

Maya Cakmak, Matt Kay, Brad Jacobson, King Xia

Slide credit: James Fogarty, Scott Klemmer

PROTOTYPING
SKETCHING
STORYBOARDING



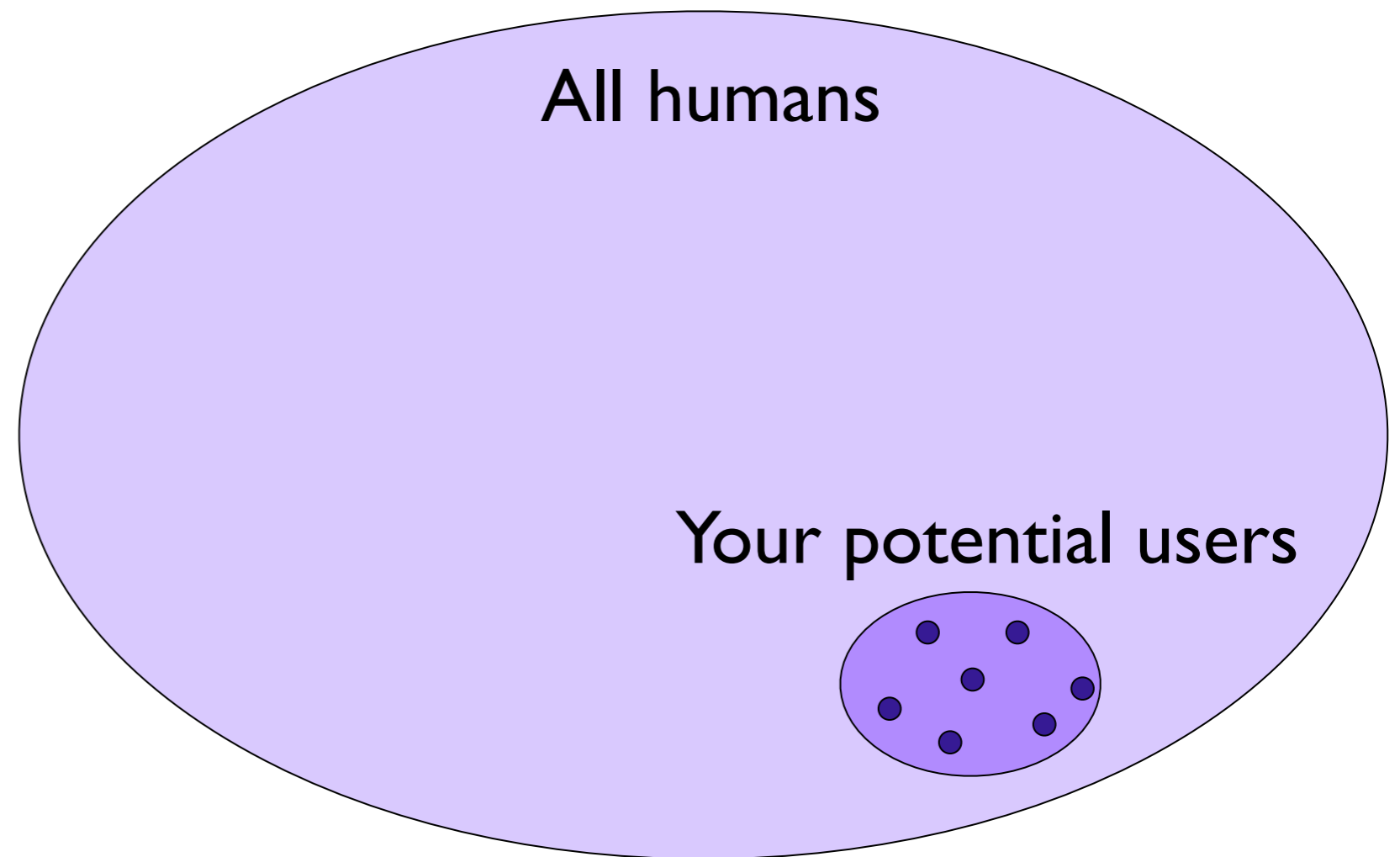
University of
Washington

human-computer interaction
CSE 440 WINTER 2015

JAN 22 - WEEK 3 - THURSDAY

Users

- User groups
 - Typical/Extreme users
- Participants
- Personas



Task analysis questions

1. **Who** is going to use the system?
2. What are the **currently possible tasks**?
3. What are currently unavailable **desired tasks**?
4. How are tasks **learned**?
5. **Where** are the tasks performed?
6. What is the relationship b/w **user and data**? Types of data?
7. What **other tools** does the user have?
8. How do users **communicate** with each other?
9. **How often** are the tasks performed?
10. What are **time constraints** on the tasks?
11. What happens **when things go wrong**?

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Problem

~~Task~~ analysis questions

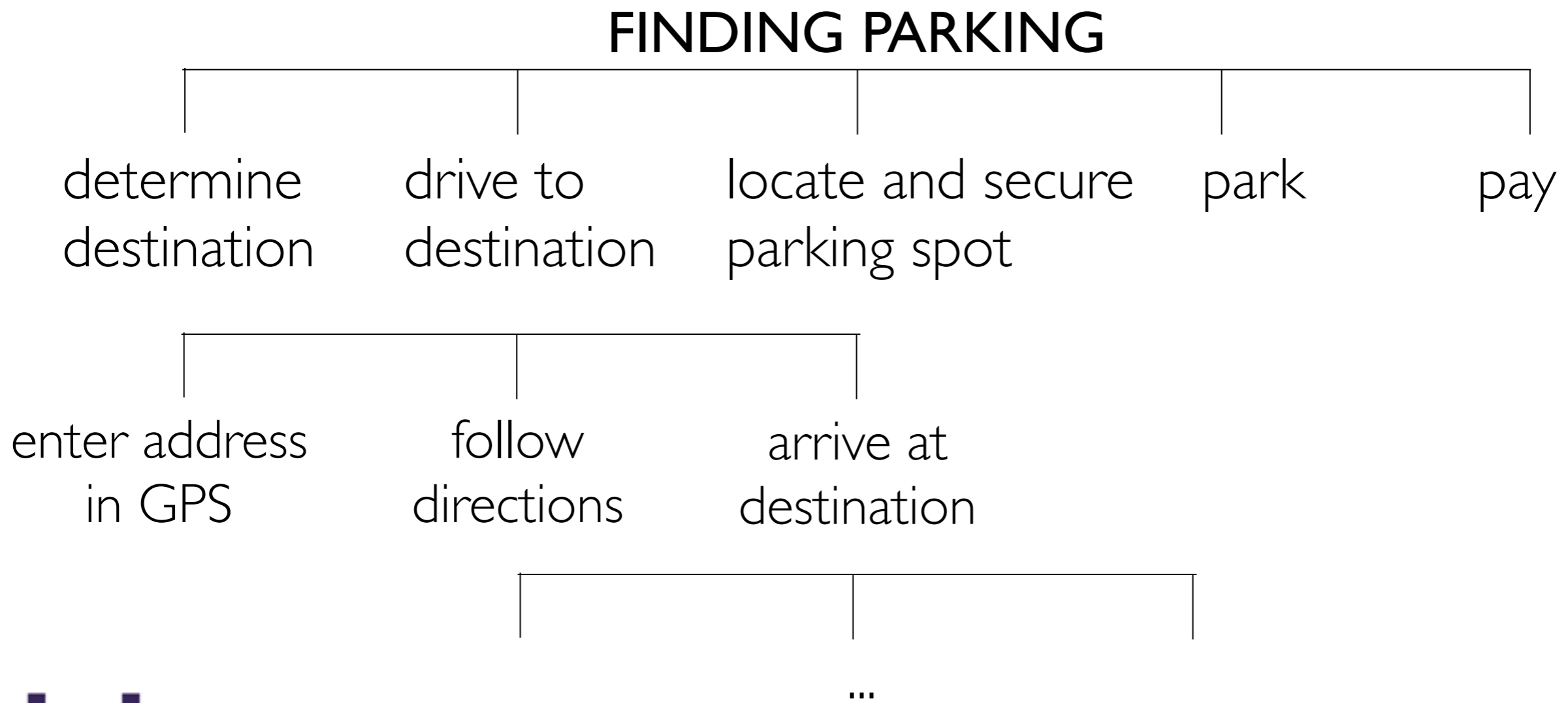
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Example

- Problem: Taking care of a plant
- Tasks:
 - Finding plant care needs: sunlight, watering frequency
 - Watering the plant
 - Fertilizing the plant
 - Saving the plant when it is ill
 - Noticing and remembering to care for a plant

Hierarchical task analysis (HTA)

- Steps of the task execution (detailed in a hierarchy)



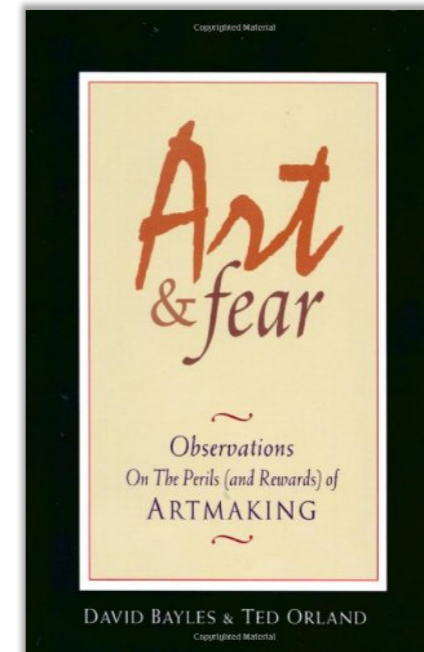
Assignment 2d



Today

- Prototyping
 - Sketching
 - Storyboarding

Prototyping in design

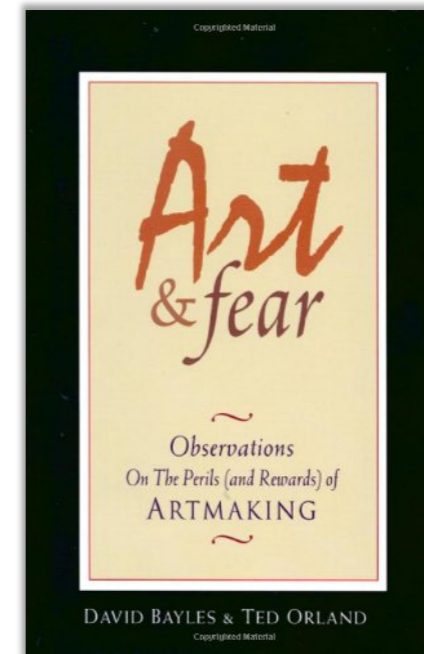


Prototyping in design

Class-A: Graded on quantity



Class-B: Graded on quality



Which produces best quality?

Prototype fidelity

Fidelity



Storyboarding

Time

Prototype fidelity

Fidelity



Paper prototypes
Storyboarding

Time

Prototype fidelity

Fidelity



Digital mockups

Paper prototypes

Storyboarding

Time

Prototype fidelity

Fidelity



...

Digital mockups

Paper prototypes

Storyboarding

Time

Prototype fidelity

Fidelity



Static html

...

