

CSE440: Introduction to HCI

Methods for Design, Prototyping and Evaluating User Interaction

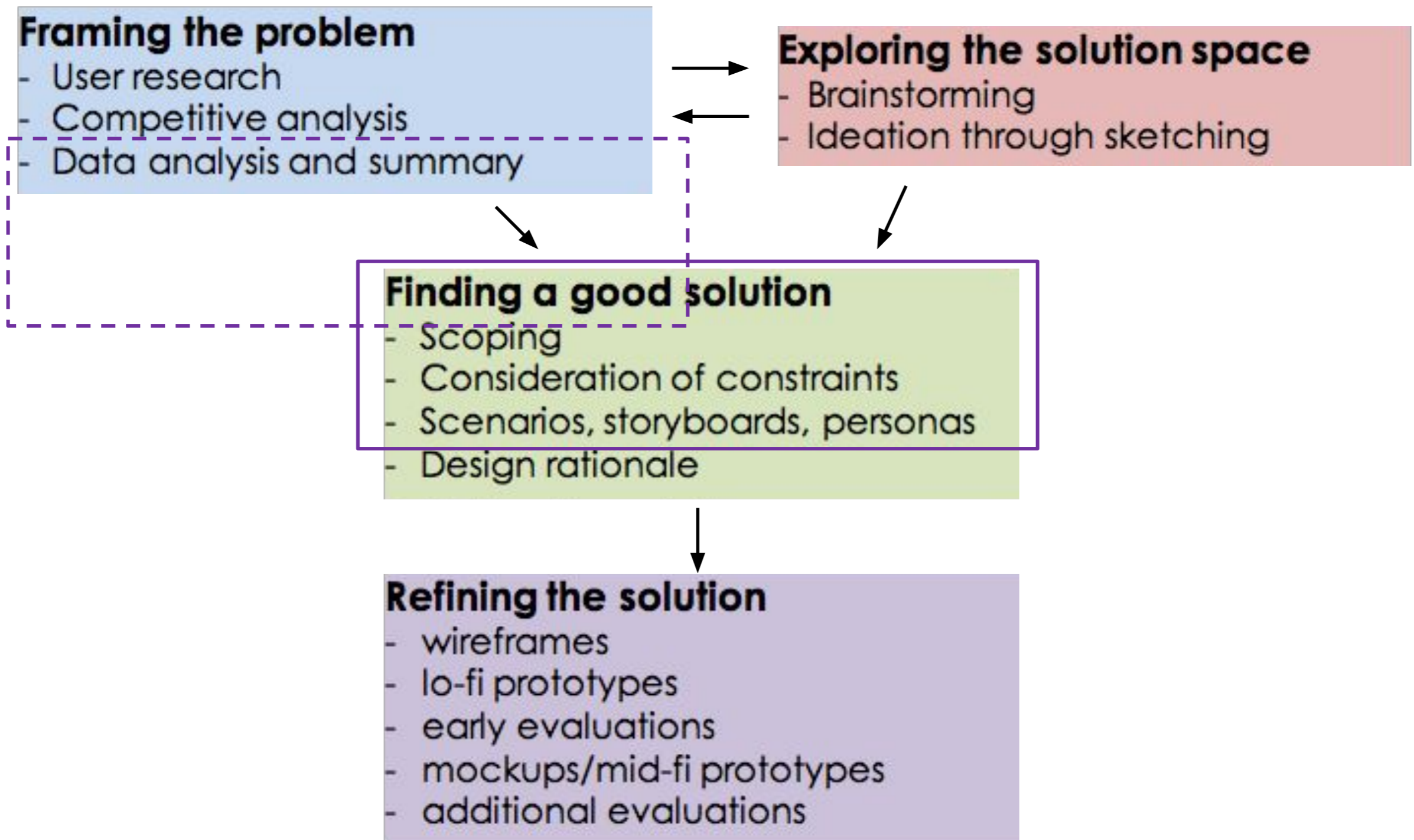
Lecture 09:
Scenarios & Storyboarding

Nigini Oliveira
Abhinav Yadav
Liang He
Angel Vuong
Jeremy Viny

This is a busy week!!!

Apr 29 2d - Design Research Review	Apr 30 Scenarios & Storyboarding 10:00 - 11:20 OUG 136	May 1 2e - Task Review Nigini's office hours 10:00 - 12:00 Allen Center 338	May 2 Paper Prototyping 10:00 - 11:20 OUG 136	May 3 Section 10:30 - 11:20 MGH 058 11:30 - 12:20 MGH 058 1:30 - 2:20 MGH 058 2:30 - 3:20 MGH 058 2f - Design Check-In
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Project Status



Revisit: Personas & Task Analysis

Task Analysis Questions

Who is going to use the system?

What tasks do they now perform?

What tasks are desired?

How are the tasks learned?

Where are the tasks performed?

What is the relationship between people & data?

What other tools do people have?

How do people communicate with each other?

How often are the tasks performed?

What are the time constraints on the tasks?

What happens when things go wrong?

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Storytelling

“Sometime reality is too complex. Stories give it form.”

— Jean Luc Godard

Why do we need stories in design?

Communicate with your audience

Other designers, clients, stakeholders, managers, funding agencies, potential end-users...

Explore people's purpose

Gather and **share information** about people, tasks, goals

Put a **human face** on user data

Spark new **design concepts** and encourage innovation

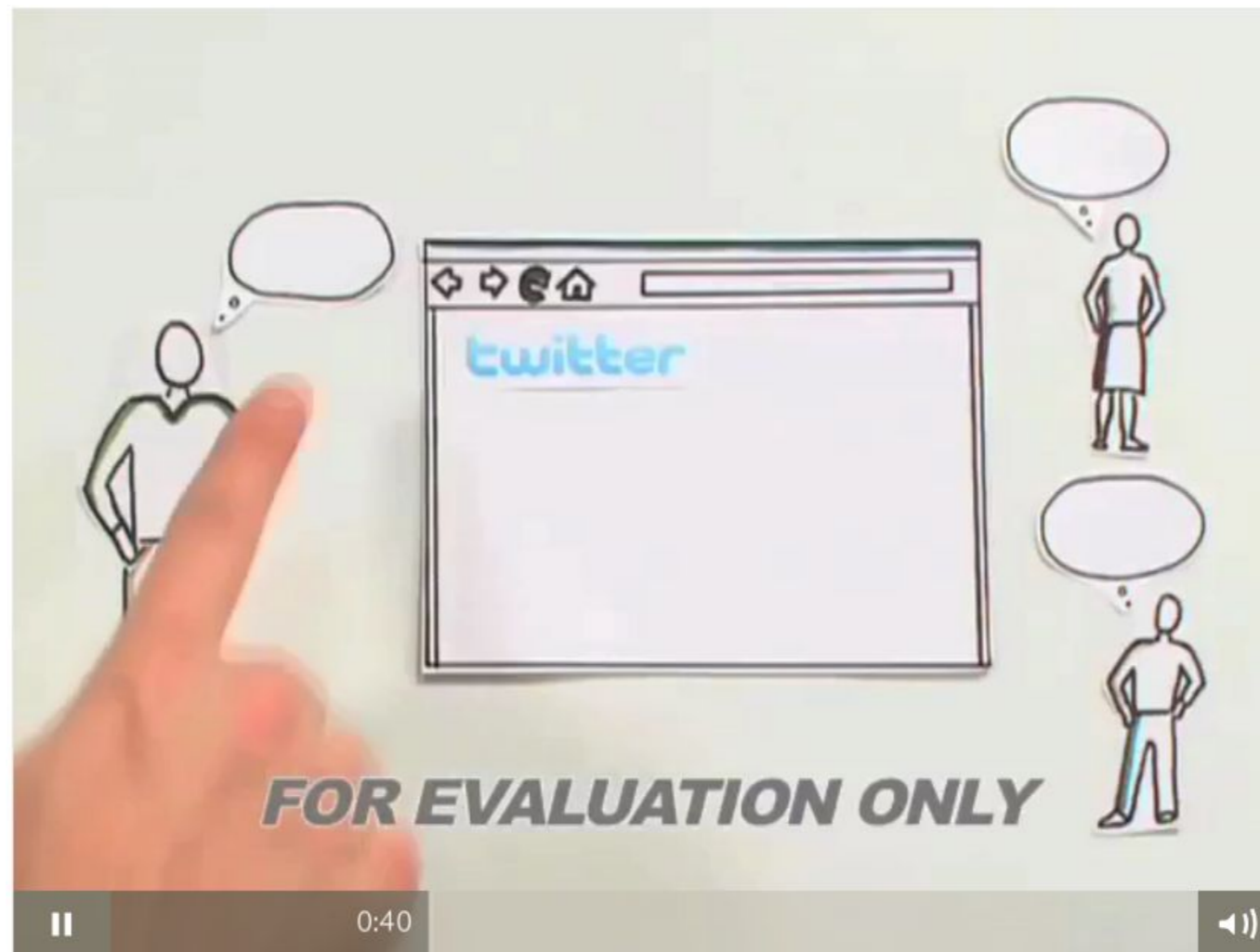
Share ideas and create a sense of **history and purpose**

Giving insight into people who are not like us (**empathy**)

"Maybe stories are data with a soul!" - Brene Brown

Why do we need stories in design?

How would you explain your favorite social media tool to someone living in 1995? E.g., yelp, twitter, snapchat,...



<https://www.commoncraft.com/video/twitter>

Storytelling

Good stories

- Understand audience
- Provide context of use
- Are well-motivated
- Memorable
- Evokes a reaction
- Evokes empathy
- Illustrate experience
- Convey emotions
- Short and to-the-point

Bad stories

- Do not account for audience
- Boring or un-engaging
- Fantastical or unrealistic
- Wrong story for purpose
- Too long to hold attention

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Three Ways of Telling Stories

Scenarios

A short story about a specific user with a specific goal

Written accounts and narratives of the experience

Analogy: Books

Storyboards

A series of sketches showing how a user might progress through a task in a system

Visual storytelling with rough sketches/cartoons

Analogy: Comics, Picture books

Video Storyboards

Richer visual storytelling

Analogy: Movies/TV

Scenario

Scenario

Persona + Task + Action = ...

Scenarios are stories created to **communicate and explore the context** on WHO does WHAT, WHEN, WHERE and WHY.

Scenario Example (Persona)

Peter Jones is a 23 years-old design professional.

He is a hard-worker, and things big career-wise. He is kind of an introvert, now single, and most of his social life happens on the weekends with roommates and a couple of good friends.

He likes to recharge by reading at home and sometimes playing video-games or watching movies.

User-story:

- Wants to make his weekend hours last as much as possible because those are the only leisure time he gets.



Scenario Example (Task Analysis)

Have a brunch with roomies

- Organize
 - Chose place
 - Poll for date
 - Share calendar invite
- Get everybody to place
 - Wake-up everybody
 - Drive to place
 - Get direction
 - Drive
 - **Park**
- Have a fun eating time
 - Order food
 - Take photos
 - Eat

Scenario Example: Parking

Peter is going to brunch on a Sunday with his roommates. He is trying a new place he found on Yelp. He has the address for the place and he is using a smartphone GPS for directions. He leaves the apartment with his roommates at around 8:30am and he wants to beat the crowd so they won't have to wait in line. He is driving a Toyota Corolla that he has owned for five years. It is a rainy day and he doesn't have an umbrella.

Scenario Example: Parking

unknown neighborhood/restaurant

Peter is going to brunch on a Sunday with his roommates. He is trying a **new place he found on Yelp**. He has the address for the place and he is using a smartphone GPS for directions. He leaves the apartment with his roommates at around 8:30am and he wants to beat the crowd so they won't have to wait in line. He is driving a Toyota Corolla that he has owned for five years. It is a rainy day and he doesn't have an umbrella.

Scenario Example: Parking

needs to find a parking spot close by?

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Team activity

Using your project as a basis:

Create one SCENARIO that presents

- one of your **personas**,
- and one of the **tasks** you plan to support.
- **IMPORTANT**: I still don't want details on the **solution**.

