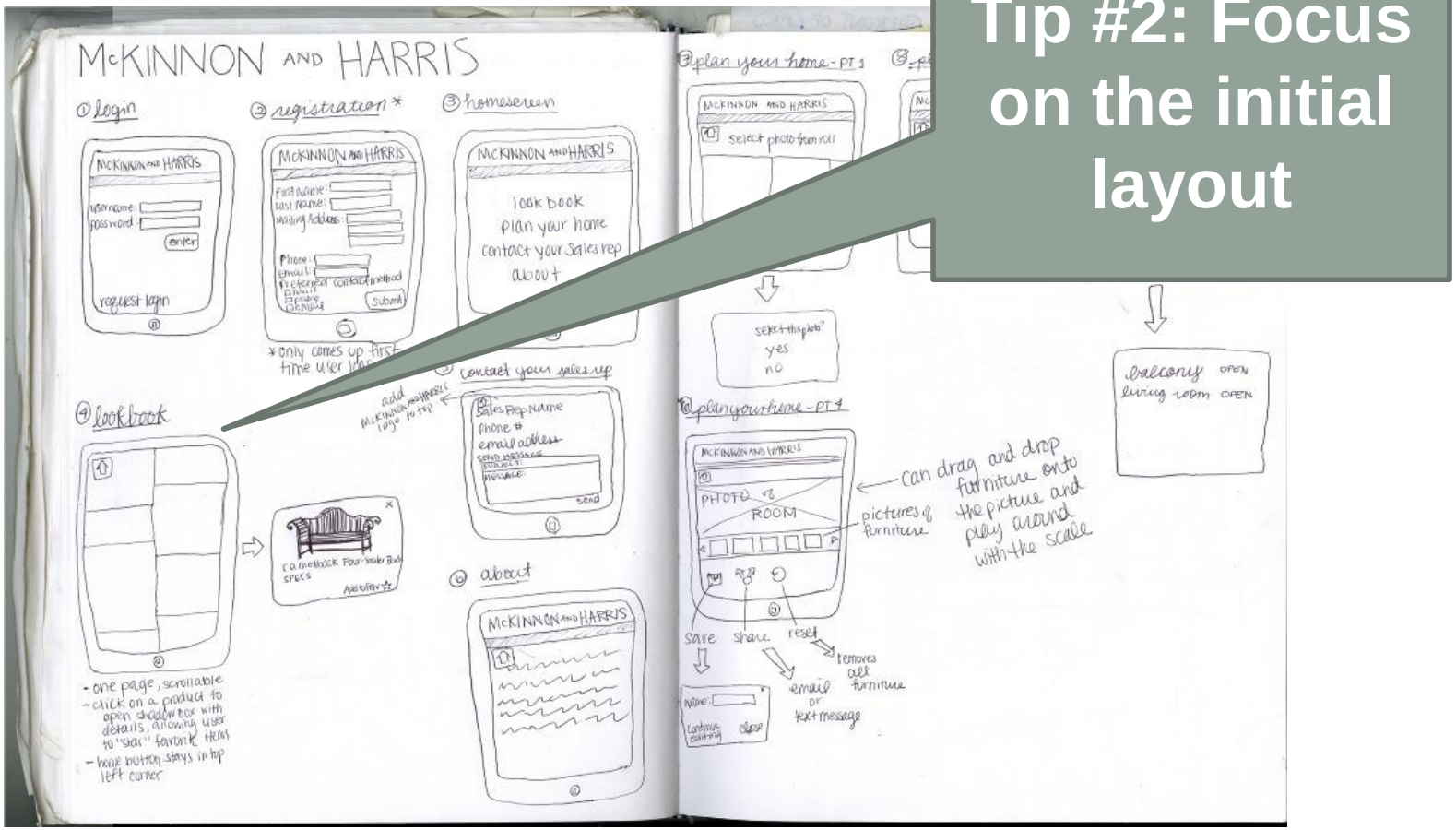
Cheap: A pen and a piece of paper allow you to show a clear concept