Digital mockups

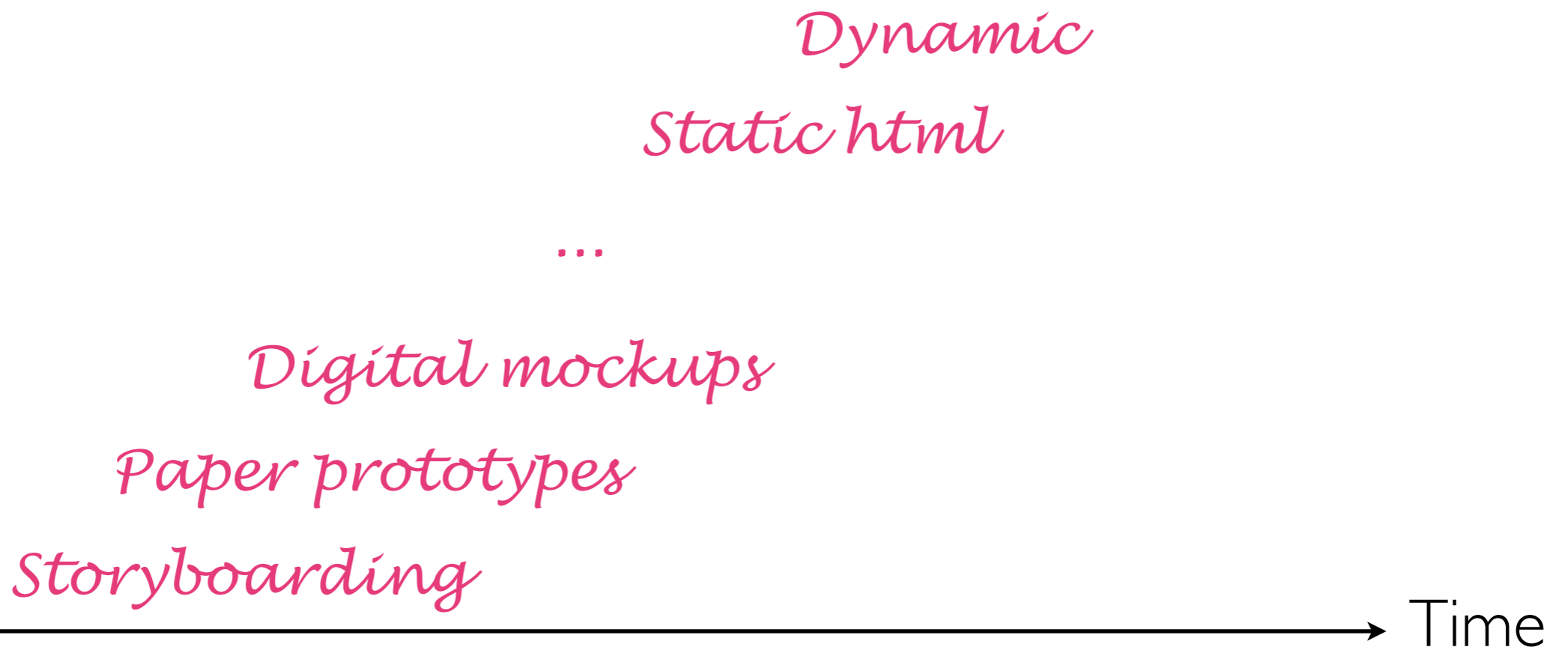
Paper prototypes

Storyboarding

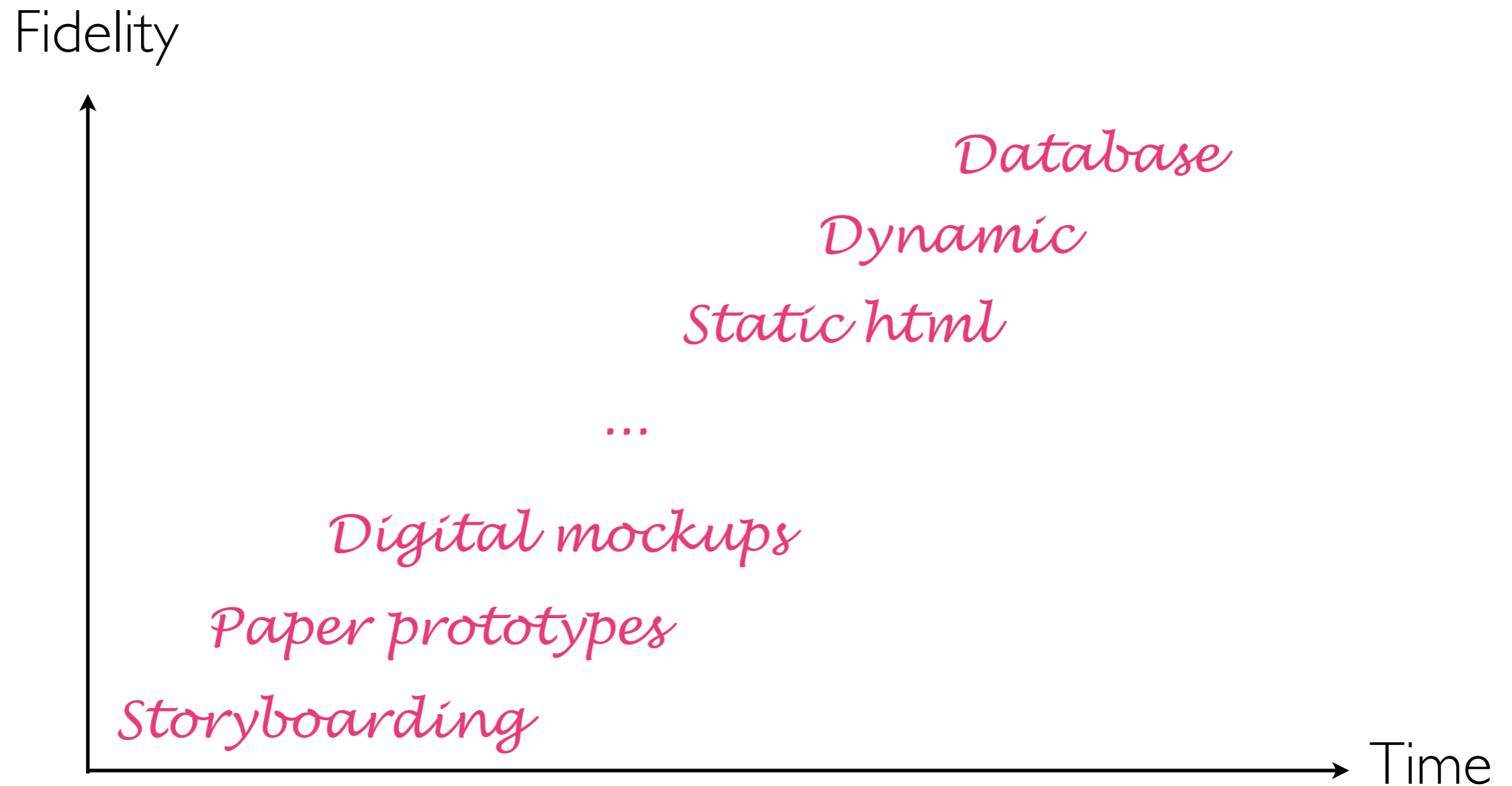
Time

Prototype fidelity

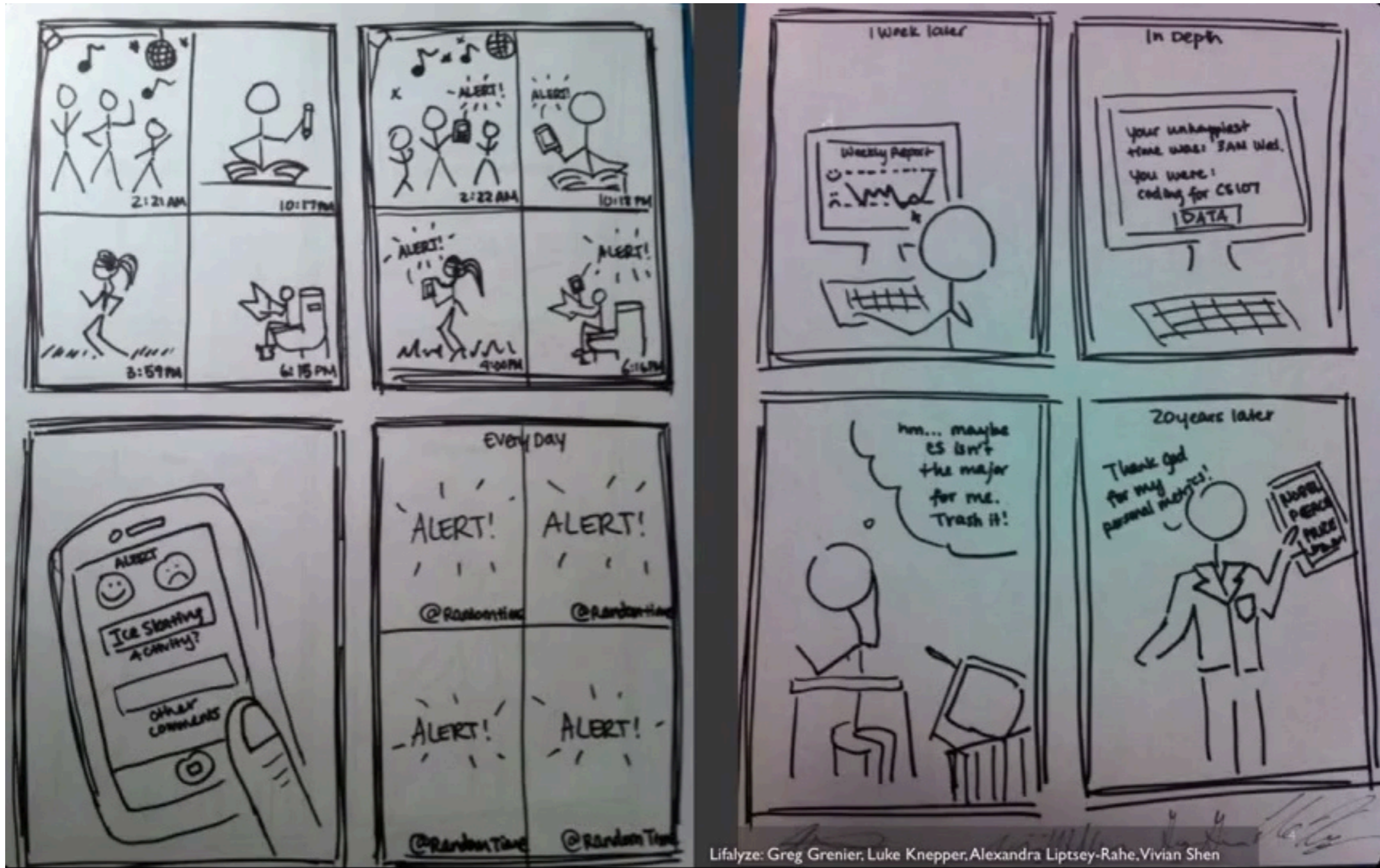
Fidelity



Prototype fidelity

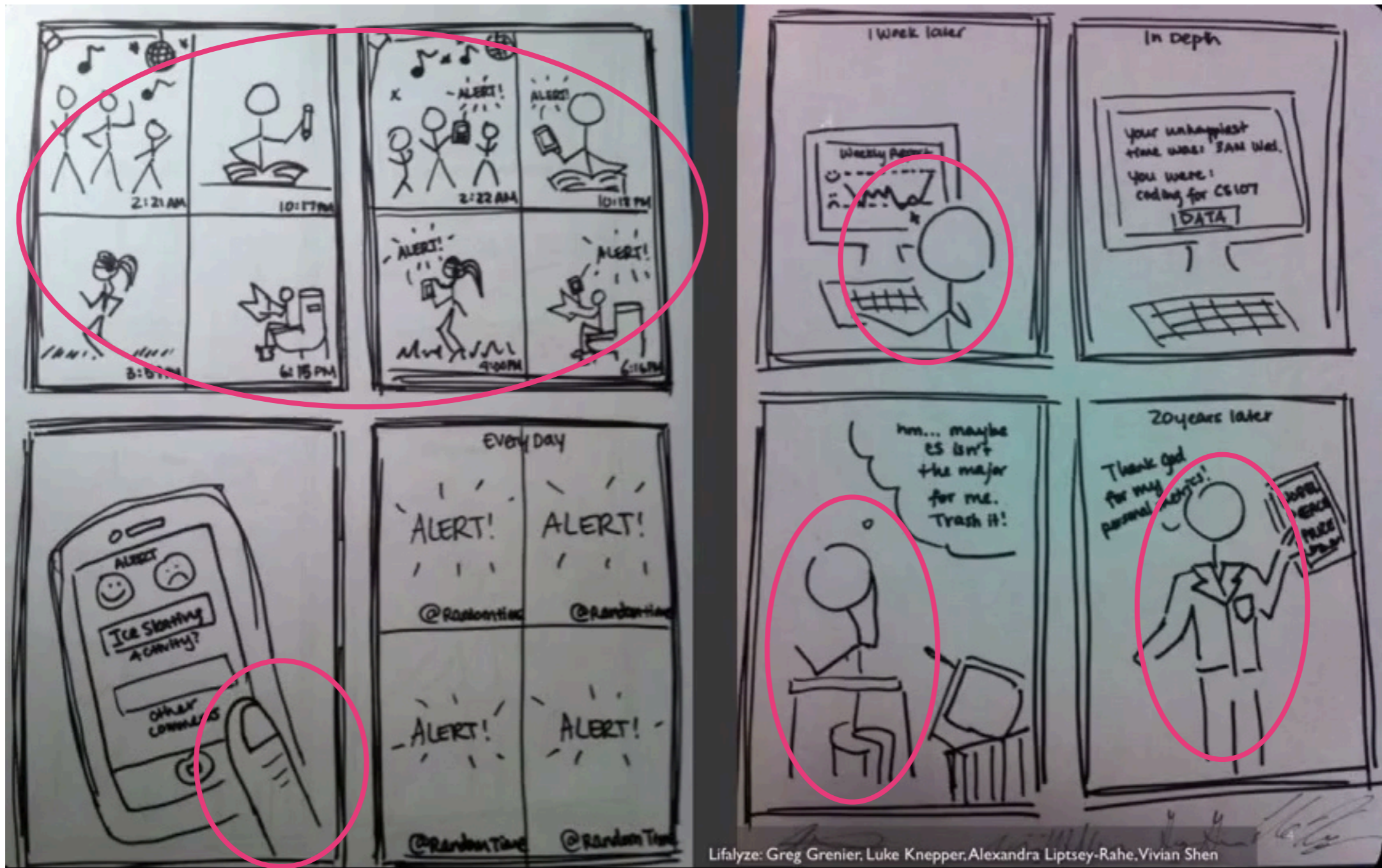


Storyboarding