Team activity

Using your project as a basis:

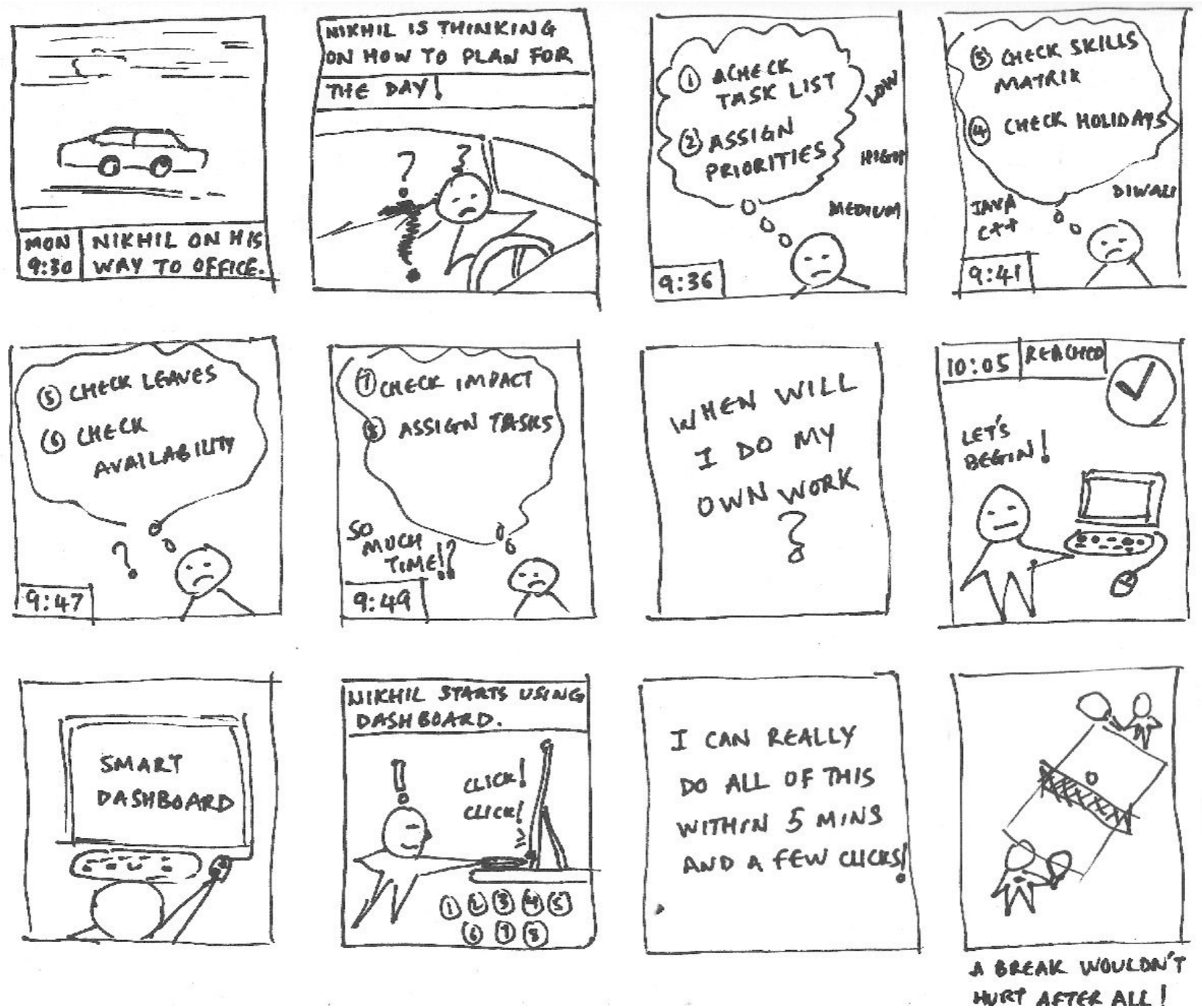
Create one SCENARIO that presents

- one of your **personas**,
- and one of the **tasks** you plan to support.
- **IMPORTANT**: I still don't want details on the **solution**.

Does anyone feel like sharing your scenario?

Storyboarding

Storyboard



Another one

**WHAT IS A SERVICE?
THE ARGOS EXPERIENCE...**

thinkpublic
www.thinkpublic.com

HI, MY NAME IS PAUL AND I'M GOING TO USE THE ARGOS SHOPPING SERVICE TODAY. MY GIRLFRIEND WANTS A EXERCISE BALL WHICH SHE SAW AT HOME IN THE CATALOGUE...

THE SHOP WAS EASY TO FIND WITH THE BIG SIGN OUTSIDE!

THIS SIGN IS USEFUL, I KNOW HOW LONG THIS IS GOING TO TAKE

STEP 1: SELECT PRODUCT

HERE'S ALL THE SPORTS STUFF, IT SHOULD BE IN THIS SECTION...

HERE WE GO... THIS IS WHAT SHE WANTED


THIS IS REALLY USEFUL, I CAN SEE IF THERE ARE ANY IN STOCK BEFORE QUEING UP. IT LOOKS LIKE I'M IN LUCK, THERE ARE 5 IN STOCK!


I'LL MAKE A NOTE OF THE NUMBER USING THE SLIP AND PEN PROVIDED...


AND HERE'S THE CATALOGUE NUMBER AND PRICE


**HOW DO ARGOS PROVIDE A SERVICE FOR THEIR CUSTOMERS?
ONE INTREPID REPORTER FINDS OUT...**


Another one

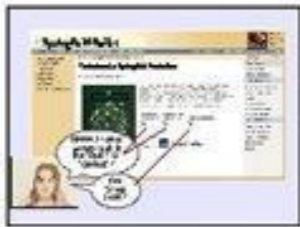
1  Slide 1


2  Sugar Plum Dreams


3  No problem, typing


4  Here's the Page


5  There it is


6  Peak and off peak?


7  I'll Try


8  Dates OK No Price?


9  OK Shows Price


10  Type Type Type


11  Blank Price


12  Back Back Back


13  Still \$0


14  Arrrgh


15  Send Form

16  Annoying

17  I don't get it

18  Slide 18

19  Hello Radio City

20  Slide 20

Observations/Issues

- Finding the a button straightforward, but...
- Flow description to user's task of finding the date
- Pricing of dates with work and dates are selected
- Bugs and browser issues create big user frustration with no resolution

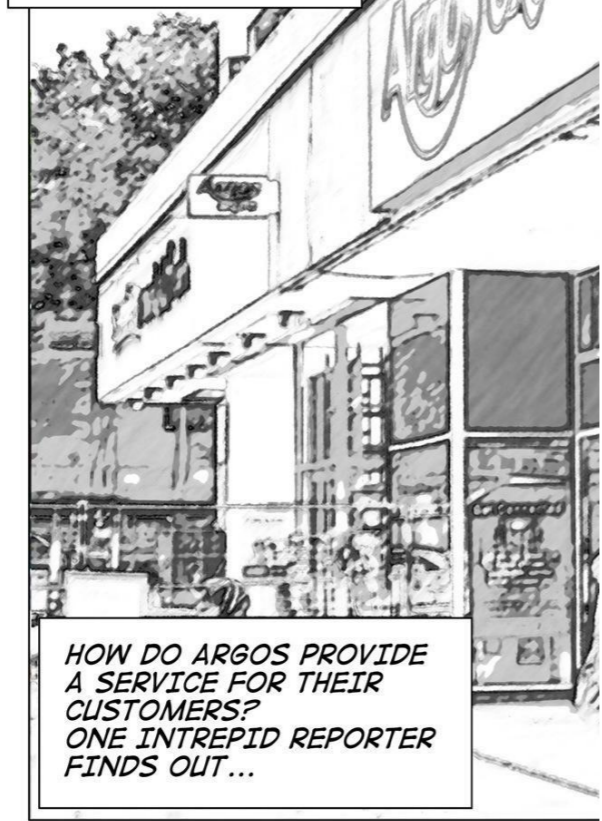
Storyboarding



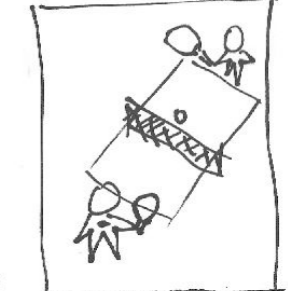
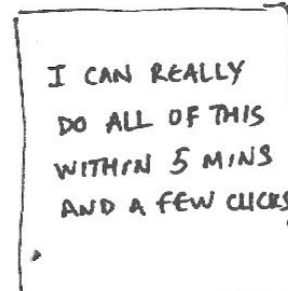
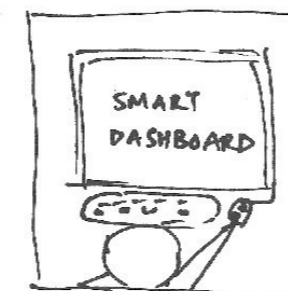
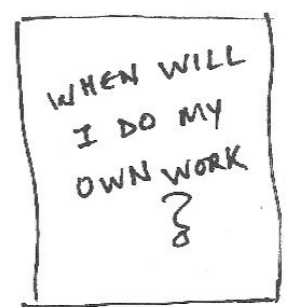
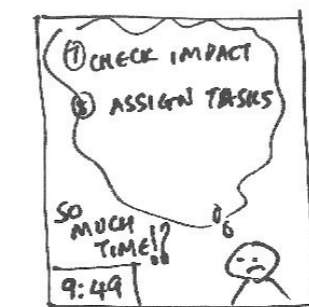
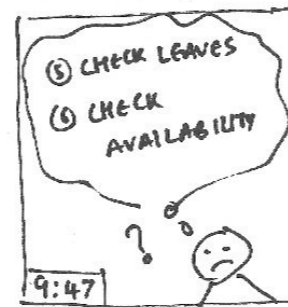
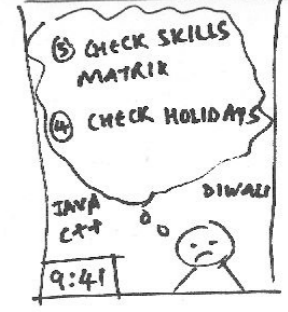
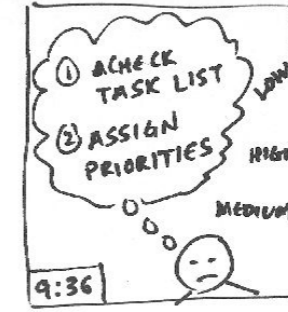
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Why Storyboards?

(If you have Scenarios)

As a visual representation, storyboards help thinking deeply about...

- Specific environments where the system is used

- Physical constraints (size of system, space where it's used...)