Tips on sketch prototyping

Tip #1: Quick and Dirty

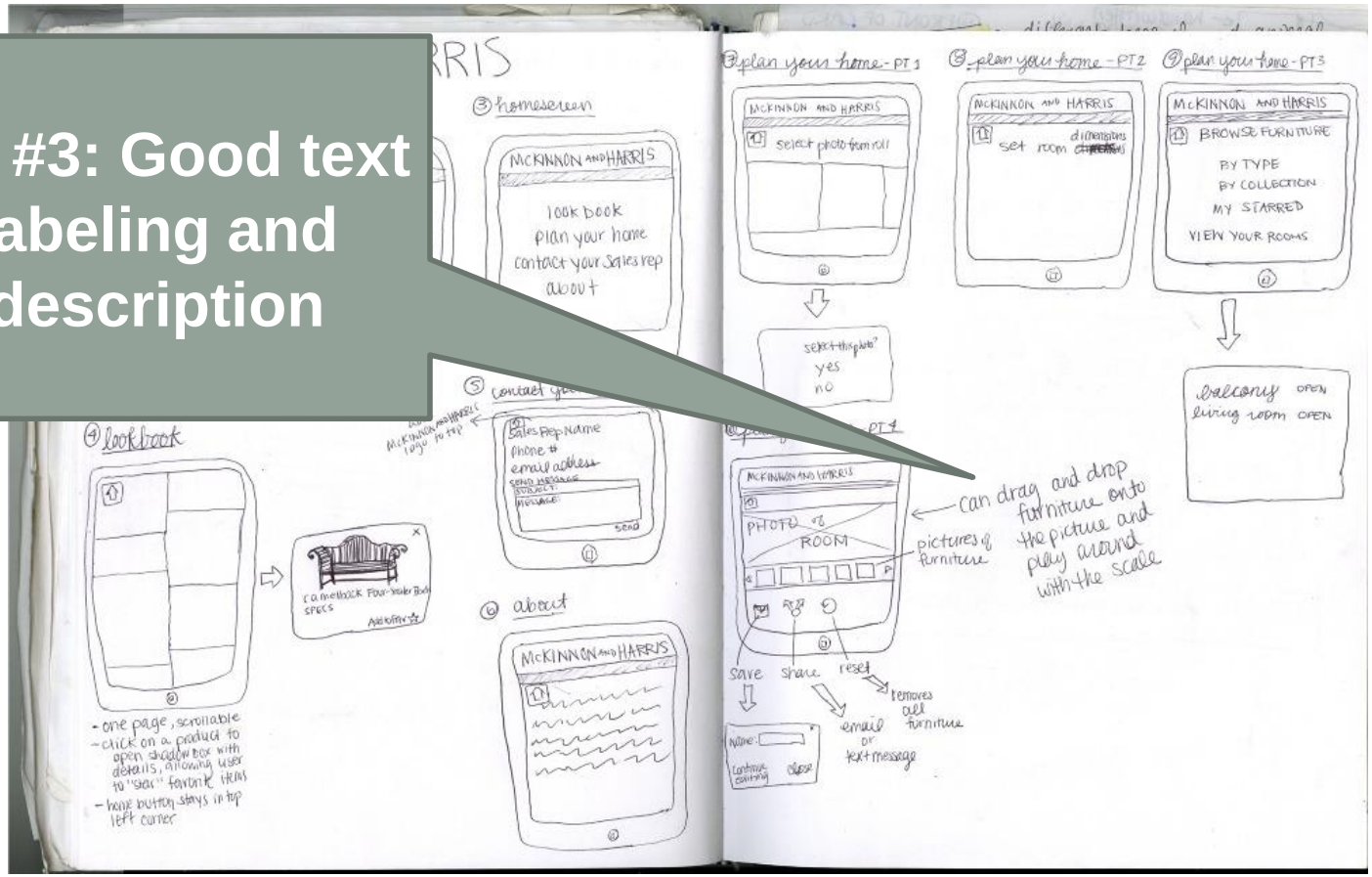


Tips on sketch prototyping



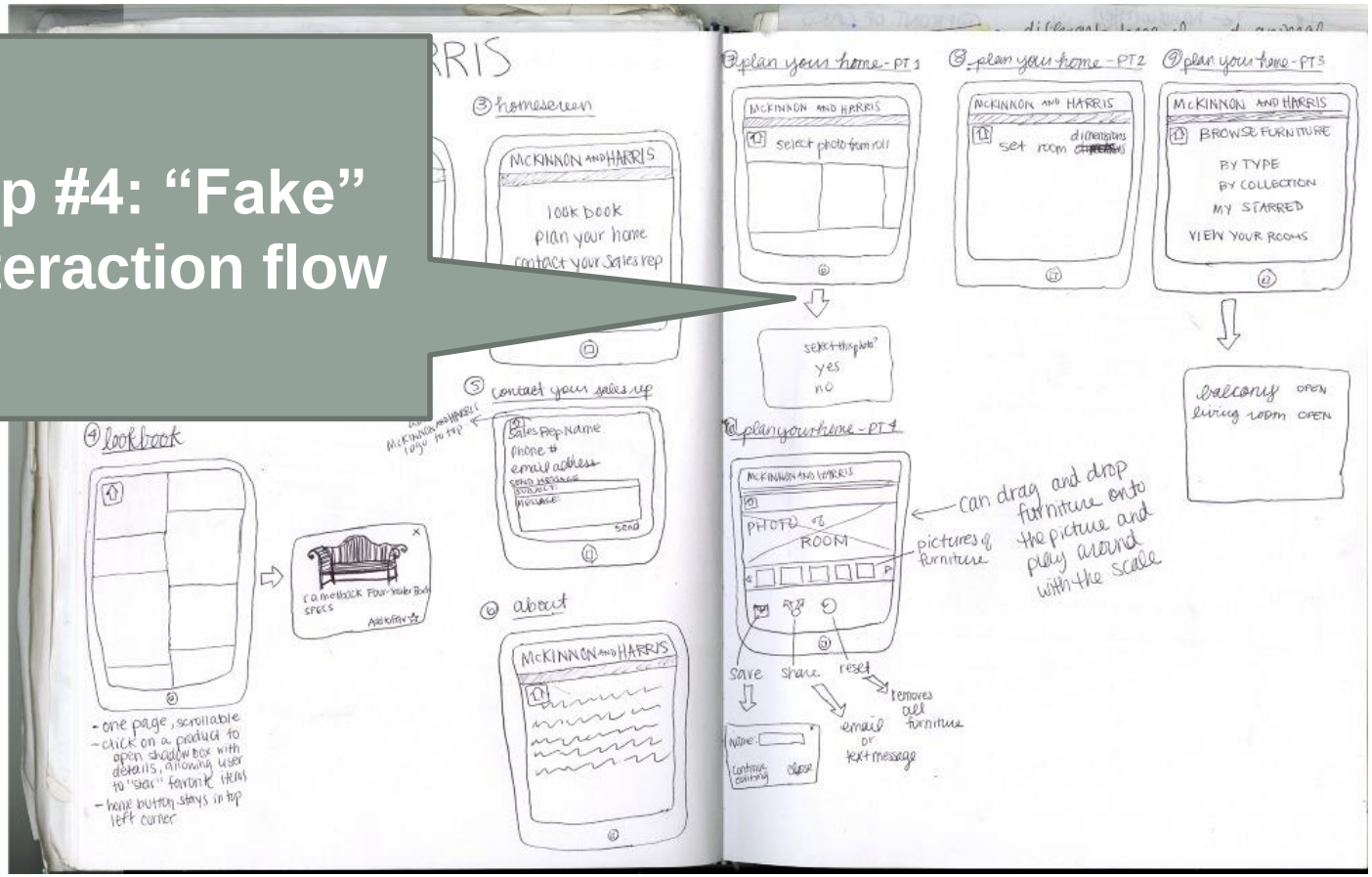