Lifalyze: Greg Grenier, Luke Knepper, Alexandra Liptsey-Rahe, Vivian Shen

Storyboarding



good storyboards have the person

Storyboarding

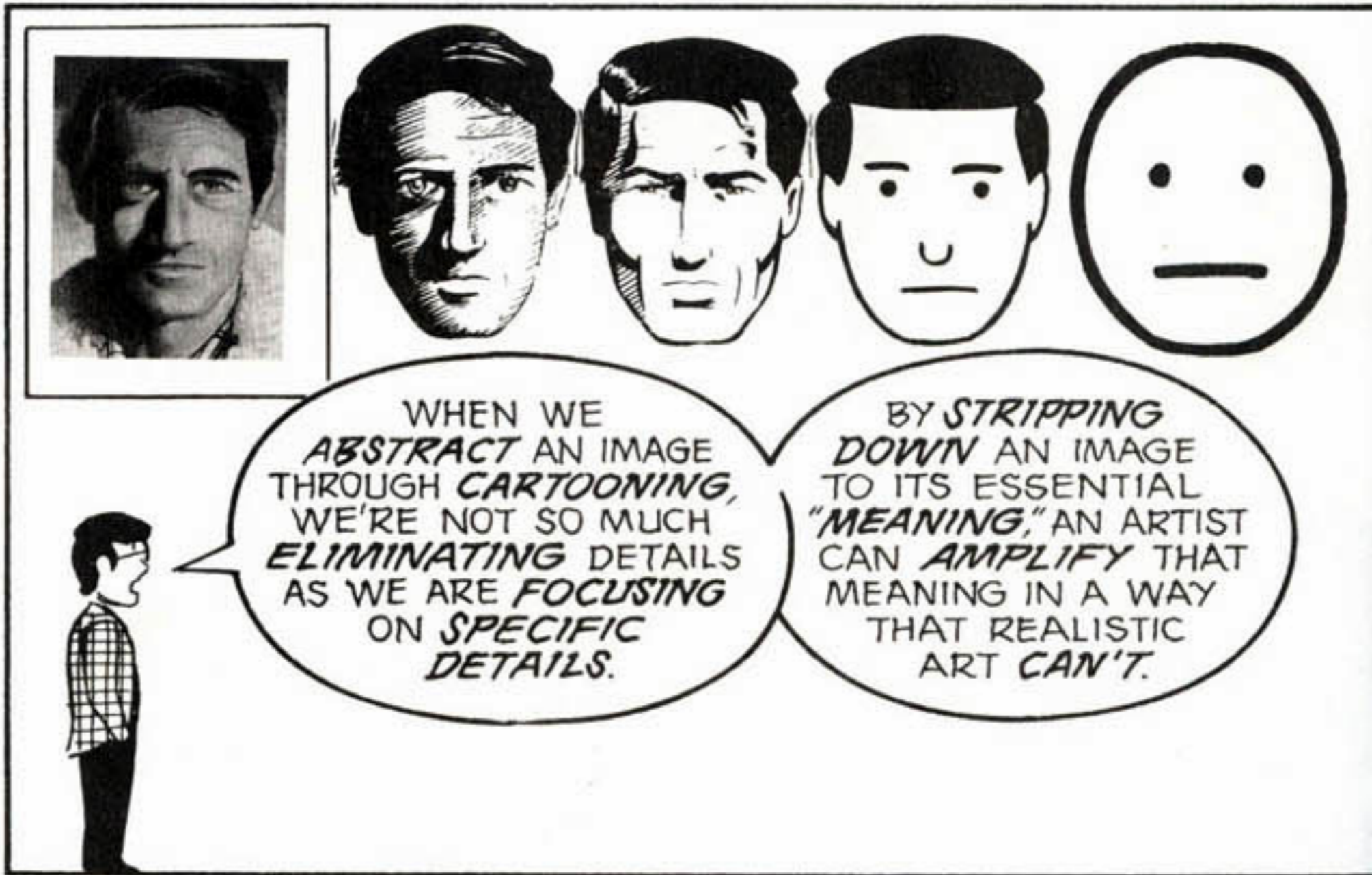
*It is not about pretty pictures,
it is about communicating ideas*

Storyboarding

*It is not about pretty pictures,
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Sketching