- Relationships among multiple people

Provide Context

Characters

- Who is involved

Setting

- Environment

Sequence

- What task is illustrated

- What leads a person to use a design

- What steps are involved

Satisfaction

- What is the motivation

- What is the end result

- What need is satisfied

Images in action

Storyboards come from film and animation

the script tells in details what is said

the storyboard focus on context and interactions

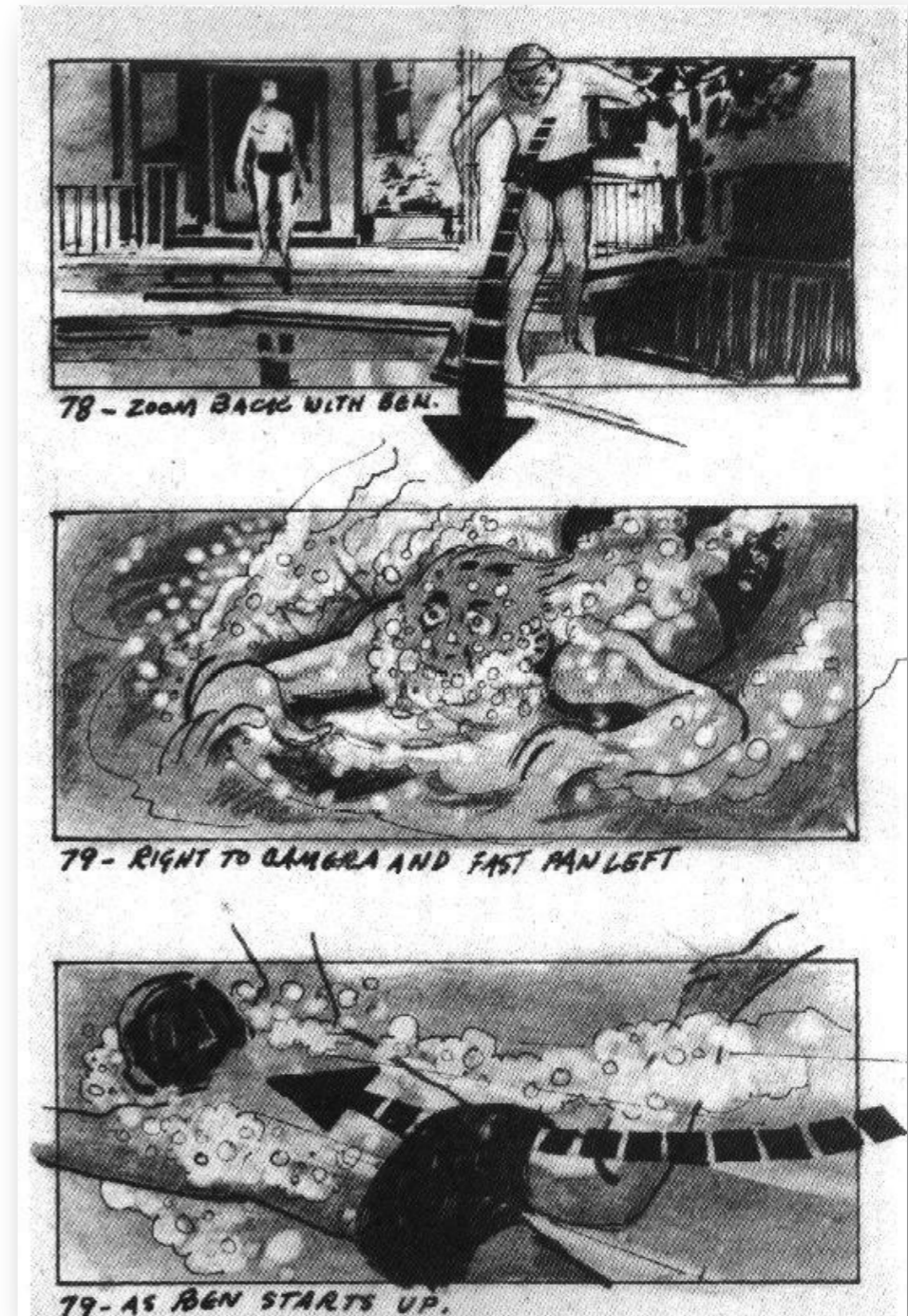


Allows Exploration

Much faster and less expensive to produce

Can therefore explore more potential approaches

(Use notes to help fill in missing pieces of the proposal)



Effective to communicate

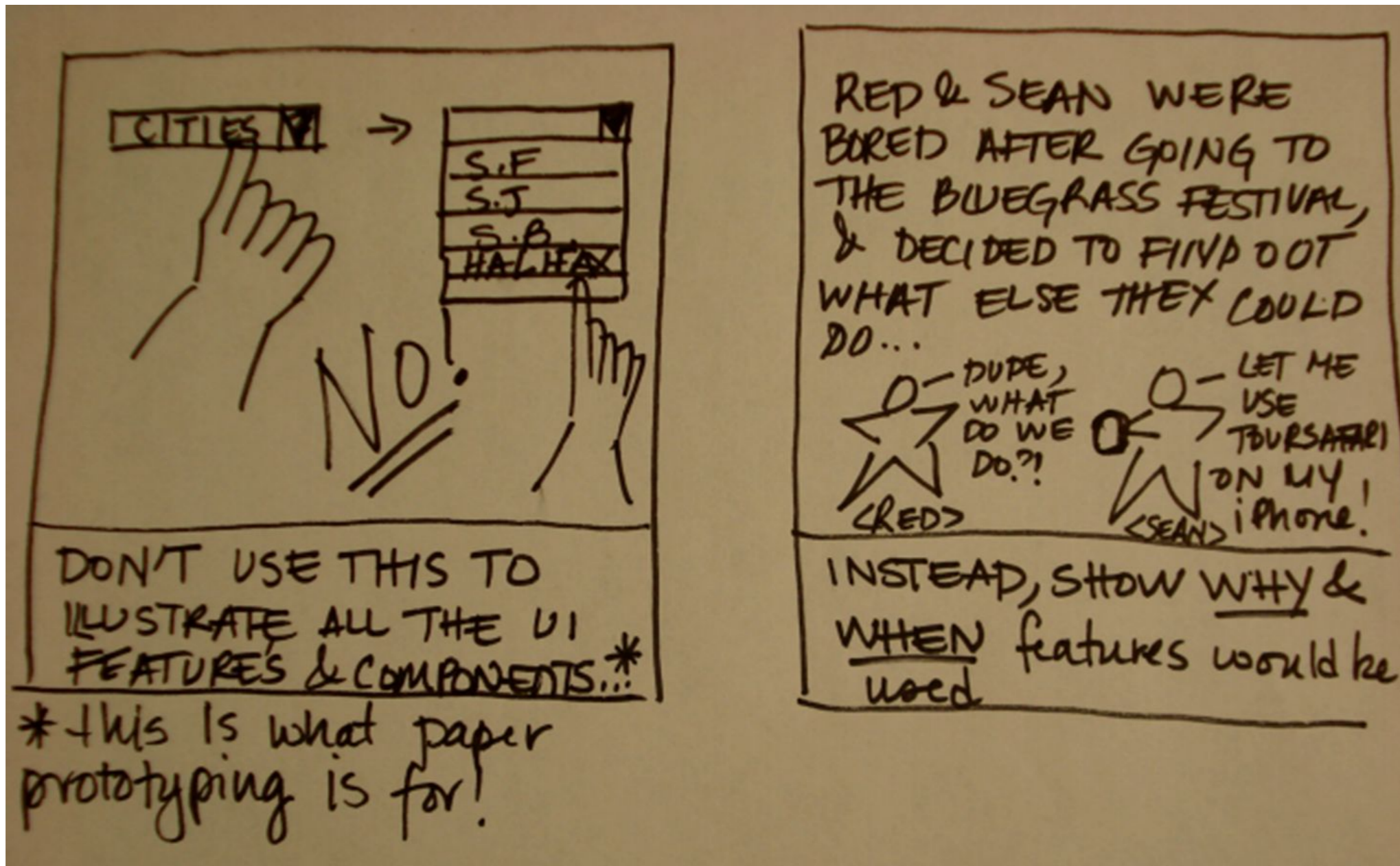
Effective storyboards can quickly **convey information** that would be difficult to understand in text

(Imagine explaining the storyboard on the right in text, for various audiences)

Can illustrate key requirements and leave open less important details of design



Amal's Guide to Storyboarding



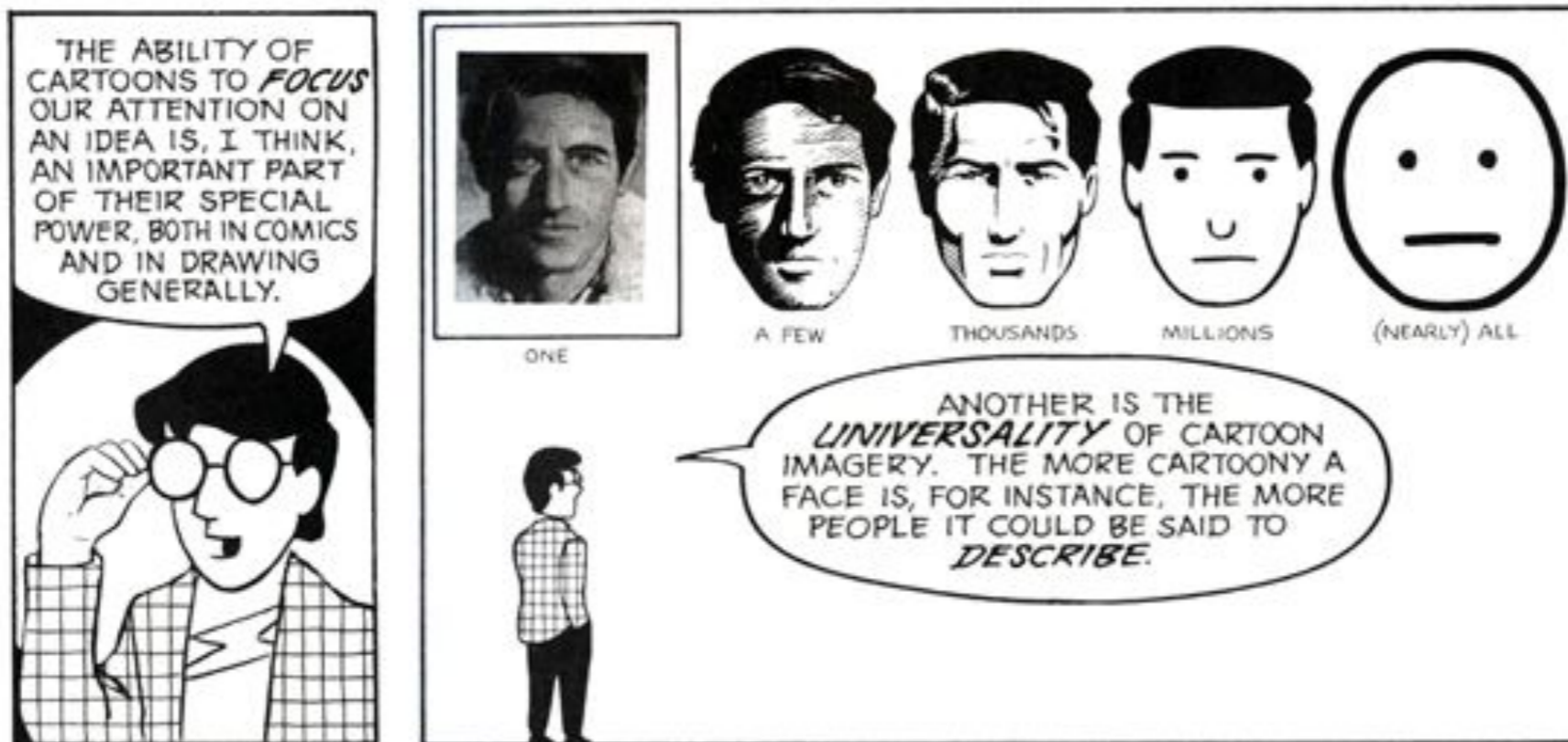
Elements of a Storyboard

5 visual elements

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

1. How Much Detail?

Too much detail can lose universality



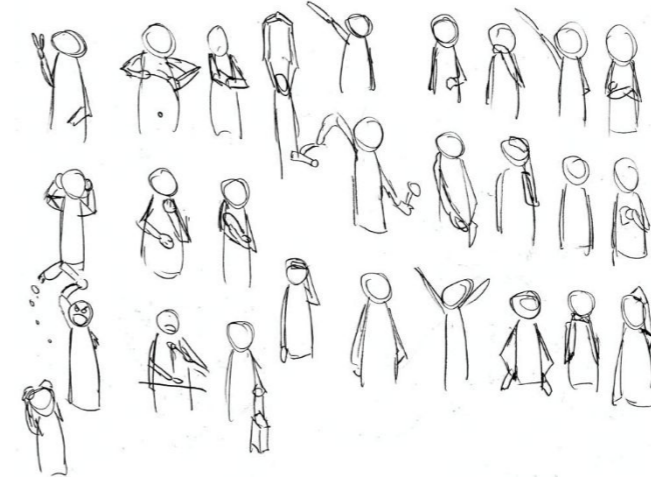
Scott McCloud

1. How Much Detail?

How to sketch people?