Tip #2: Focus on the initial layout

Tips on sketch prototyping



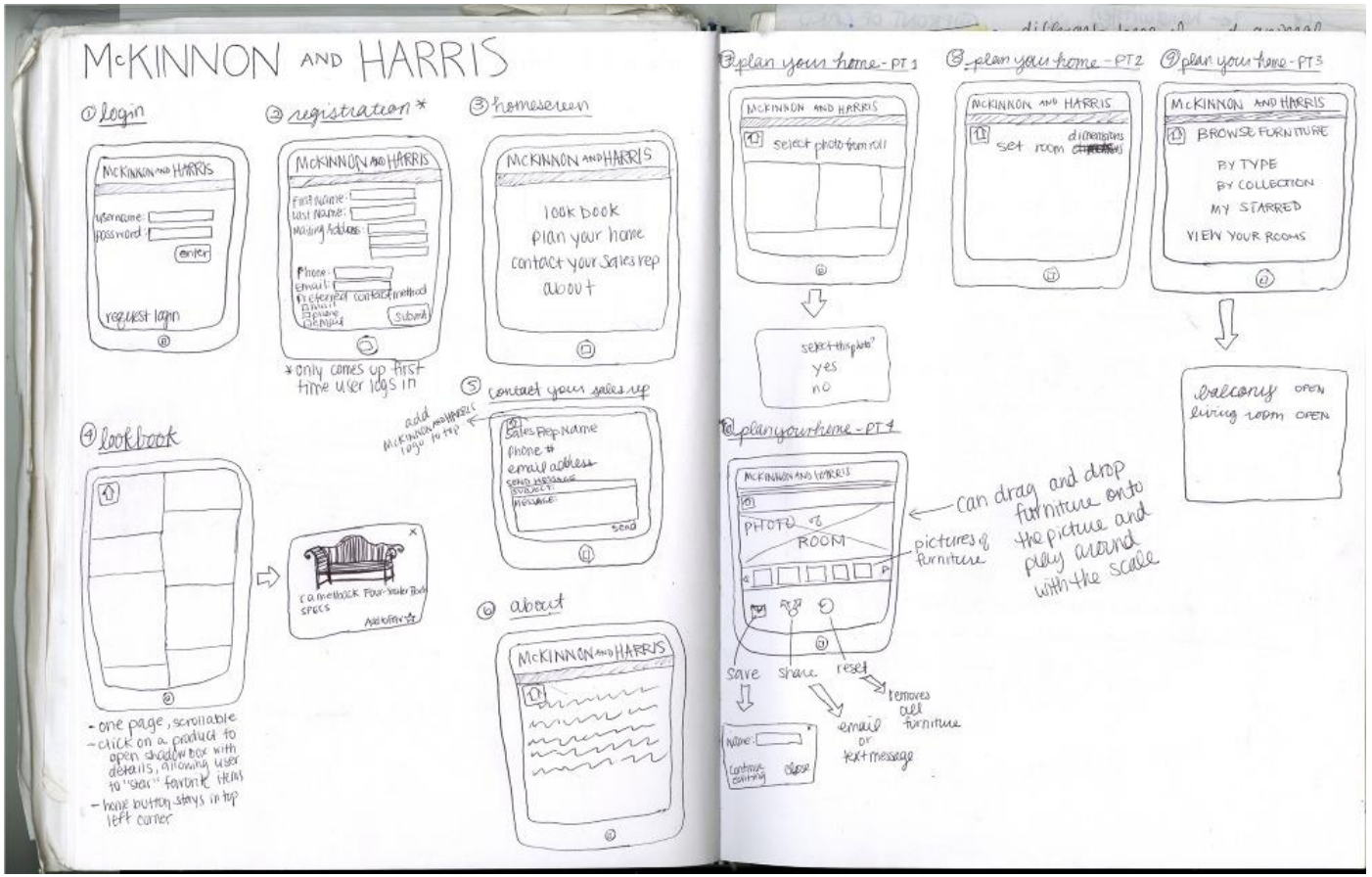
Tips on sketch prototyping