Sketching people



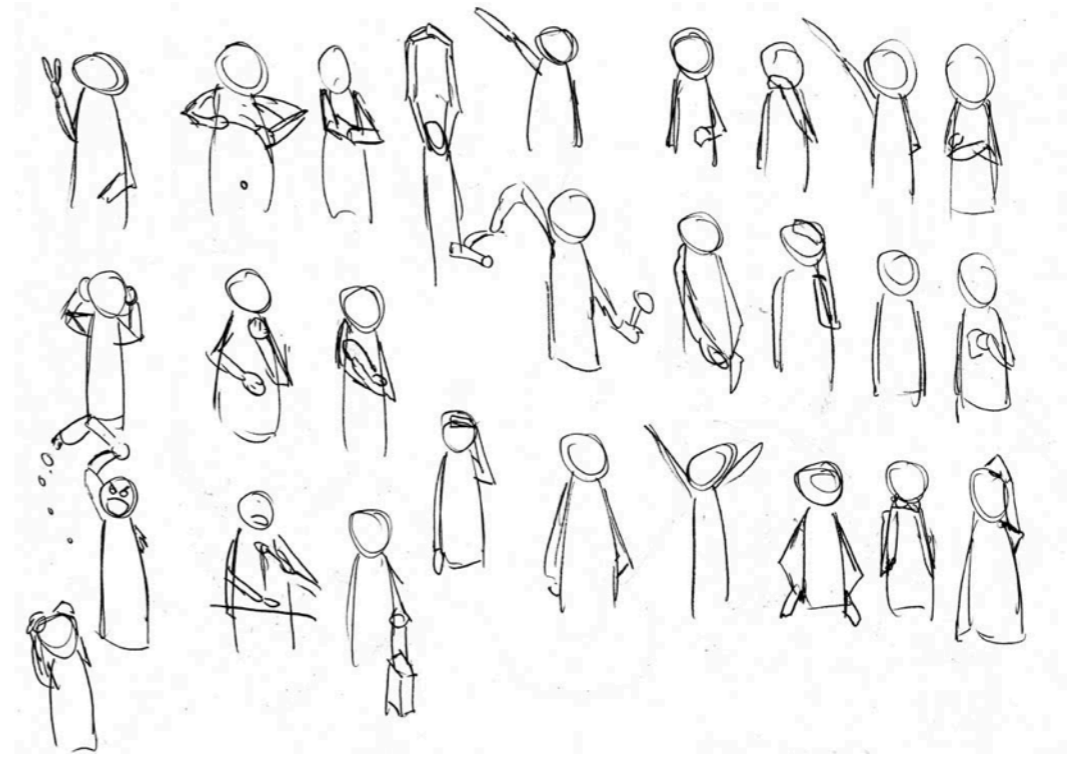
PERSON



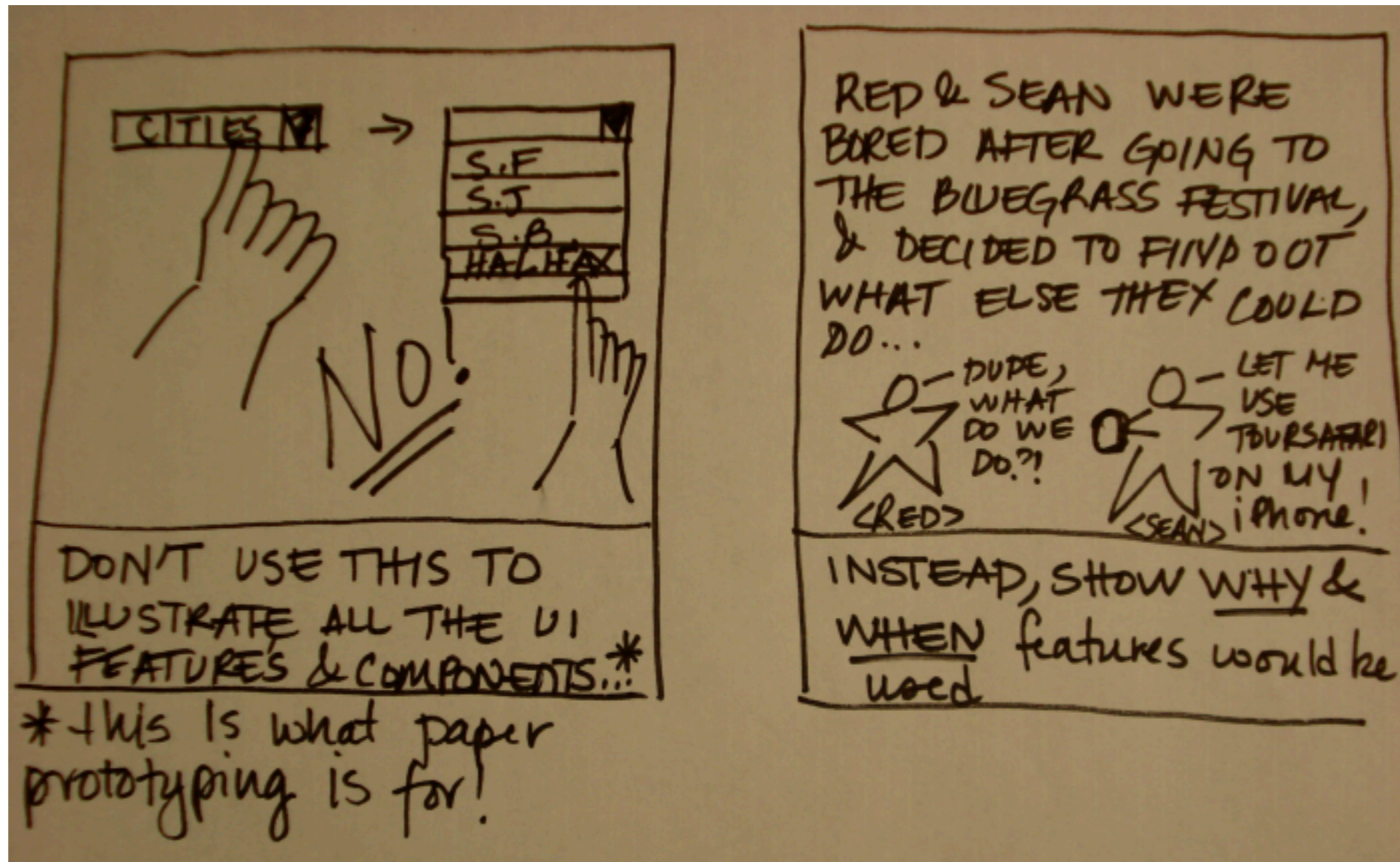
Star people by Bill Verplank



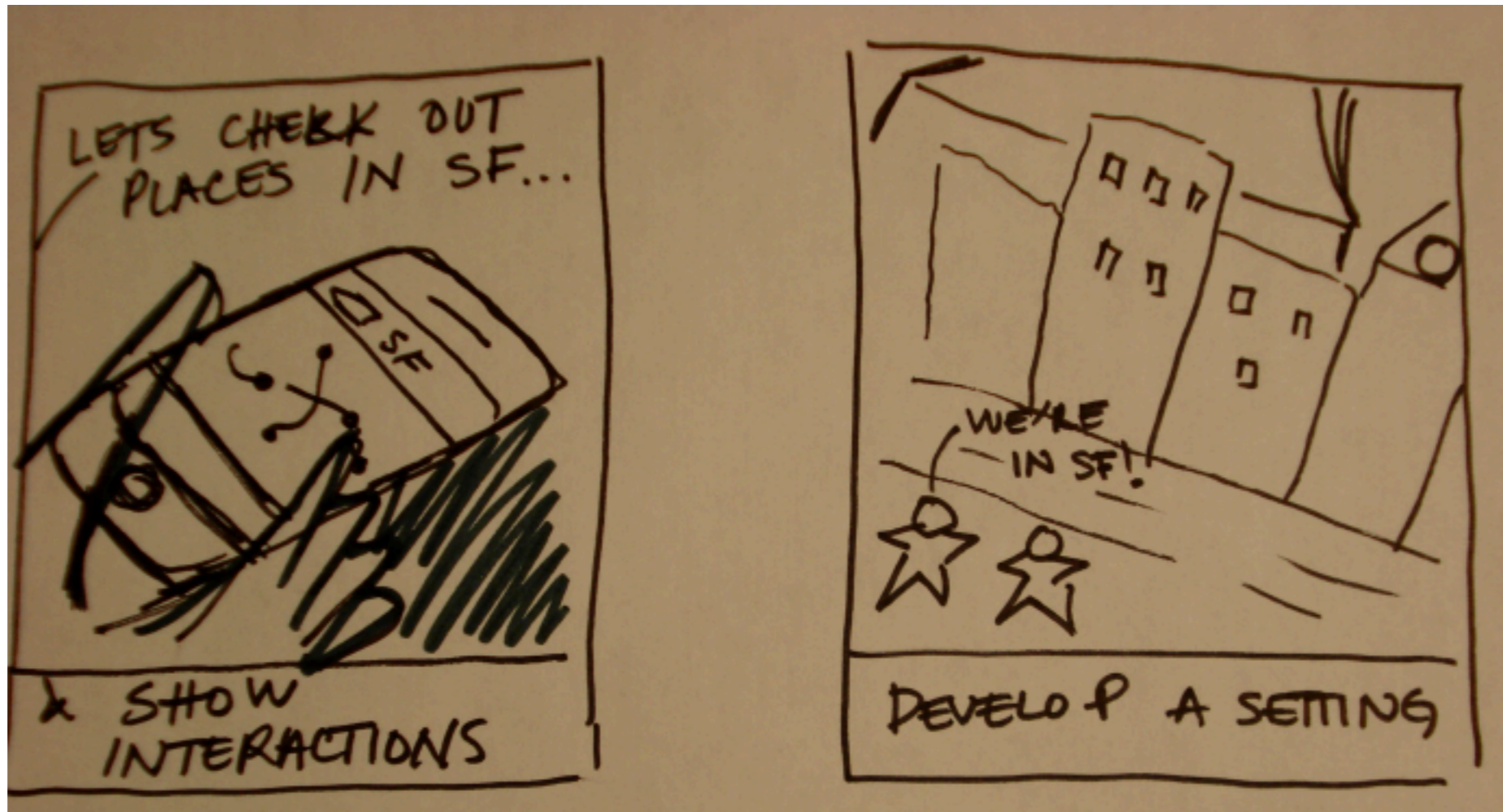
(c) 2009 SACHA CHUA



Storyboarding *from Amal's guide*

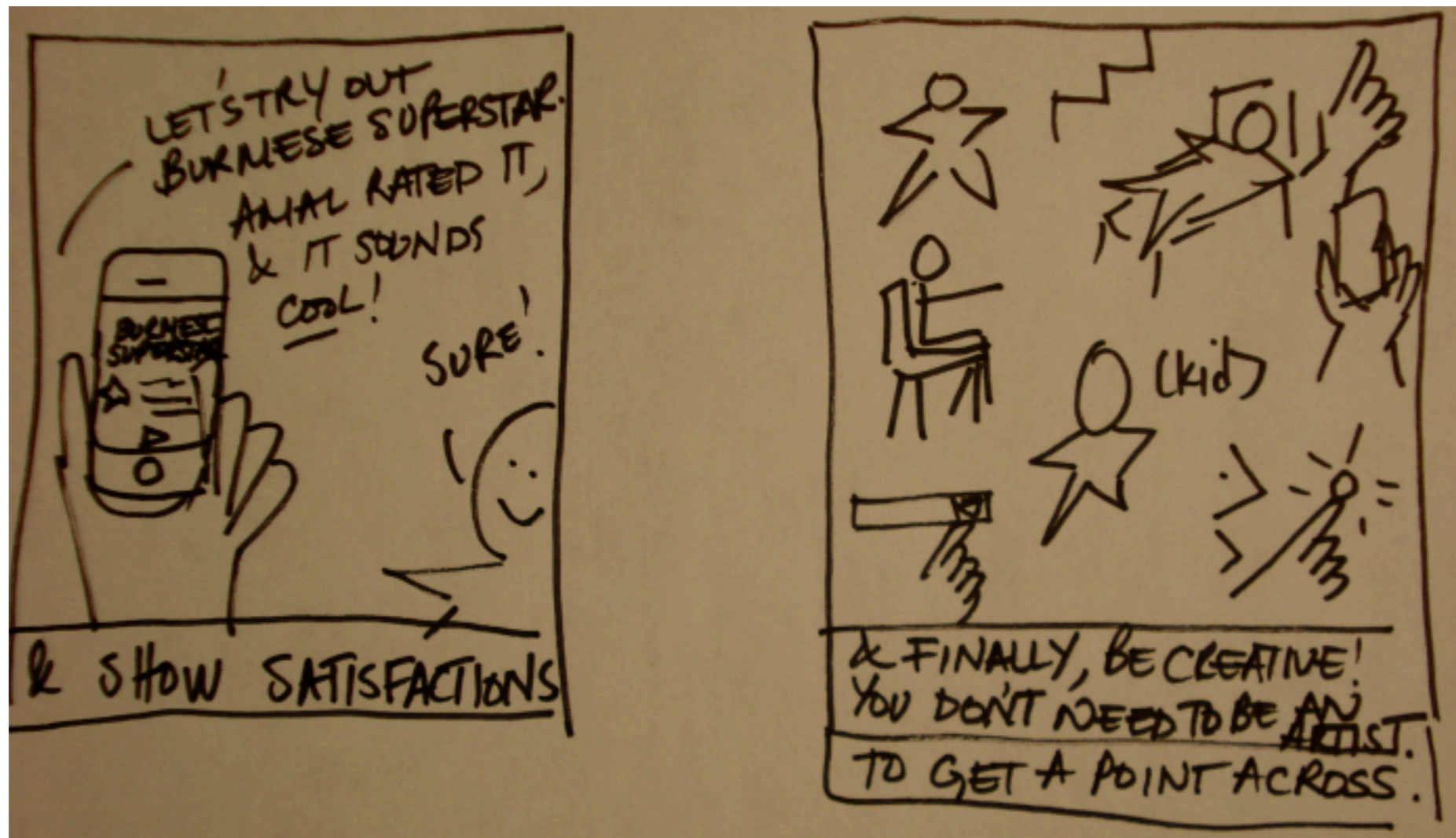


Storyboarding



illustrate the goal

Storyboarding



show accomplishment
of the goal

Storyboarding

- Setting
 - People involved?
 - Environment?
 - Task being accomplished?
- Sequence
 - What steps are involved?
 - What leads someone to use the app?
 - What task is being illustrated?
- Satisfaction
 - What's the motivation for the user?
 - What's the end result?
 - What need are you "satisfying"?

Benefits of Storyboarding

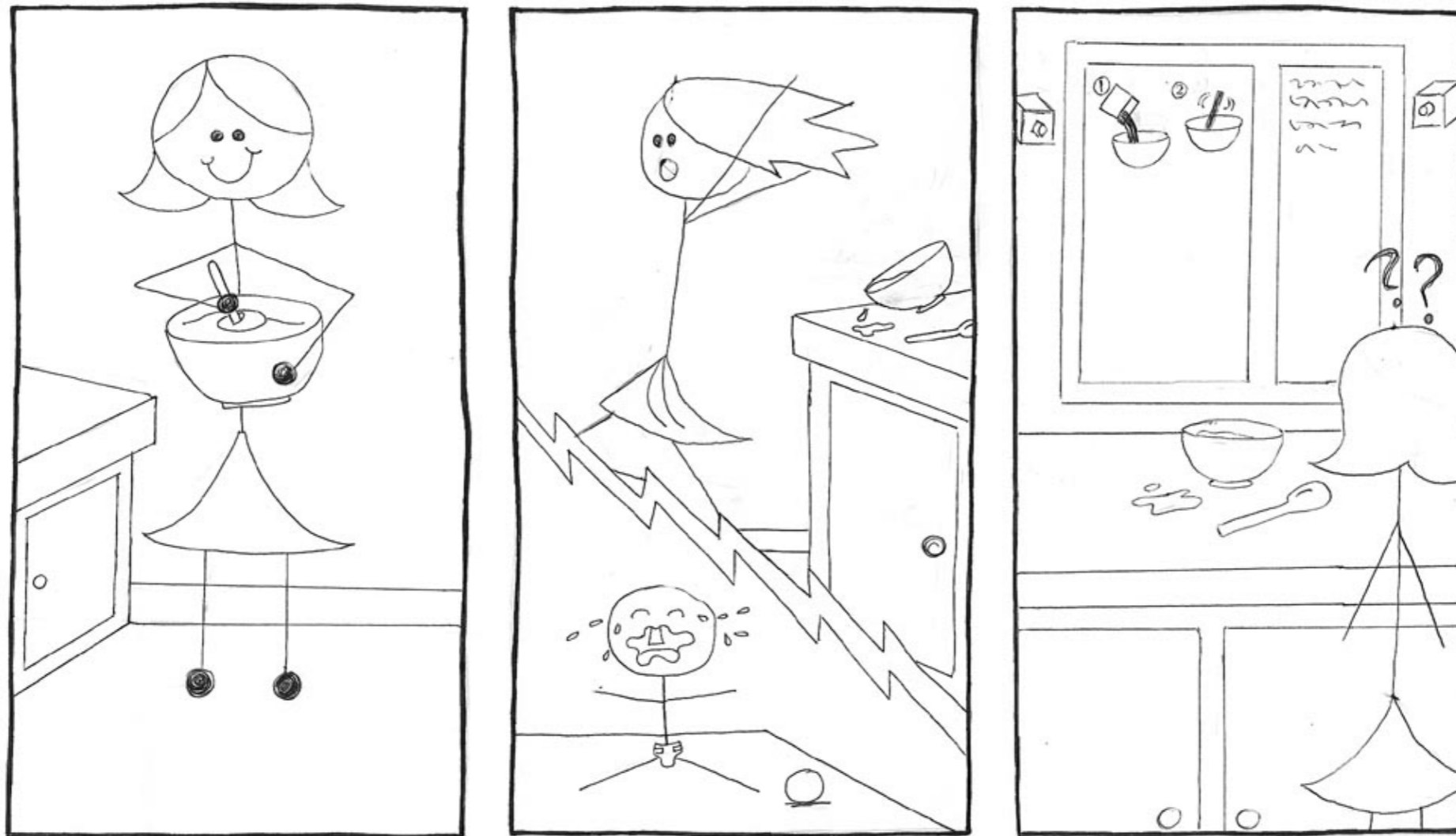
- Avoid commitment to a particular interface
- Get on the same page