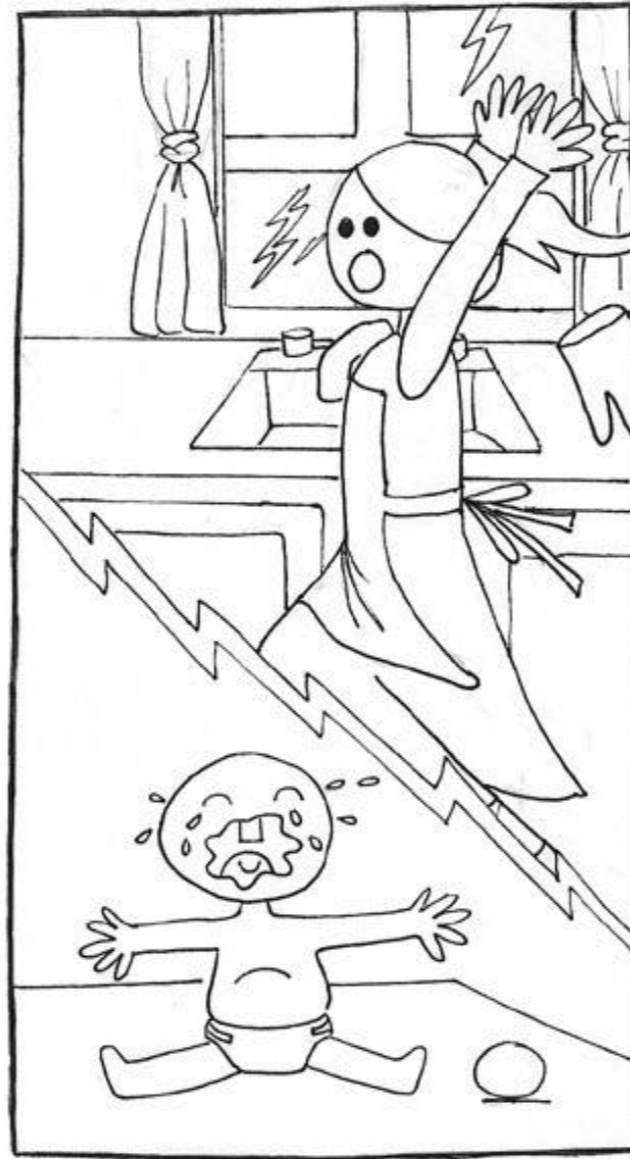
Star people
by Bill Verplank



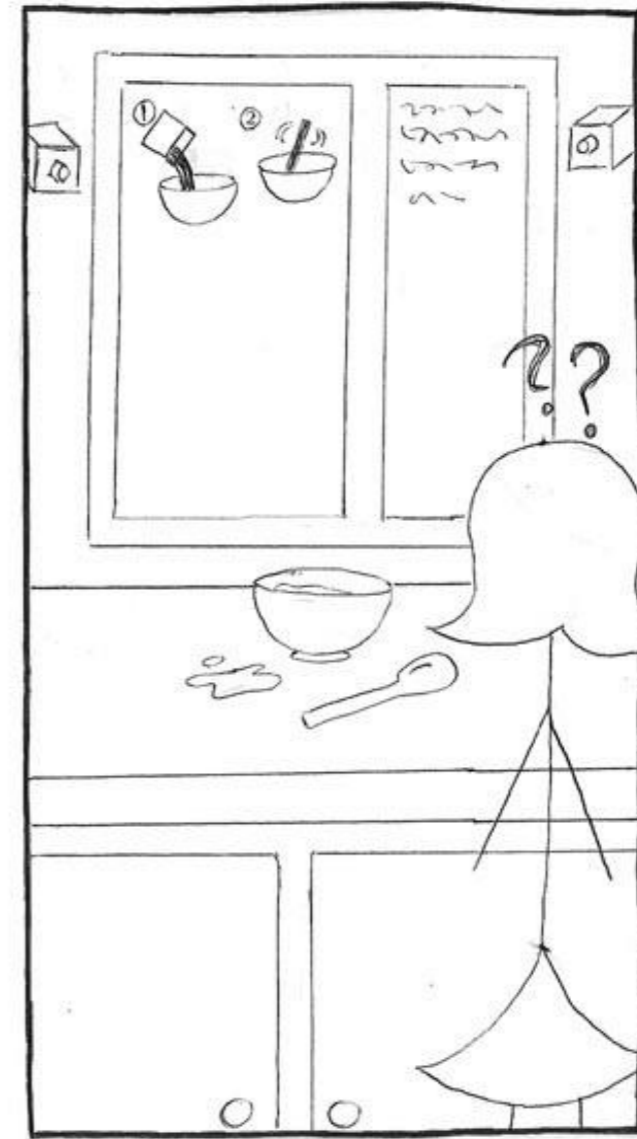
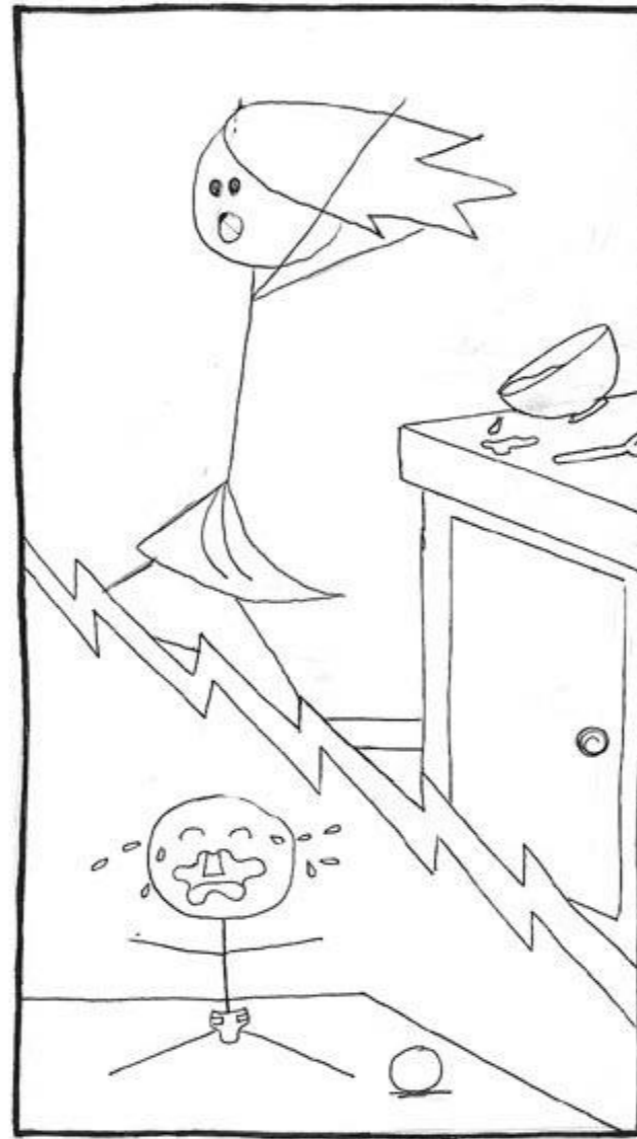
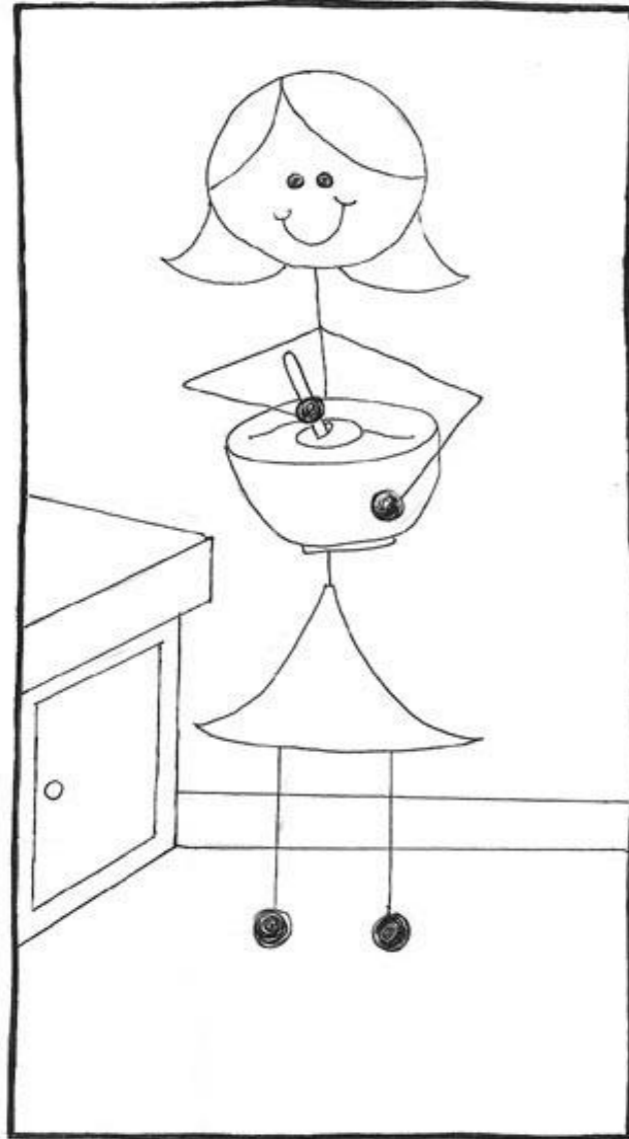
(c) 2009 SACHA CHUA



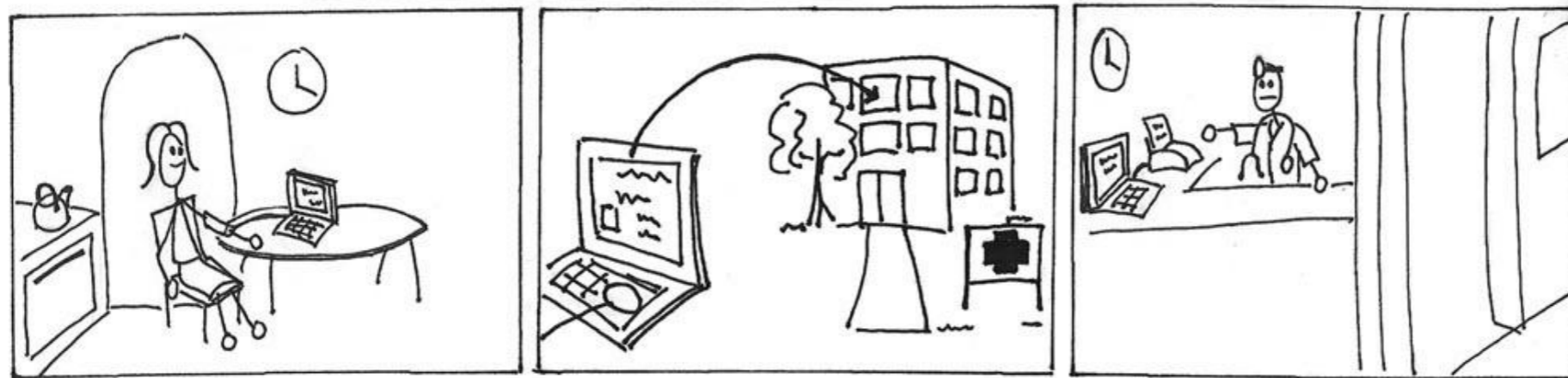
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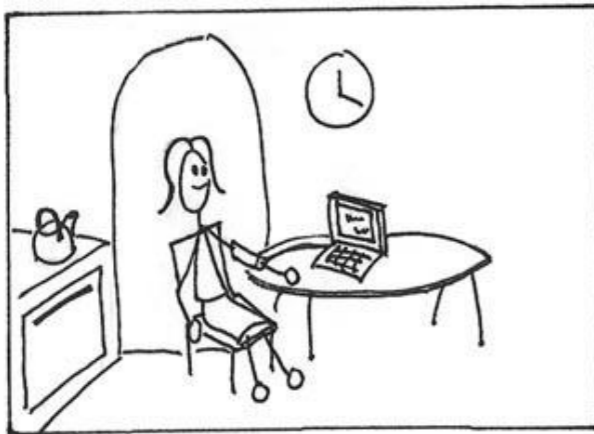