Tip #4: “Fake” interaction flow

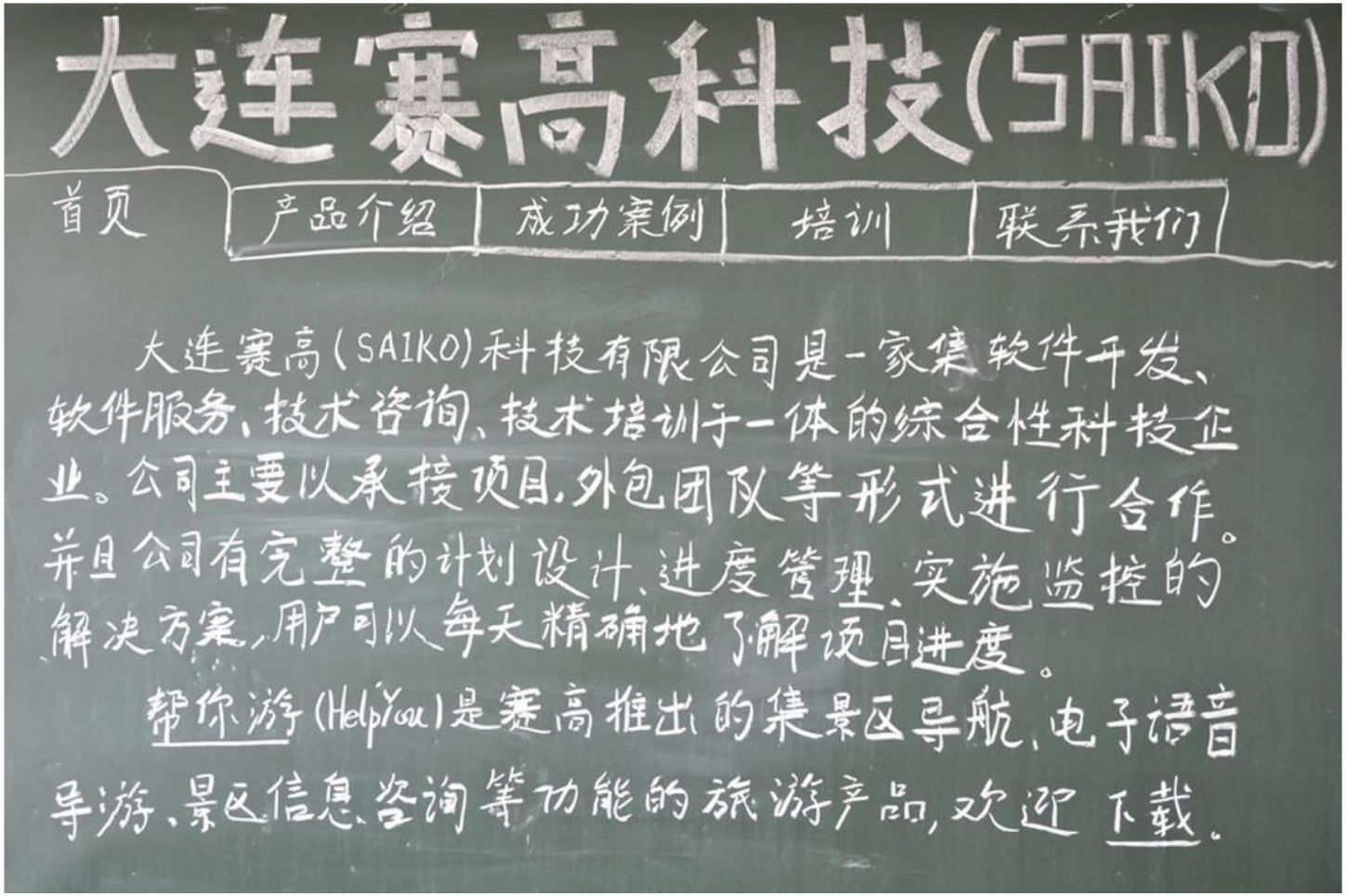


But…can sketch be really interactive?

- You need to write down the flow or explain to users during the evaluation..