Guidelines for Storyboarding

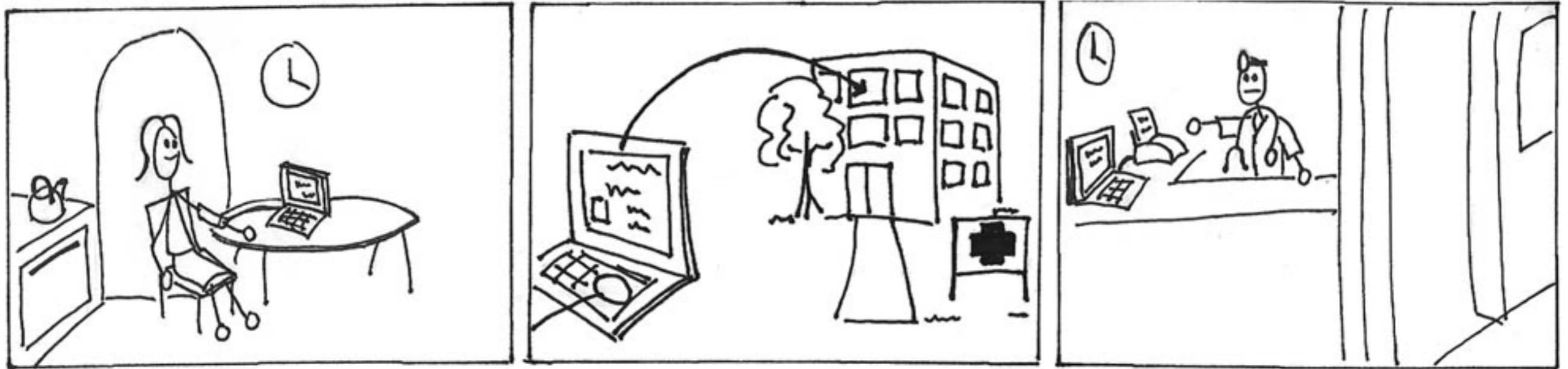
- Level of detail
- Inclusion of text
- Inclusion of people and emotions
- Number of frames
- Portrayal of time



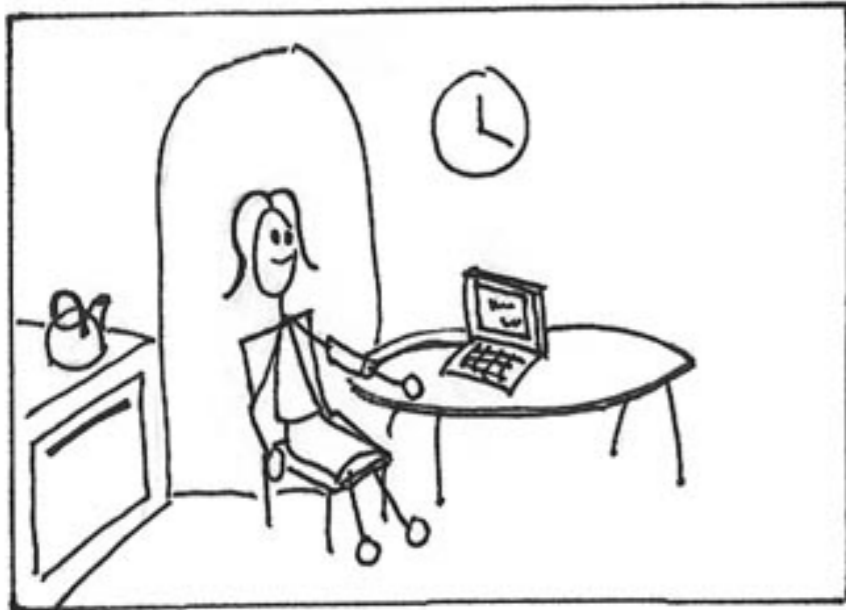
How much detail?



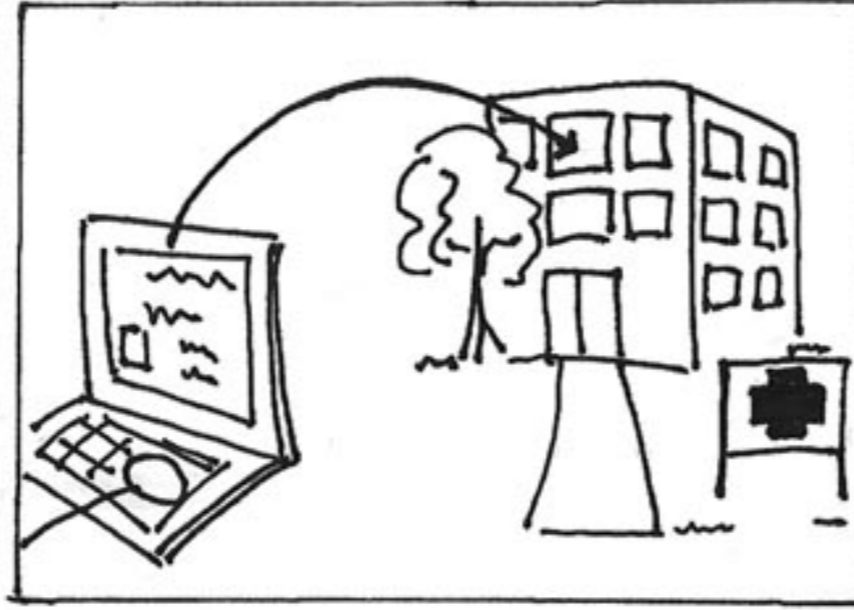
Use of text?



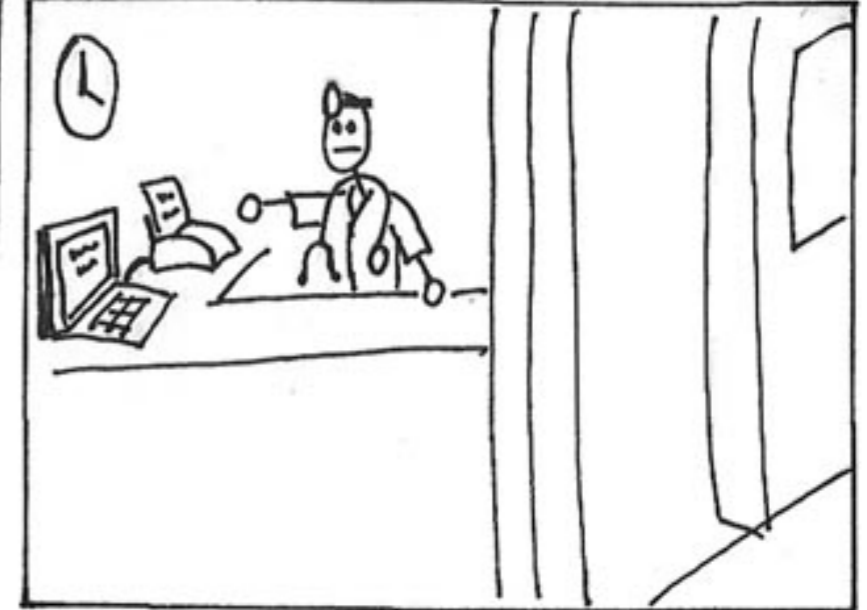
Use of text?