2. Use of Text

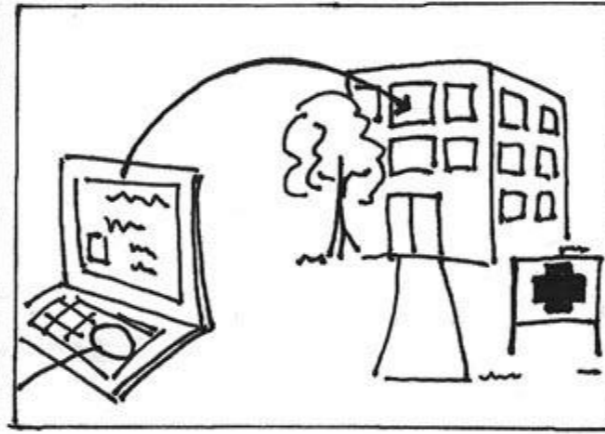


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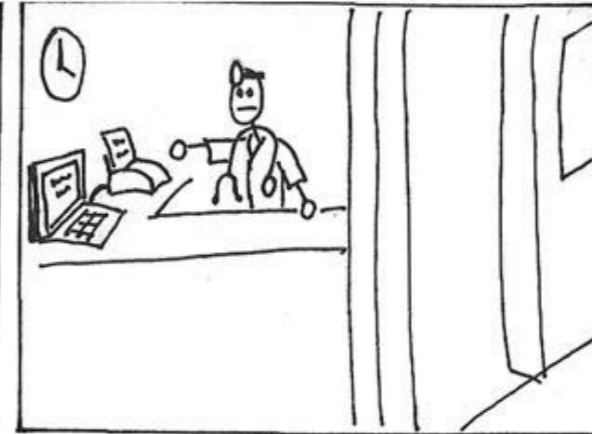
It is often necessary, but keep it short



1. At home, Mary checks her blood pressure.



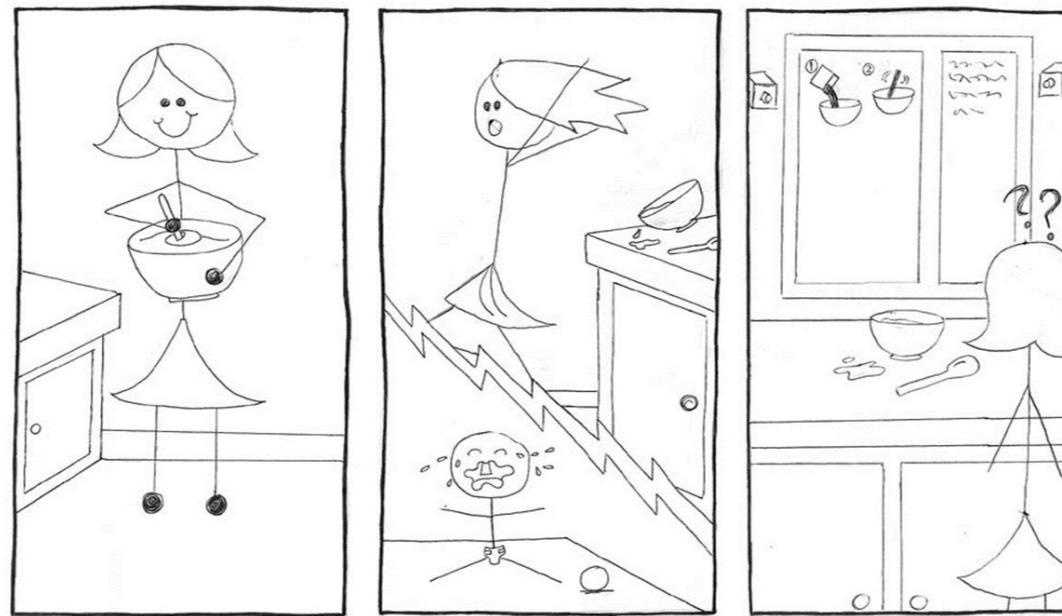
2. After a few simple key presses, her blood pressure readings get sent to a clinic.



3. The information is made available to her doctor.

3. Include People and Emotions

Include people experiencing the design and their reactions to it (good or bad)



The point of a storyboard is to convey the experience of using the system

4. How Many Frames?

4-6 frames is ideal for end-users

- Less work to illustrate

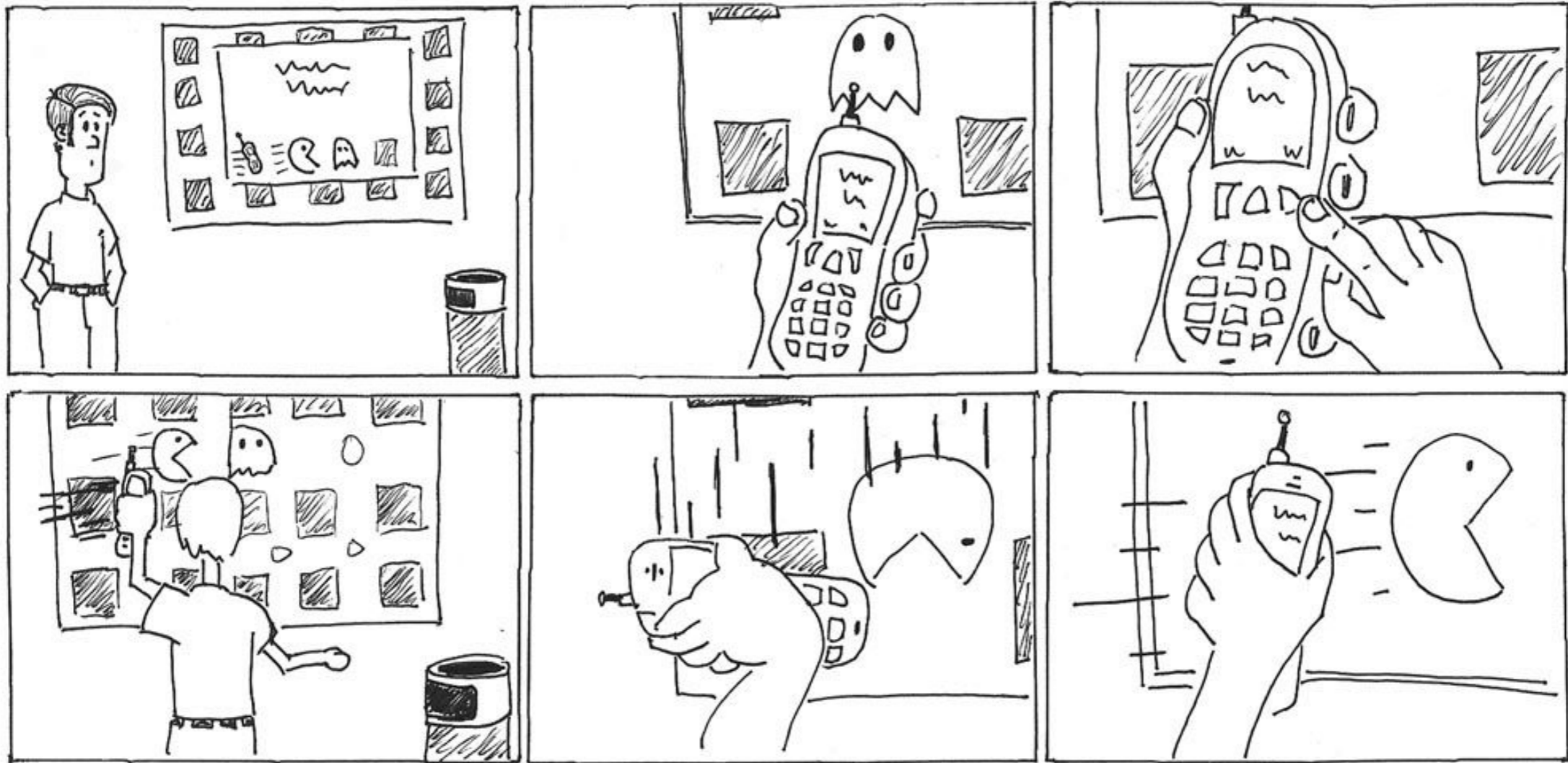
- Must be able to succinctly tell story

More is not always better

- May lose focus of story

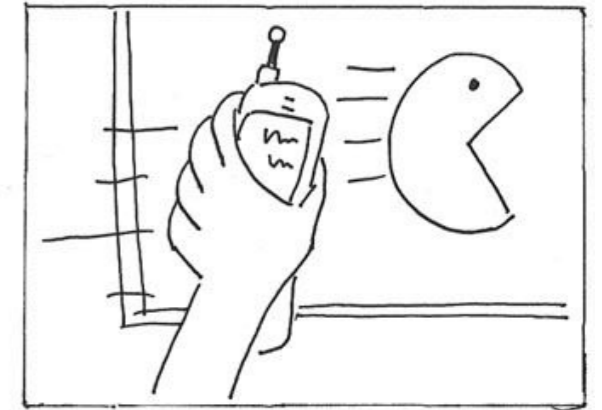
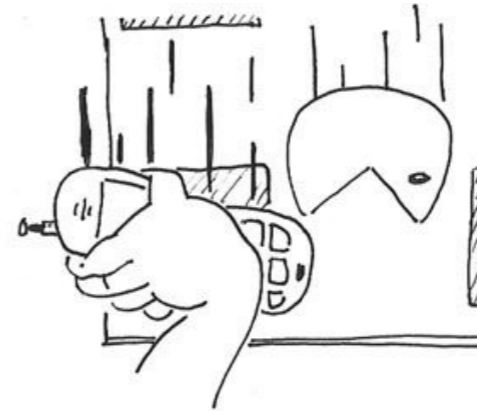
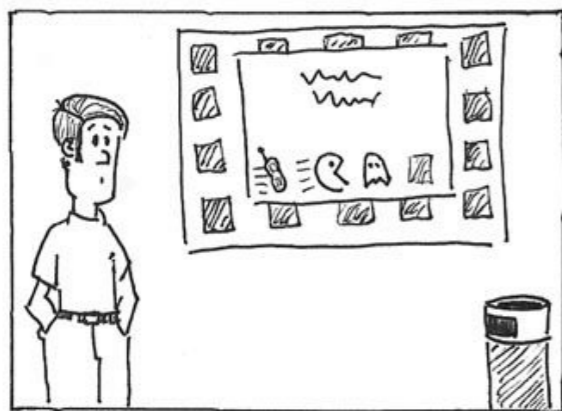
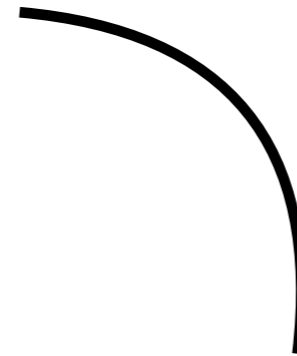
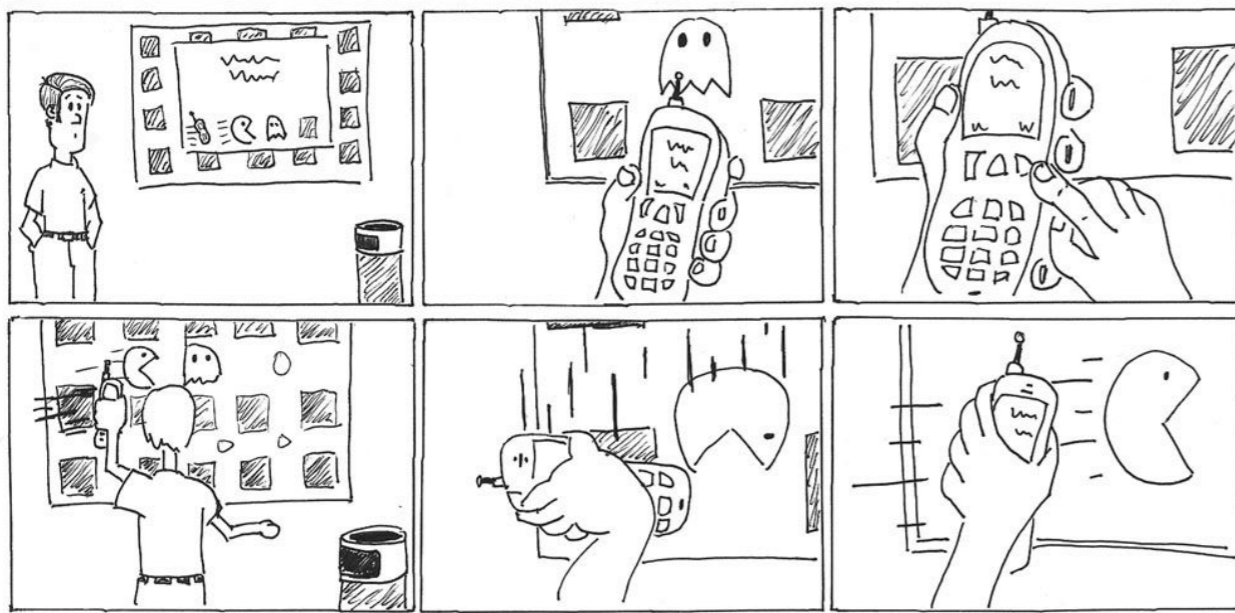
- May lose attention