And…you can make something like this…



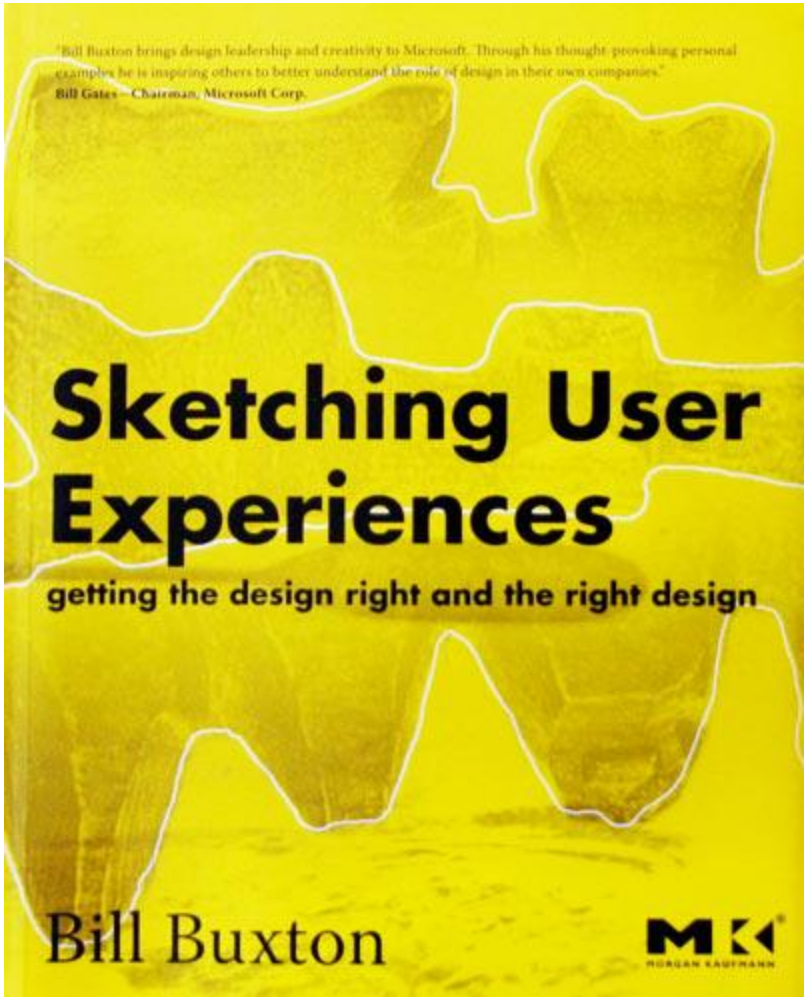
- We will talk about this method in details next week.