1. At home, Mary checks her blood pressure.

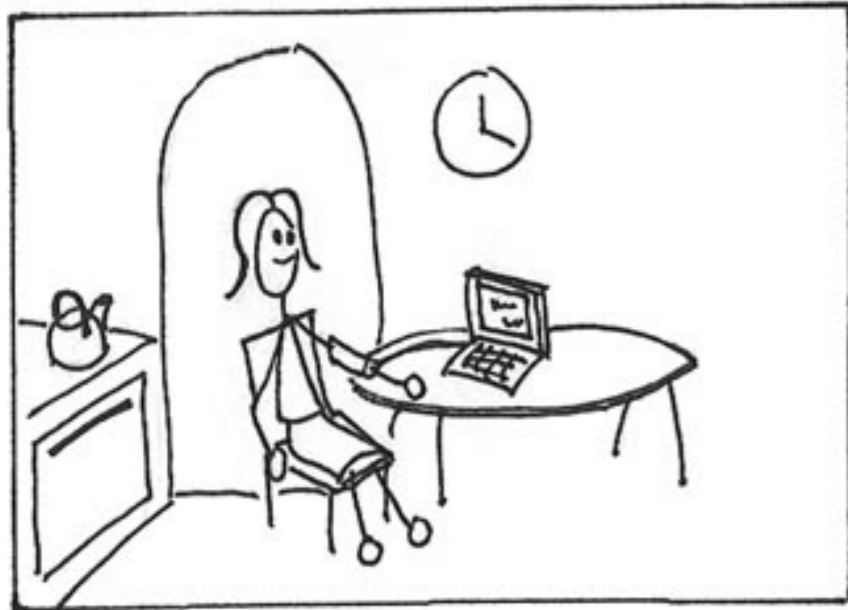


2. After a few simple key presses, her blood pressure readings get sent to a clinic.

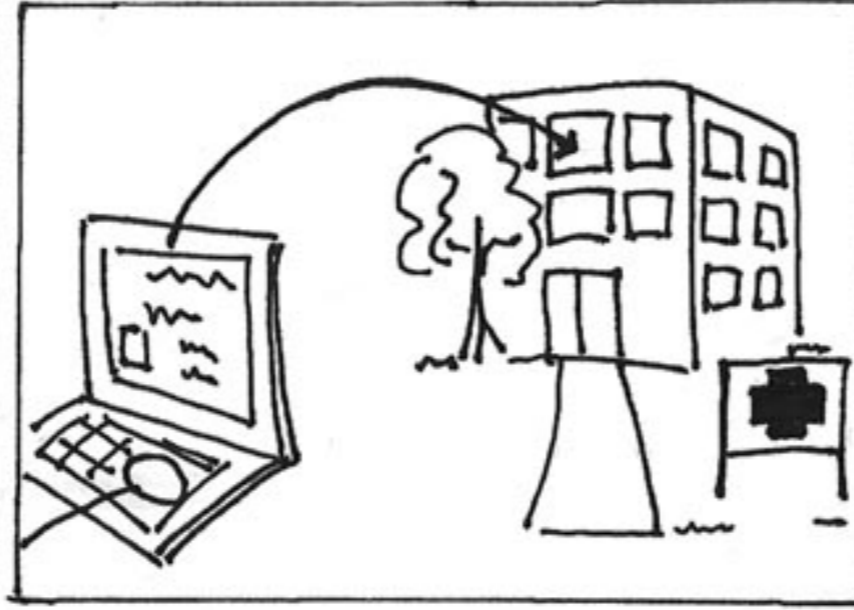


3. The information is made available to her doctor.

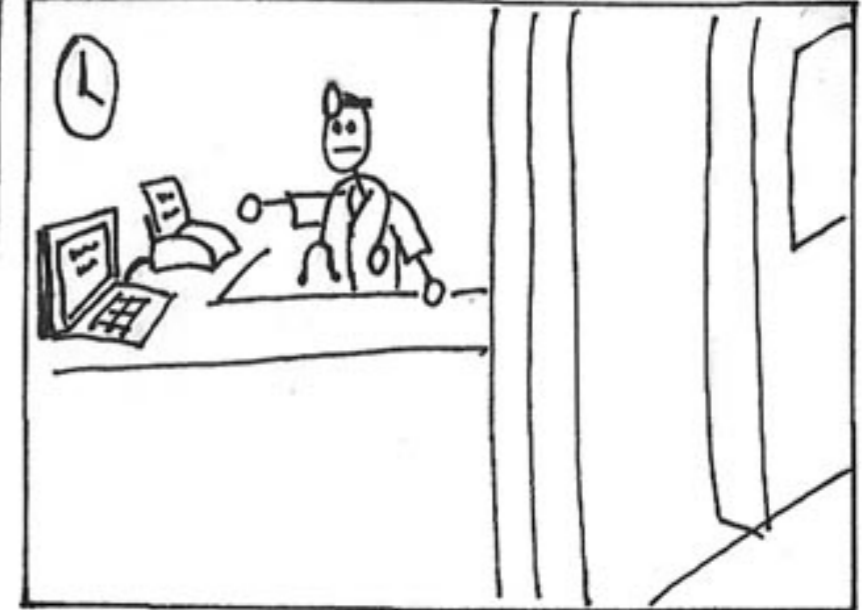
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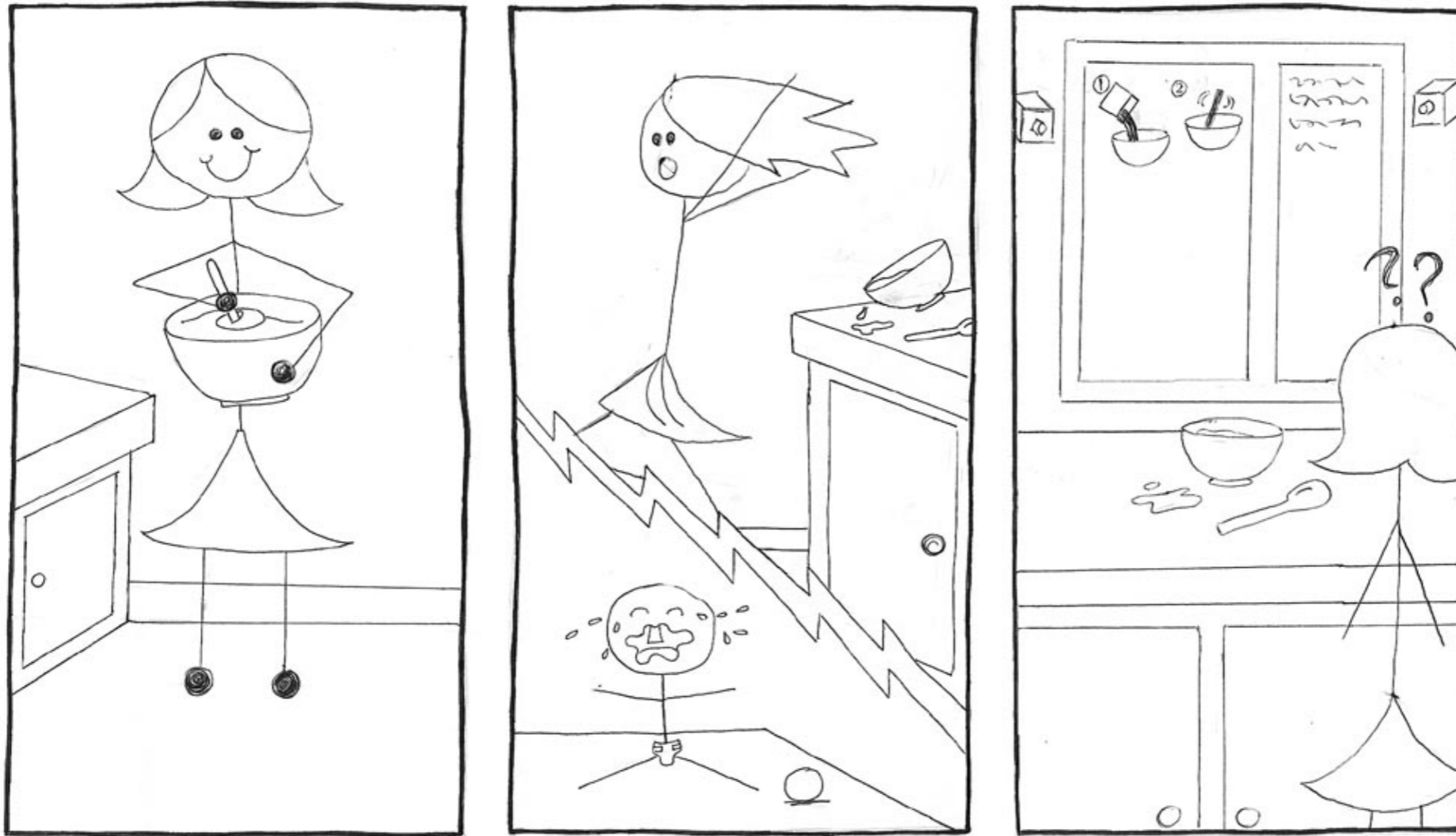
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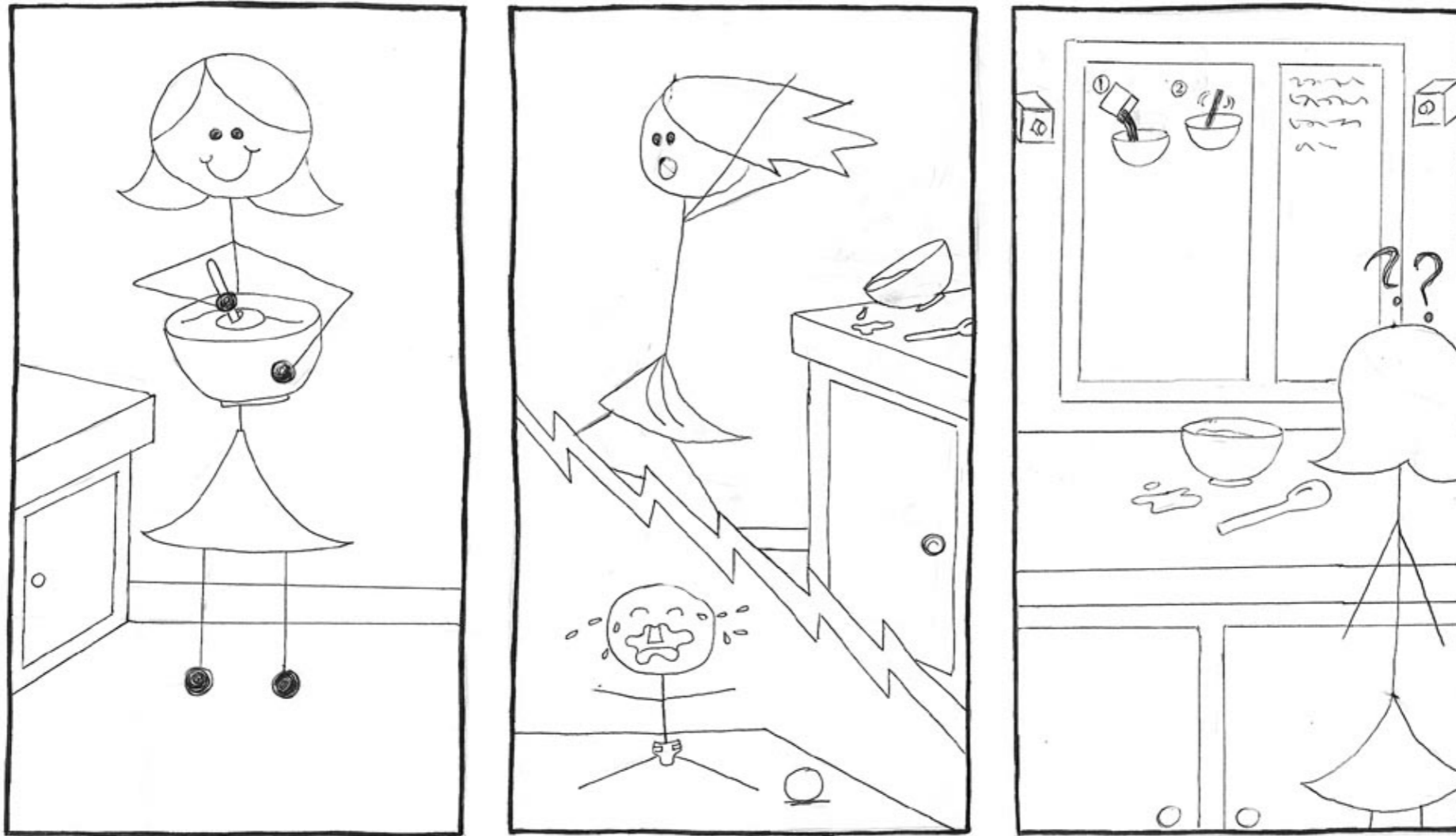
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often necessary but keep it short