4. How Many Frames?



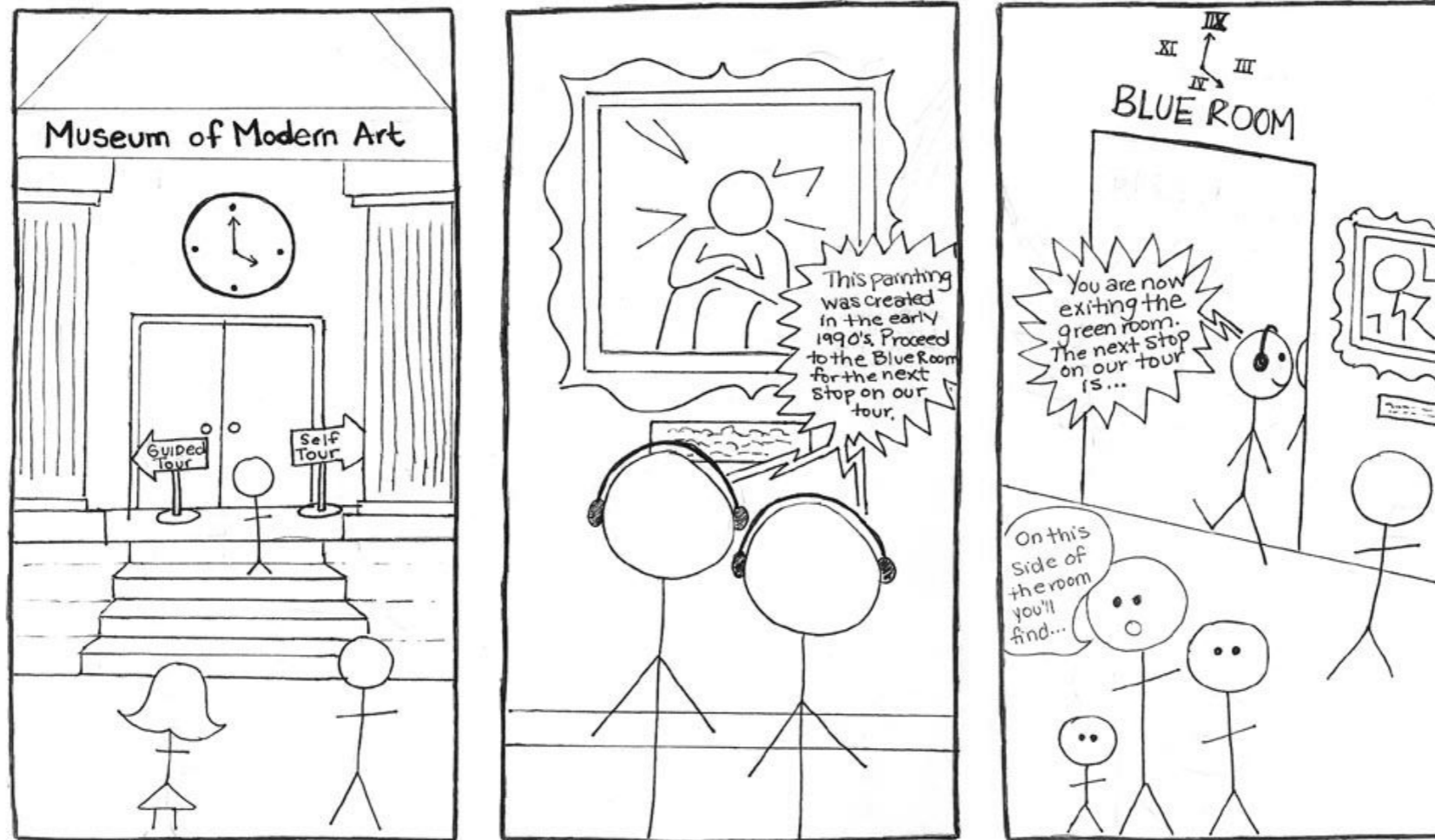
4. How Many Frames?

Remove unnecessary frames



5. Passage of Time

Only use of necessary to understand



Team activity

Again, using your project as a basis:

Create one storyboard that presents

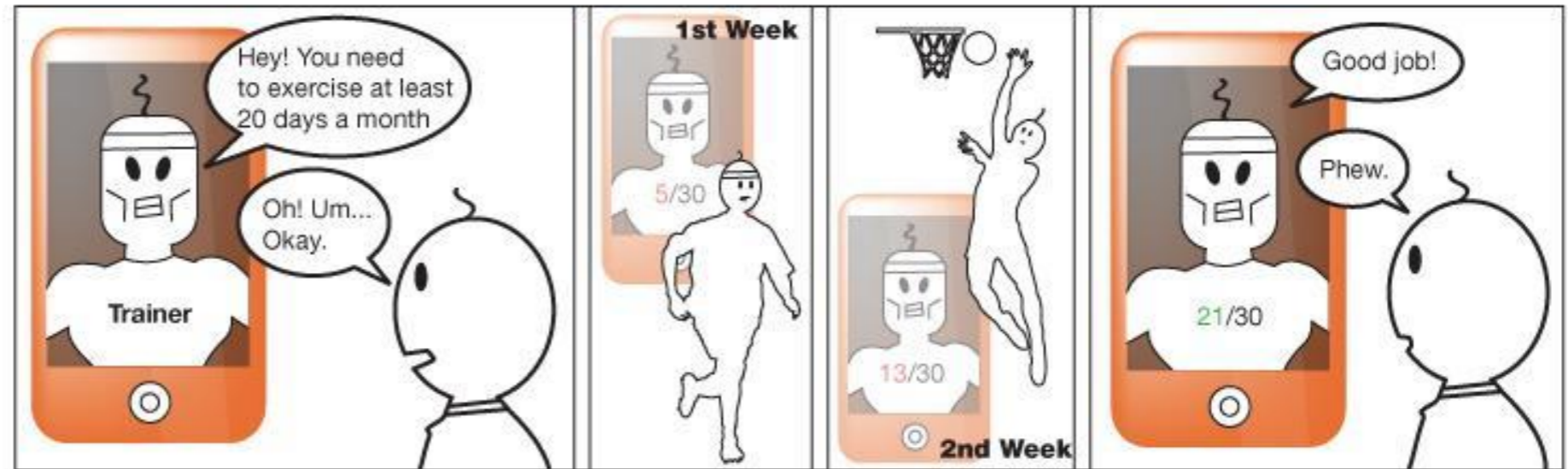
- one of your **personas**,
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- **IMPORTANT**: I still don't want details on the **solution**.

When you finish, get feedback from another team.

More Examples and Tricks in Storyboarding

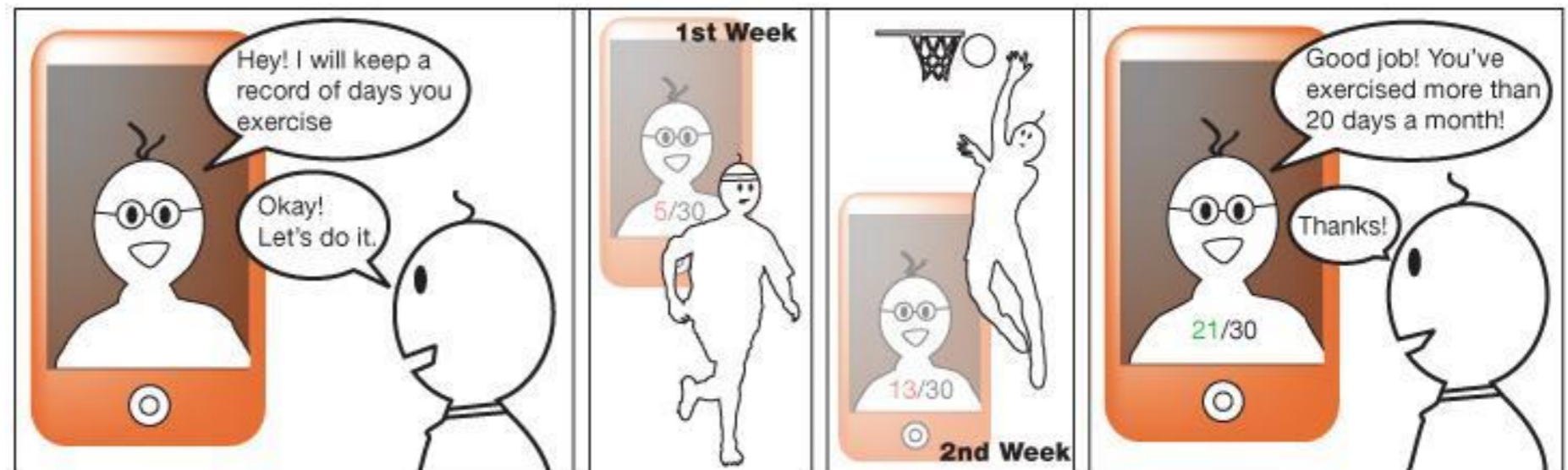
Storyboards for Comparing Ideas

Authoritative



Cell phone is used to keep track of one's fitness goal.