So **sketch** first!

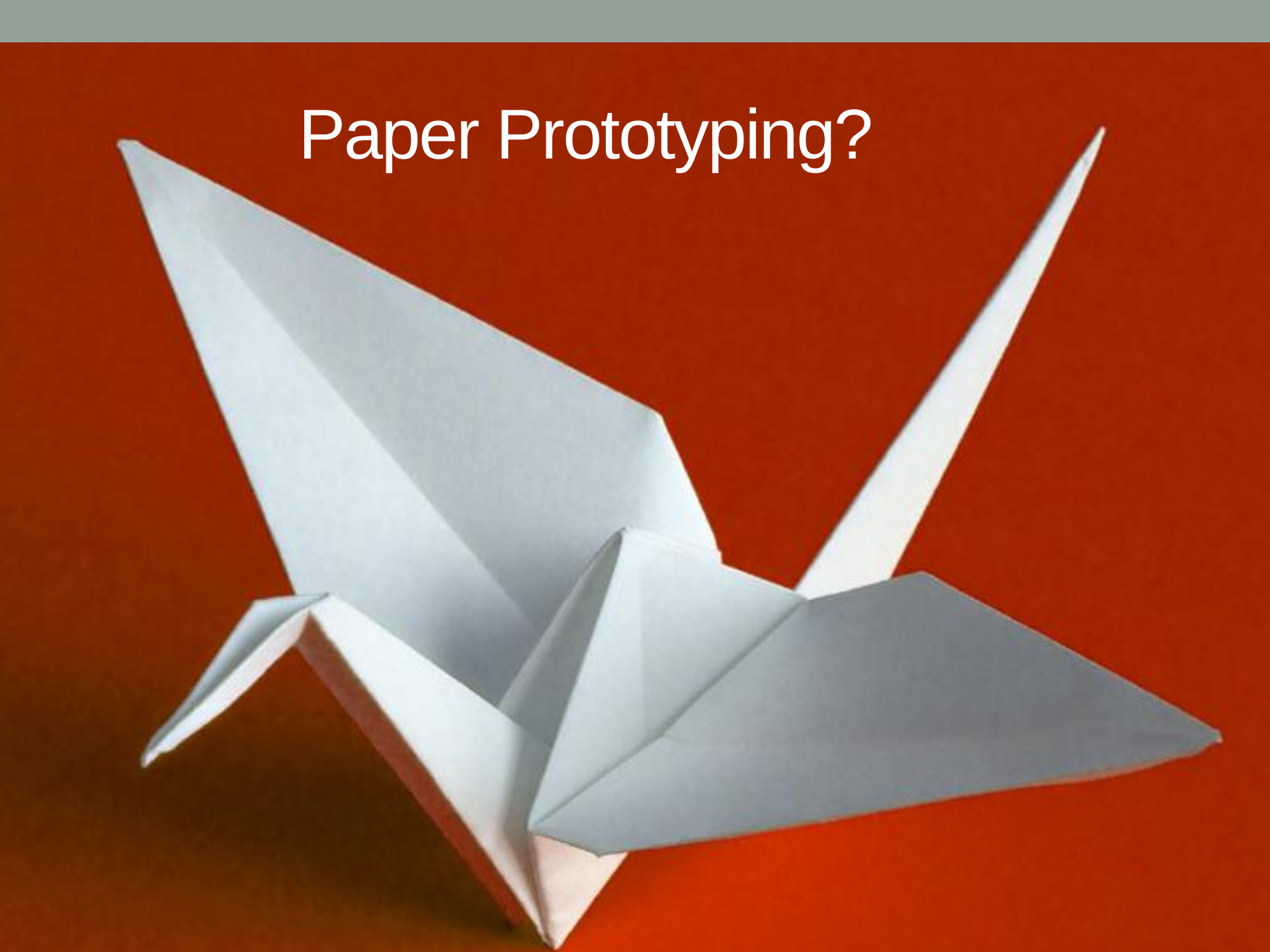
- Pick up a pen and a piece of paper
- Sketch your design of the final project. (UI Layout, Text Labeling, Interaction Flow)
- Tell a person who don’t know about the design (people from other groups)
- See whether he/she can get the idea/concept and any feedback from him/her
- Come back and improve the sketch, and ask again

Recommended Book

- “Sketching User Experience”
- By Bill Buxton



Paper Prototyping?