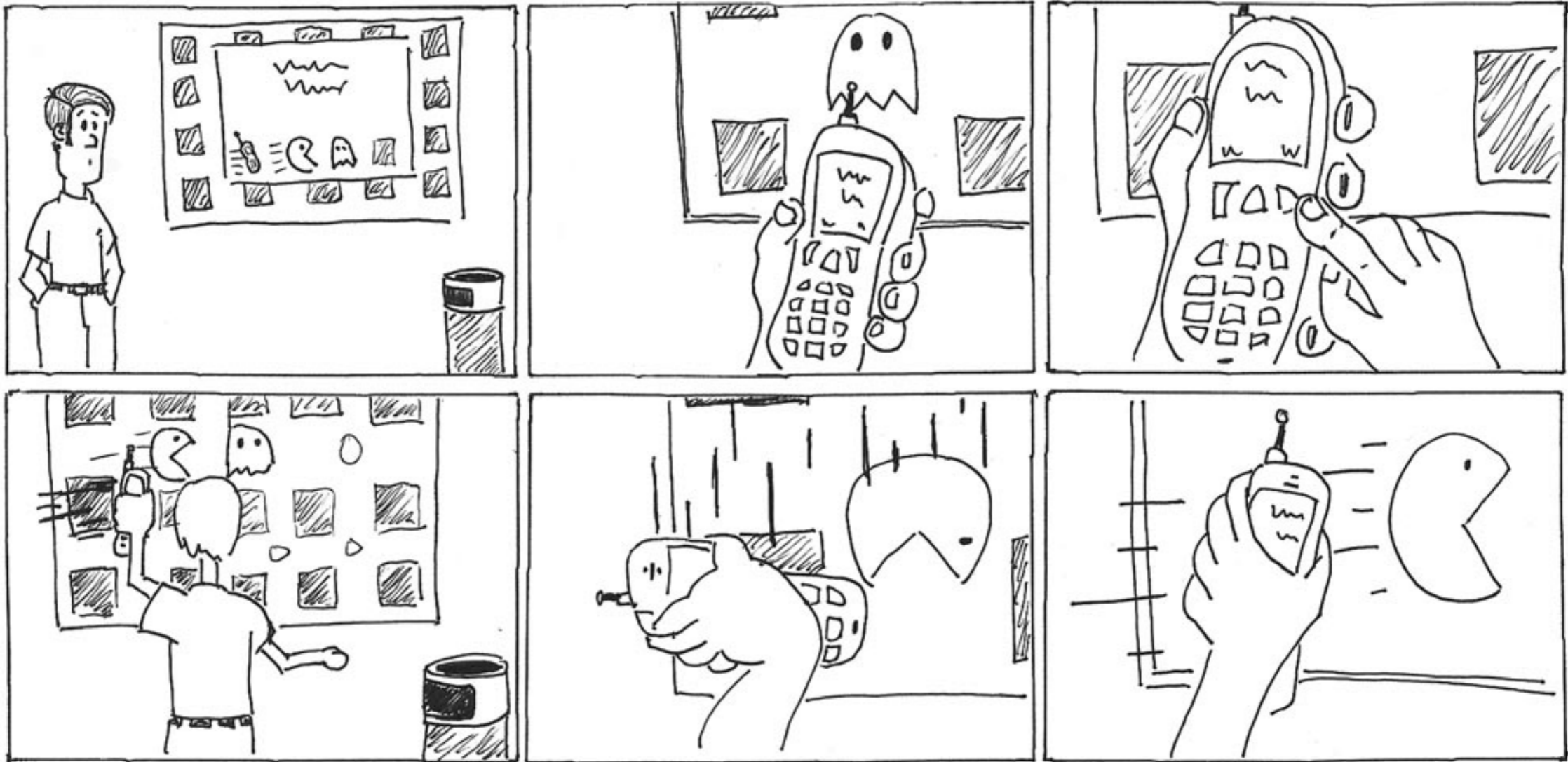
Include people and emotions? *totally!*



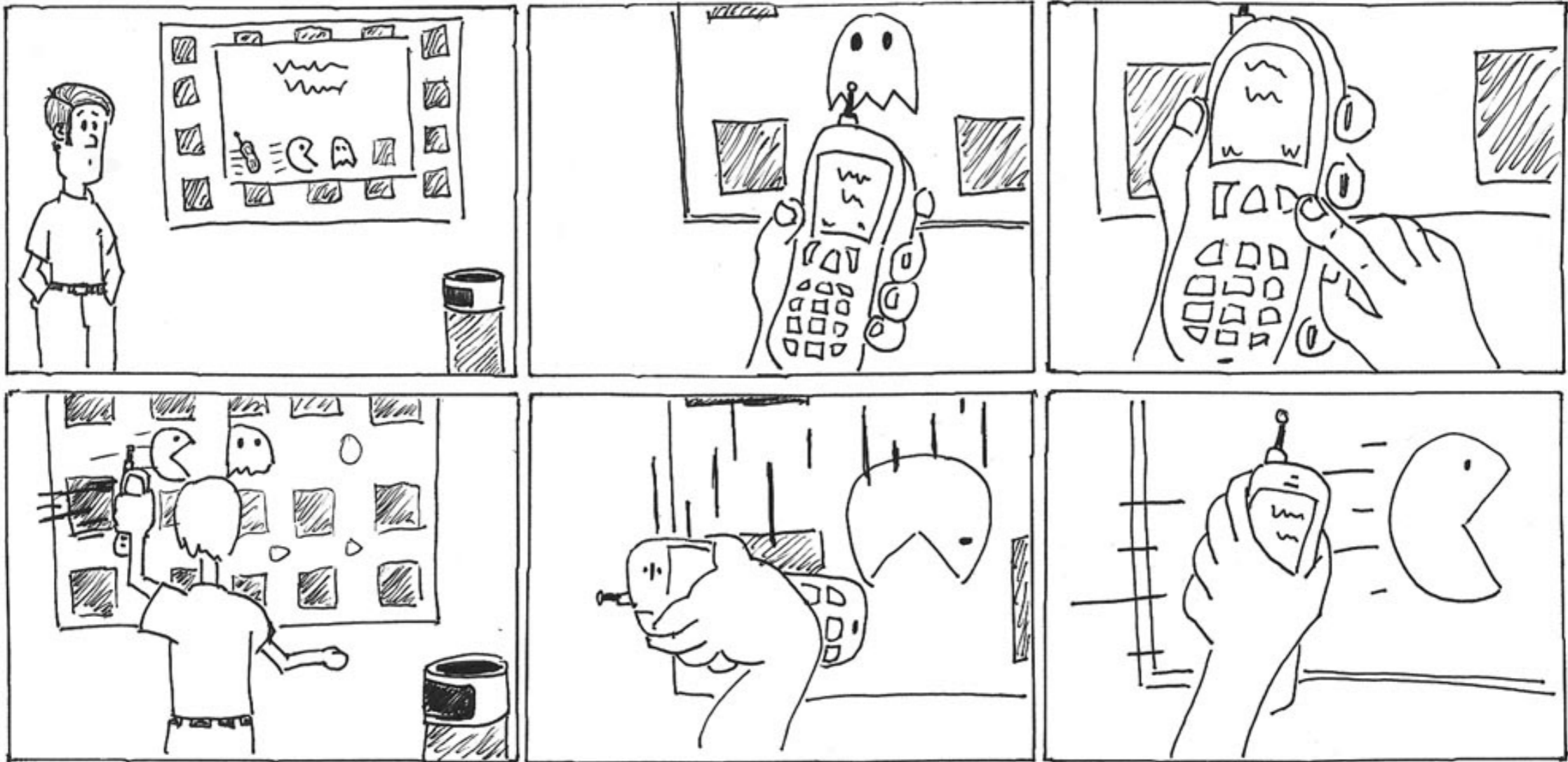
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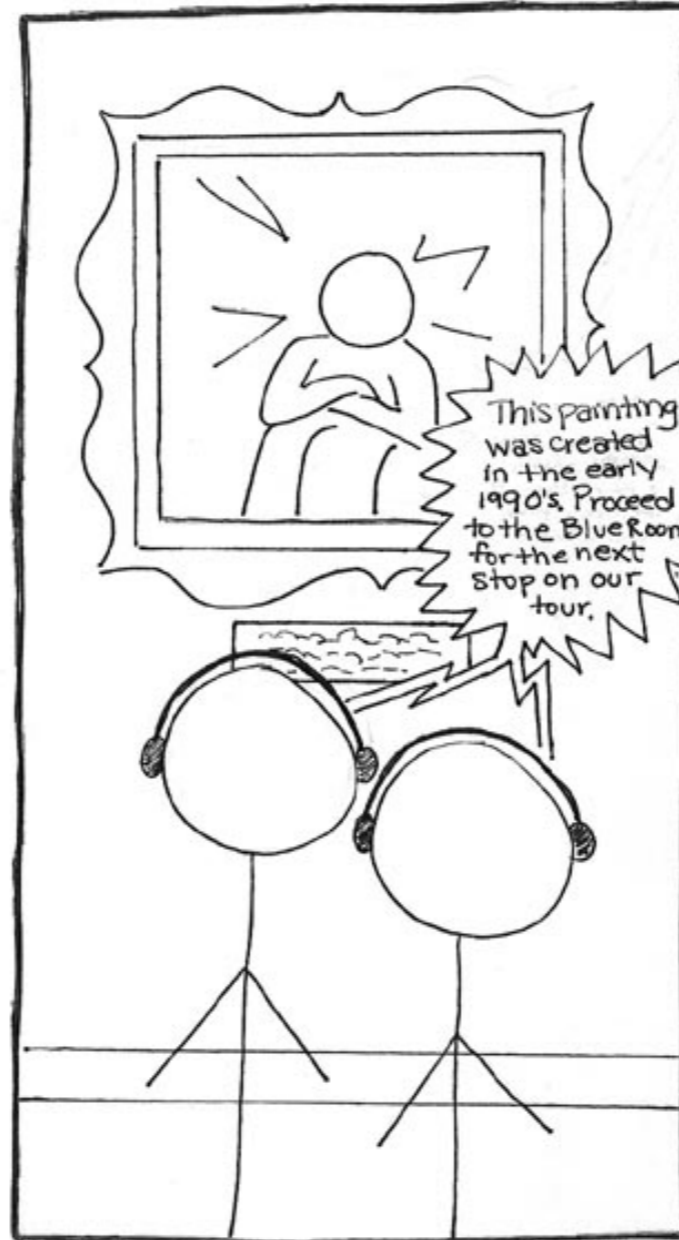
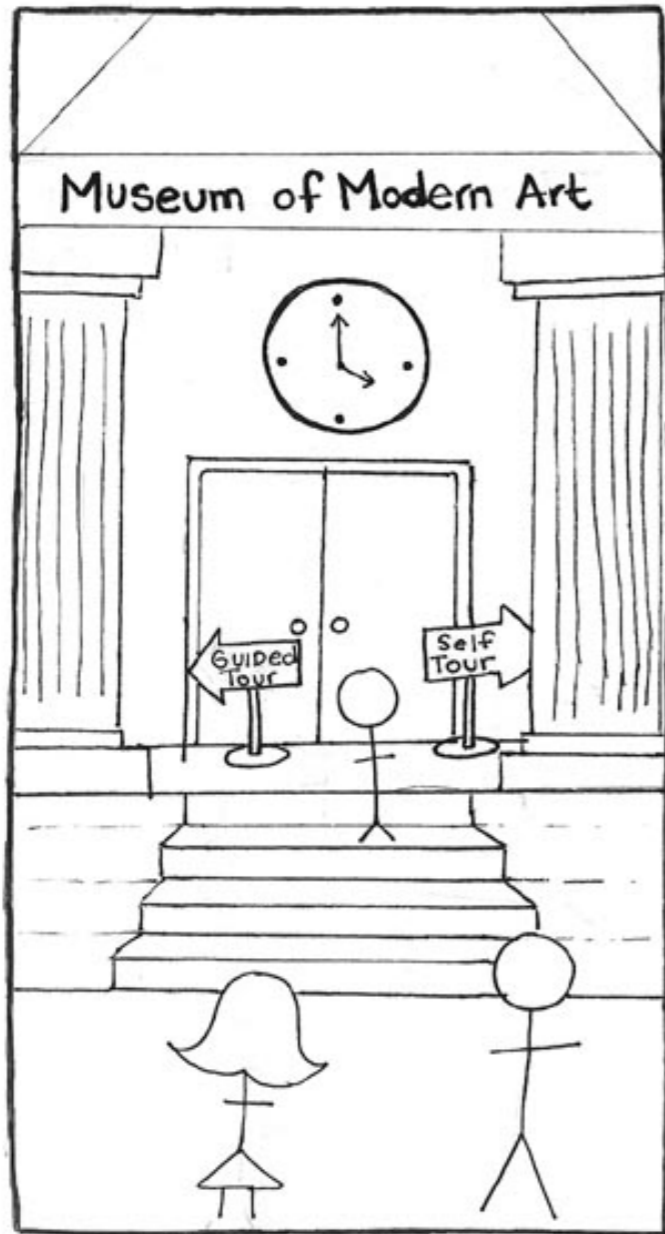
How many frames?



How many frames?



Passage of time?