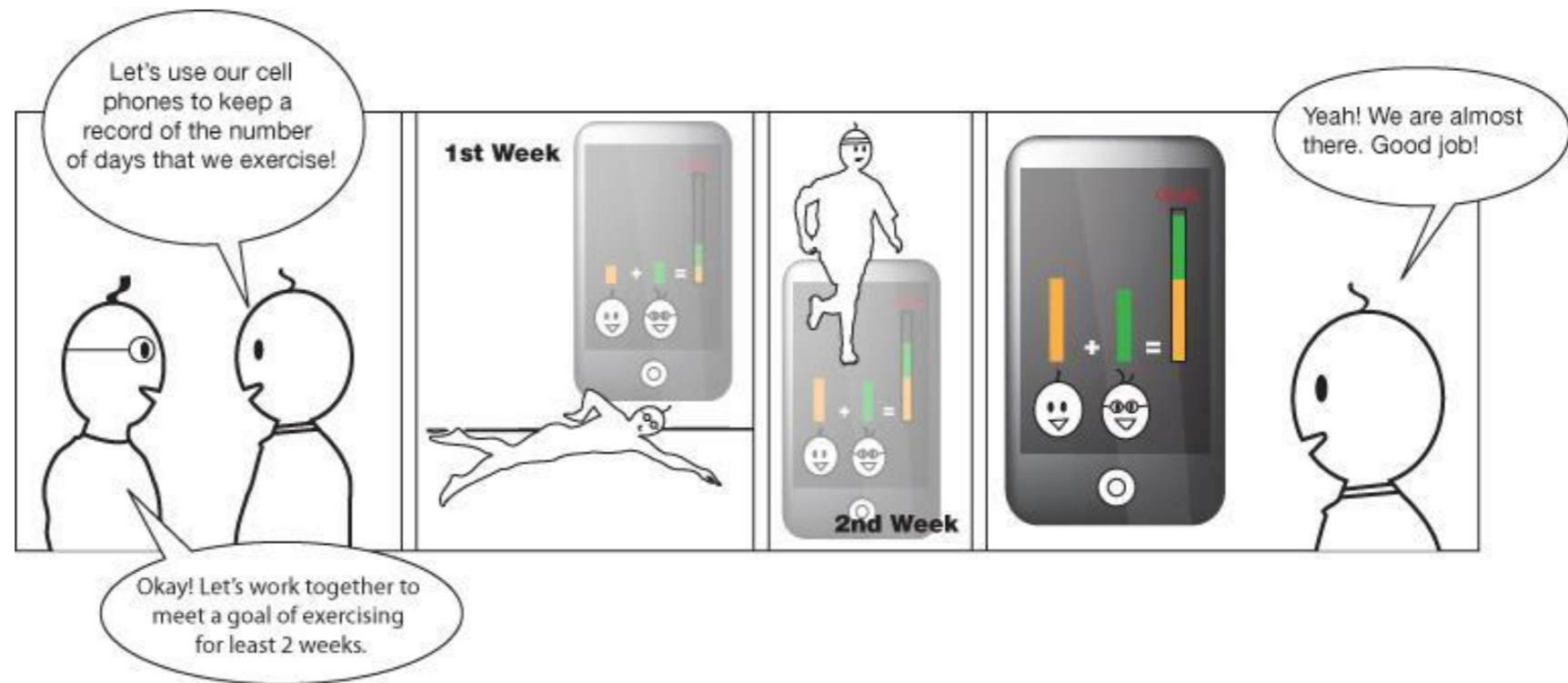
Supportive



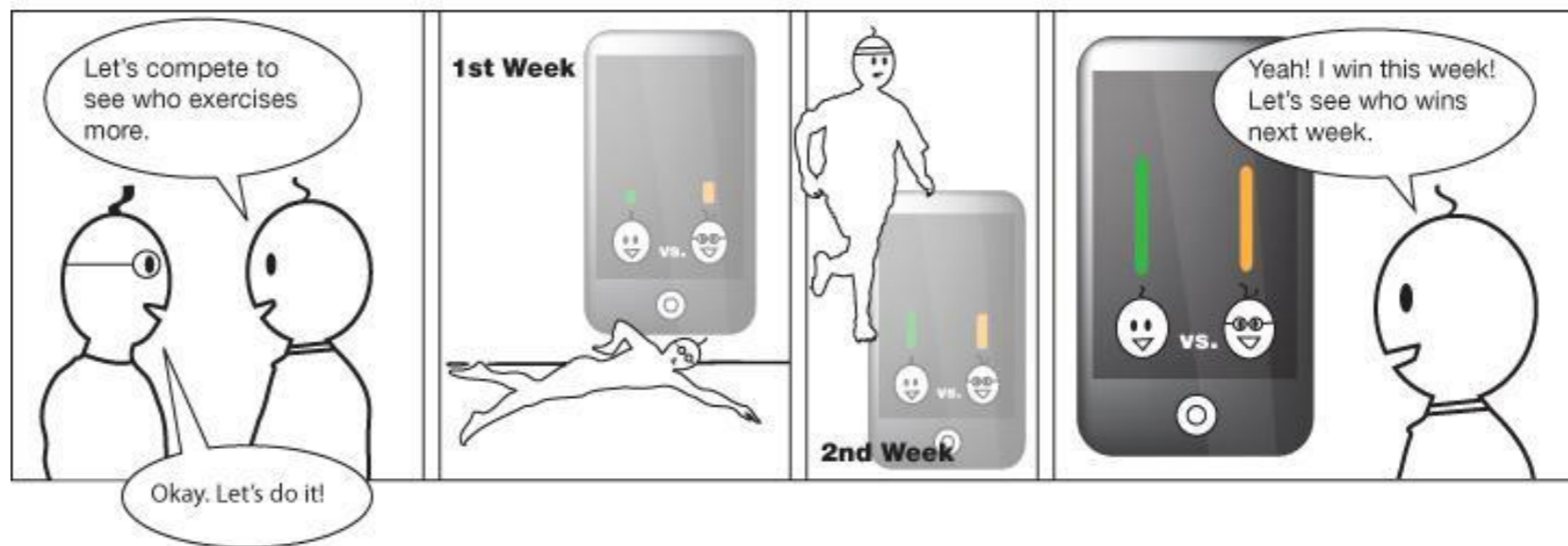
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Storyboards for Comparing Ideas

Cooperative

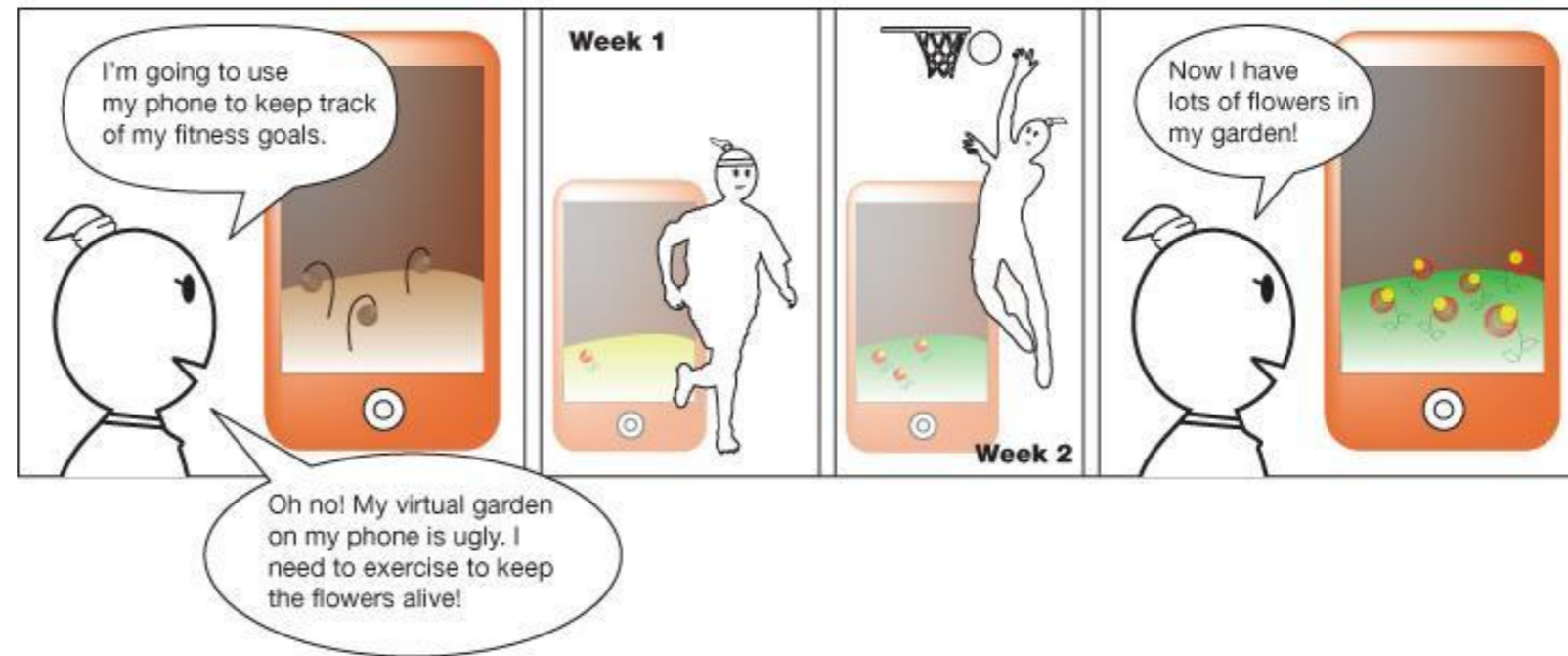


Competitive

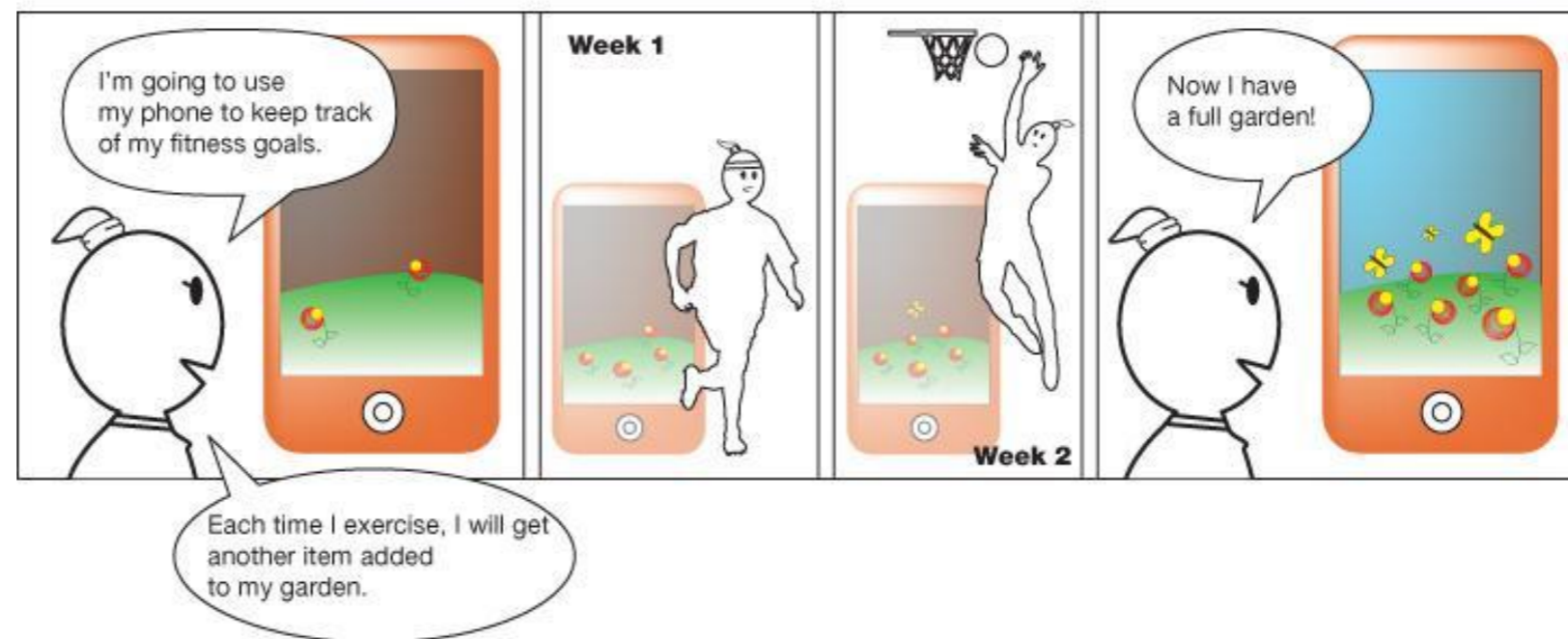


Storyboards for Comparing Ideas

Negative
Reinforcement



Positive
Reinforcement



Use Pictures (only if really necessary)



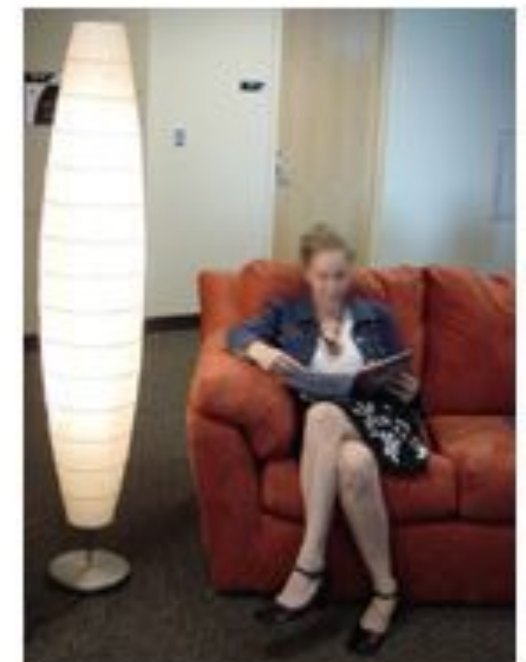
IT IS SO DARK JANE CAN
HARDLY READ HER BOOK