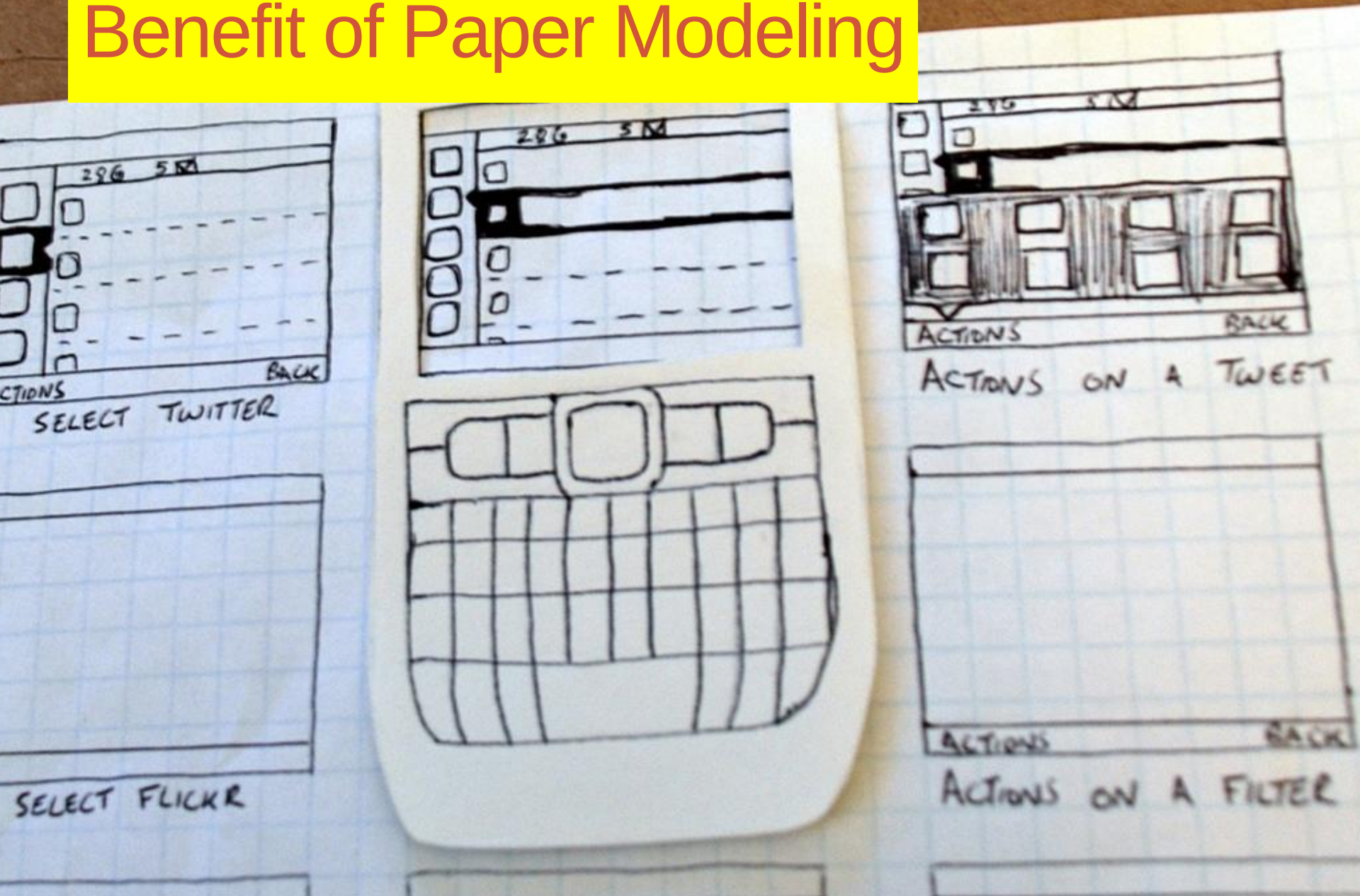


What is paper prototyping?

- Paper prototyping is a key component of the DESIGN process and is a popular method among designers.

It is essentially the **paper craft/model** of your design of pervasive media

Benefit of Paper Modeling



Low Cost (Paper is cheap!)

Collaborative
(Anyone can make paper-craft!)

Fast iterations (Creating paper craft is fast!)

Only a few more tools than sketching: scissors, glue, more paper, etc.

What paper prototype can't do…

- They said

  - *"Paper prototypes are less suitable for refining Low-level interactions, such as transitions, scrolling, and swiping."*

  - *"Less useful for certain classes of apps, such as musical instruments, videos, and games."*

Is that true?