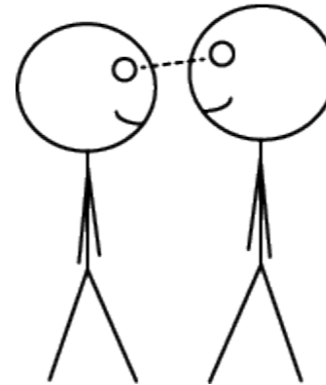
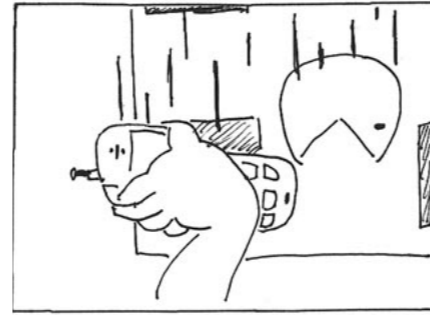


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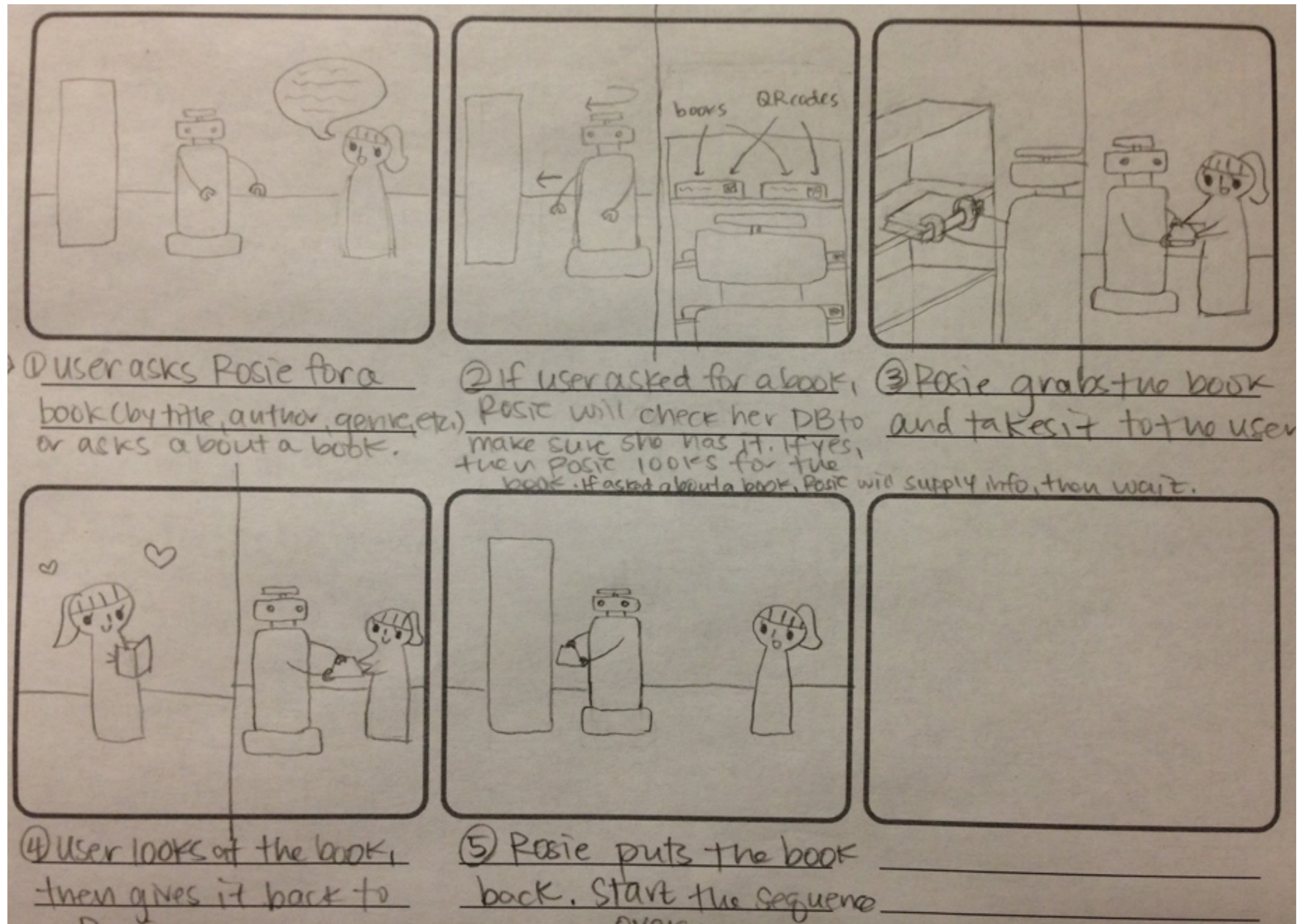
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Tricks

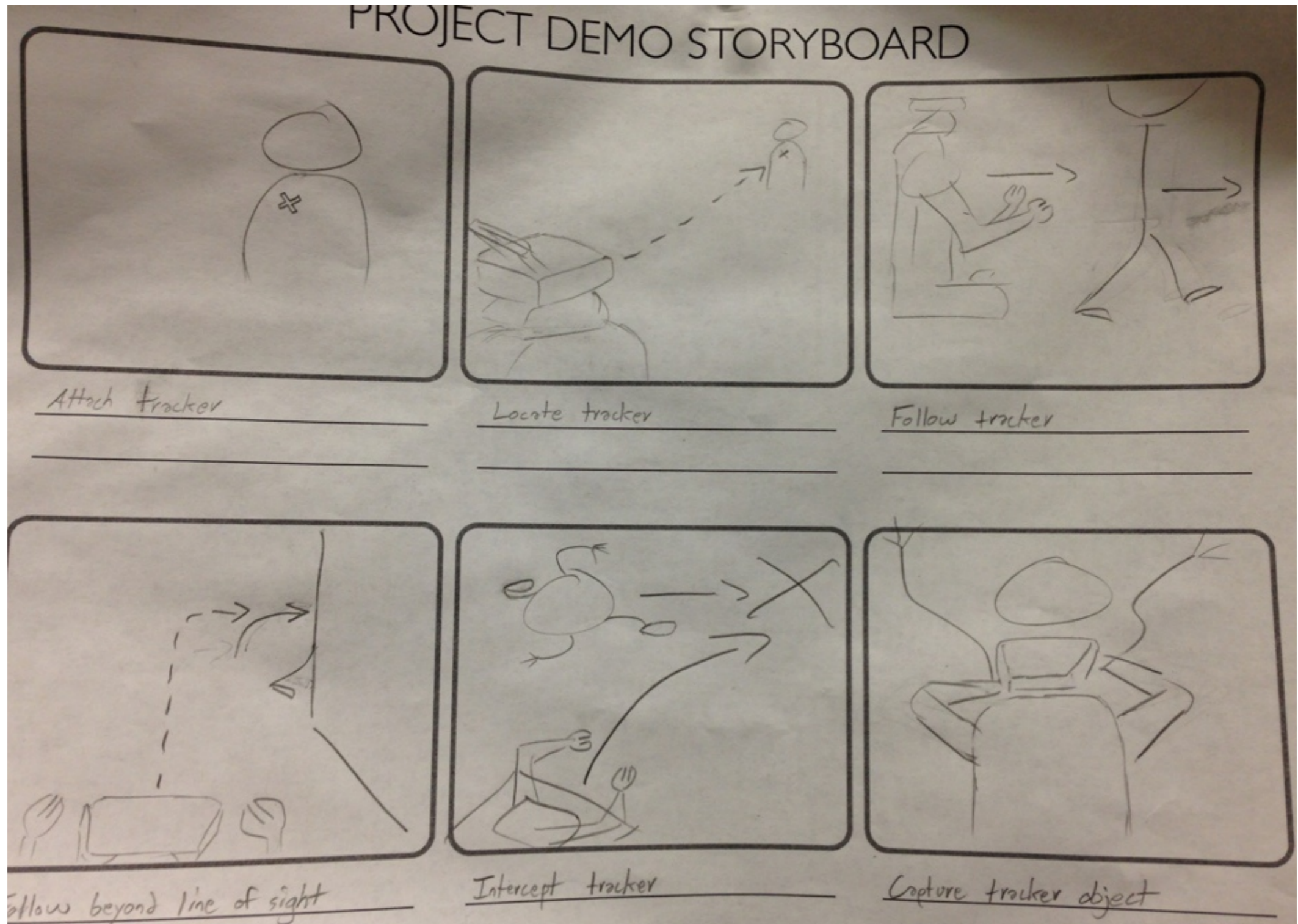
- Action lines
- Trajectories
- Collisions/contacts
- Sweat
- Gaze lines
- Camera views
- ...



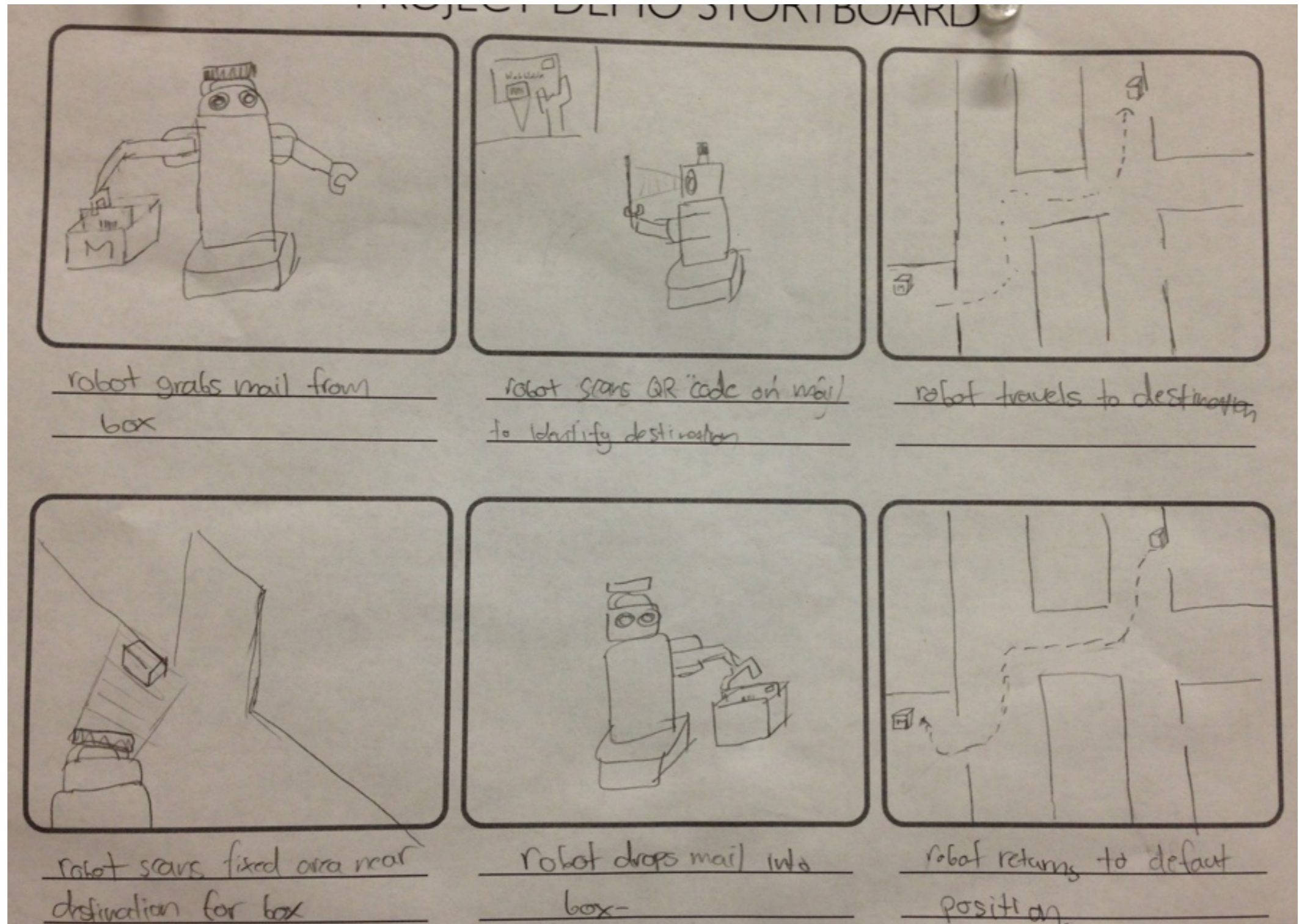
More examples, please critique



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Exercise

Make a storyboard of a robot helping with an everyday task/problem

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