SHE GESTURES IN FRONT OF HER
SPECIAL PENDANT TO TURN ON
THE LIGHTS

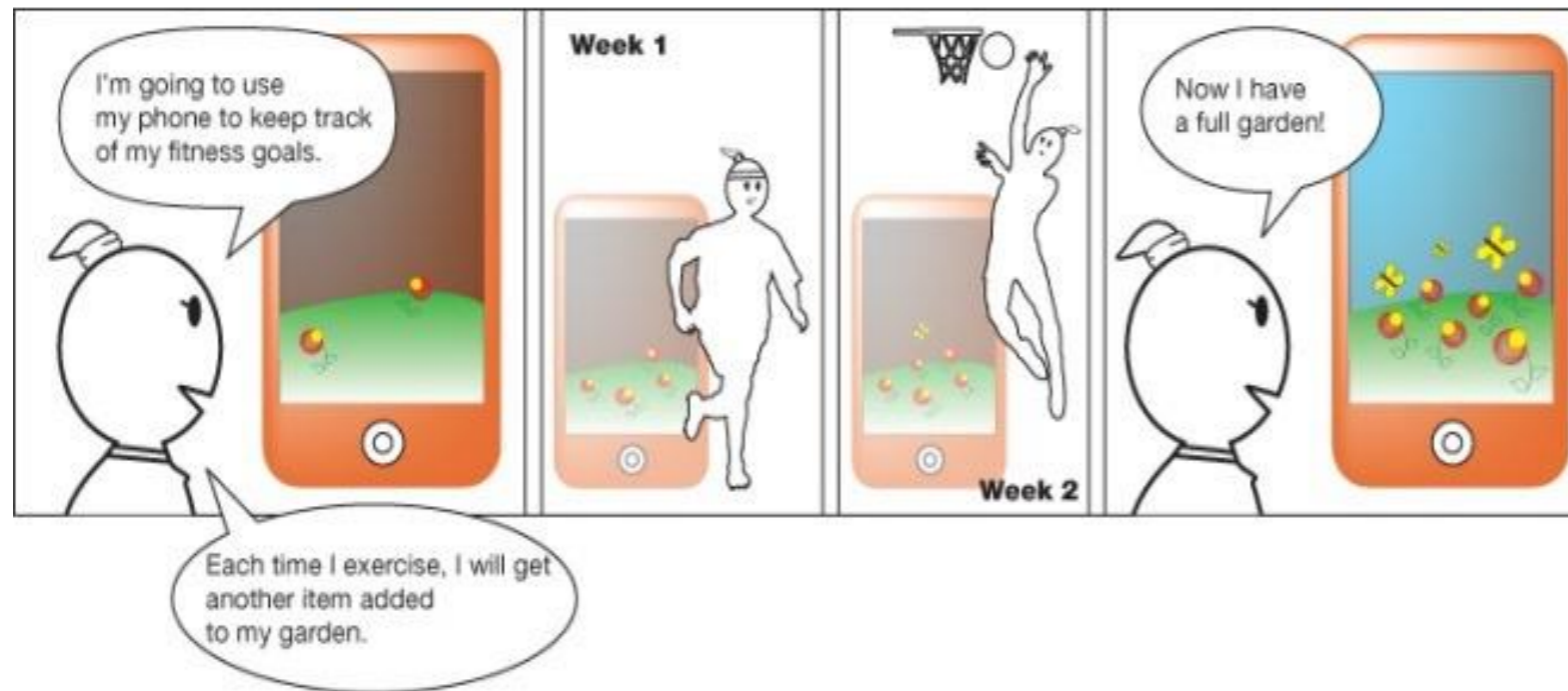


THE LIGHTS TURN ON!



FINALLY, SHE CAN
READ HAPPILY.

Existing Images from Other Sources

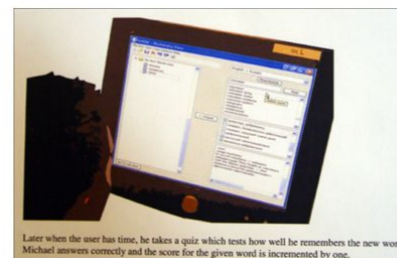
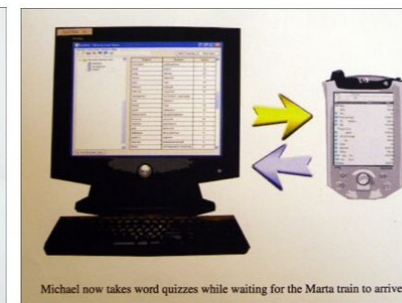
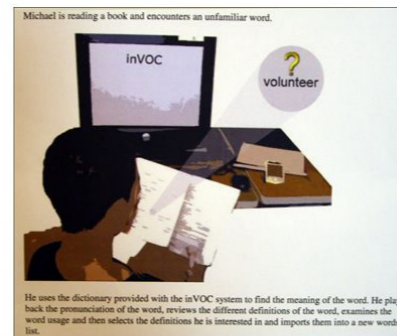


<http://designcomics.org/>

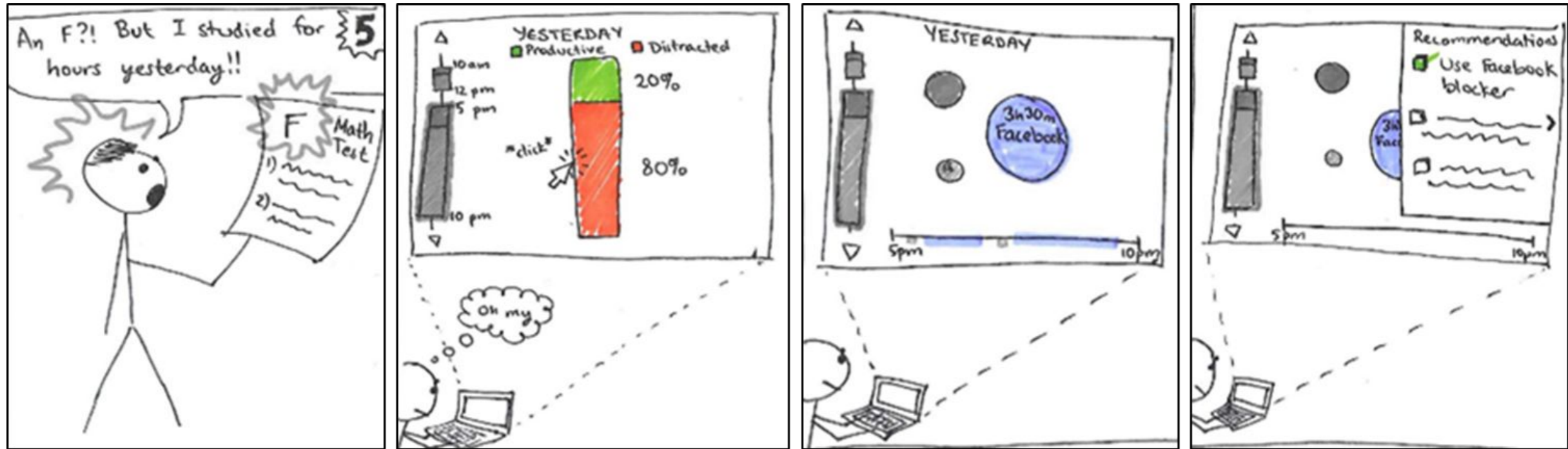
<http://www.pdclipart.org/>

Blur Out Unnecessary Detail

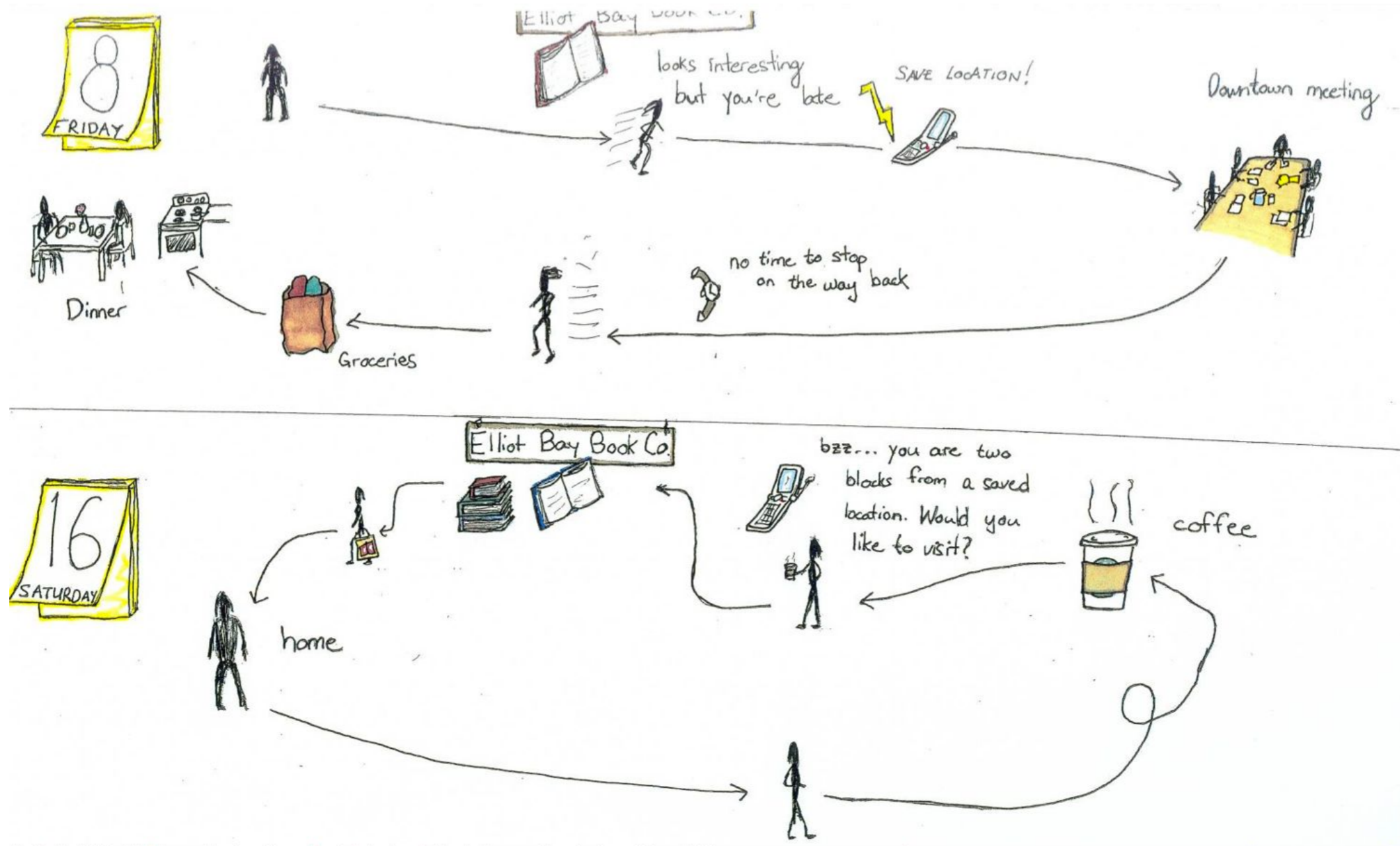
Using image editing software to simplify photos into sketches



Selective Use of Color



Selective Use of Color



Summary

Think about your audience

Think about your time constraints

Think about how much you want to tell

Think about options for presenting your story

And most importantly: Think about your users

Ask me something!