Paper prototype can be interactive…

http://www.youtube.com/watch?v=GrV2SZuRPv0

Paper model can be automated…

This is my work :D

http://www.youtube.com/watch?v=M61TJksEJwg

Paper prototype can be tested…

http://www.youtube.com/watch?v=9wQkLthhHKA

Basically a good paper prototype can present a lot to information to user!

- Design concepts
- UI components
- Functions
- Work flow
- Terminology
- etc..

How to do paper prototyping?

Step 1: Gather Materials

- Paper, Pen, Cardboard, Tape, Glue, and Scissors, etc.

Some nice tools for paper prototyping

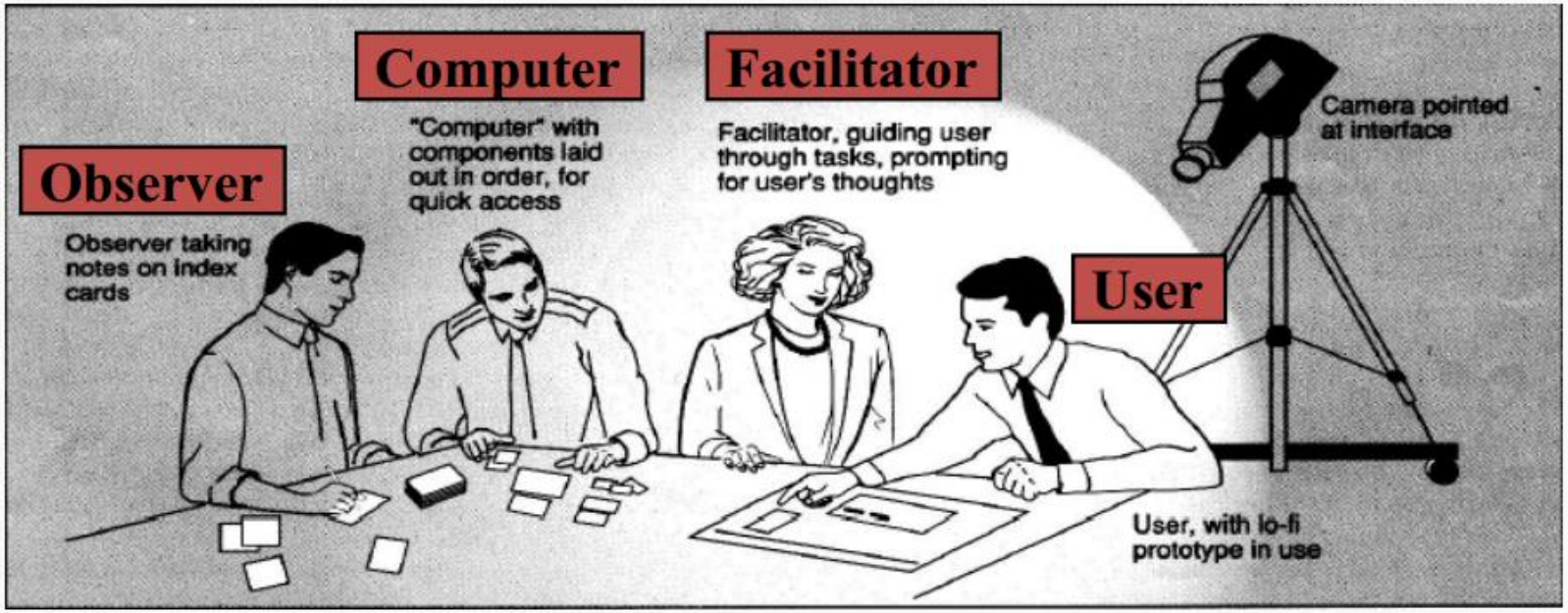
Step 2: Determine the form factor

- At some point your designs will have to match the PHONE screen dimensions—320× 480 pixels (640 × 960 for iPhone 4) —but paper prototypes can be less exact. Using a larger form factor will make it easier for others to interact with the design (e.g., rearrange the layout and write in text Fields)

Step 3: Make the paper craft~

- Your prototype will include a background, the screens, and the user interface controls.

How do you evaluate these lo-fi prototypes?



- Details will be discussed on week 11
  - Do users Understand your app's central concept?
  - Is the overall navigation clear? Are there too many steps to complete tasks?
  - Does the current organization match user's expectations?
  - Are the labels on tabs, screens, and buttons clear?

Exercise and After-class Task

- Start making your sketch and paper prototype
- You are **required** to create sketches and an interactive paper prototype of your final project.