

# **IN4MATX 231:**

# **User Interface Design & Evaluation**

**Class 8:  
Storyboarding &  
Video Prototyping**

**Daniel Epstein**

# Today's goals

**By the end of today, you should be able to...**

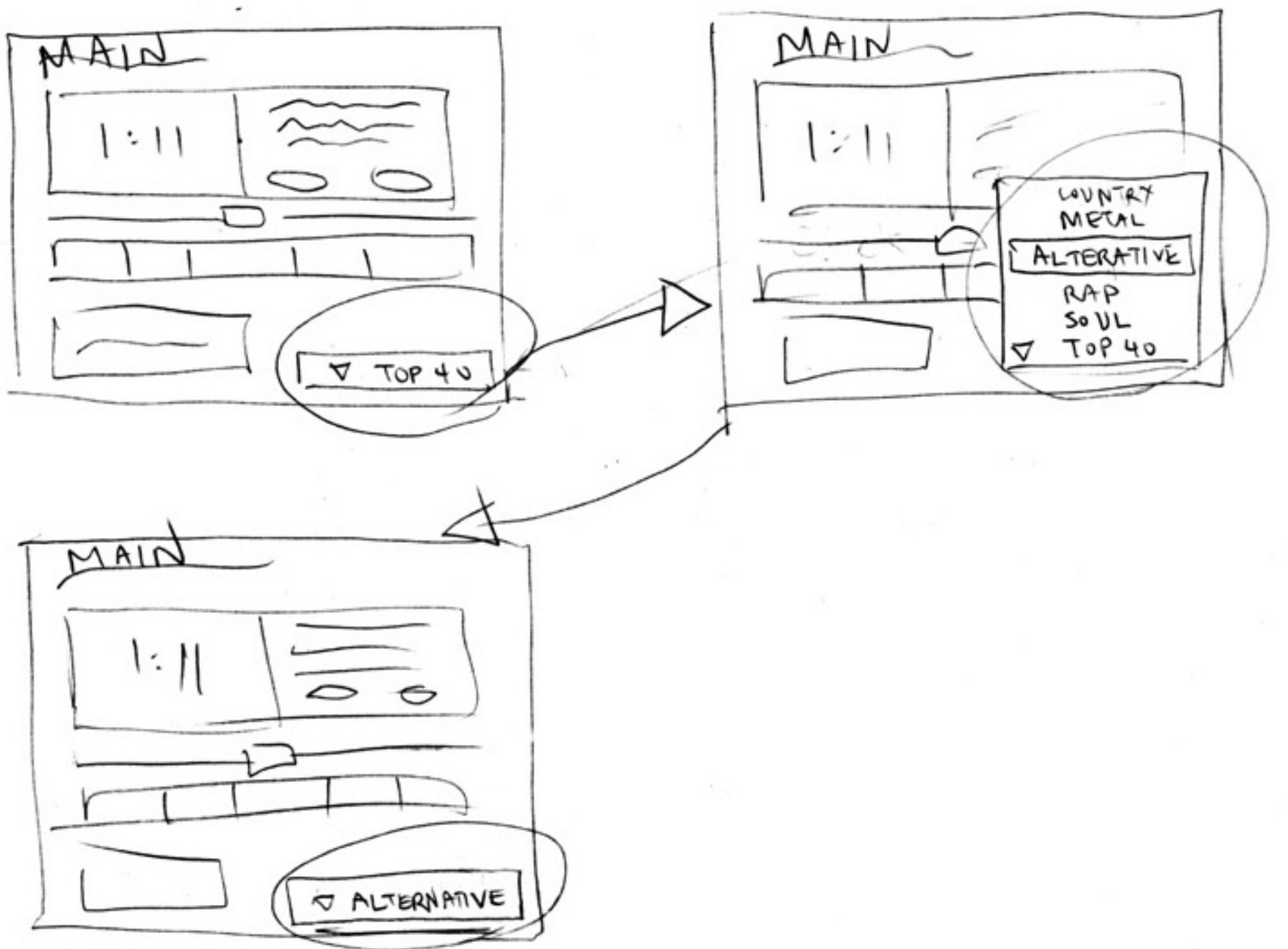
- Describe the purpose of storyboards, as differentiated from sketches and prototypes
- Describe varying purposes of video prototypes (e.g., why the name is a poor fit)

# Reminder on tasks

- Tasks guide your exploration of a design
- Creating scenarios for each task illustrates:
  - What a person does
  - What they see
  - Step-by-step performance of a task with a design

# Sketching and tasks

SCENARIO 1 "I want to listen to alternative music"



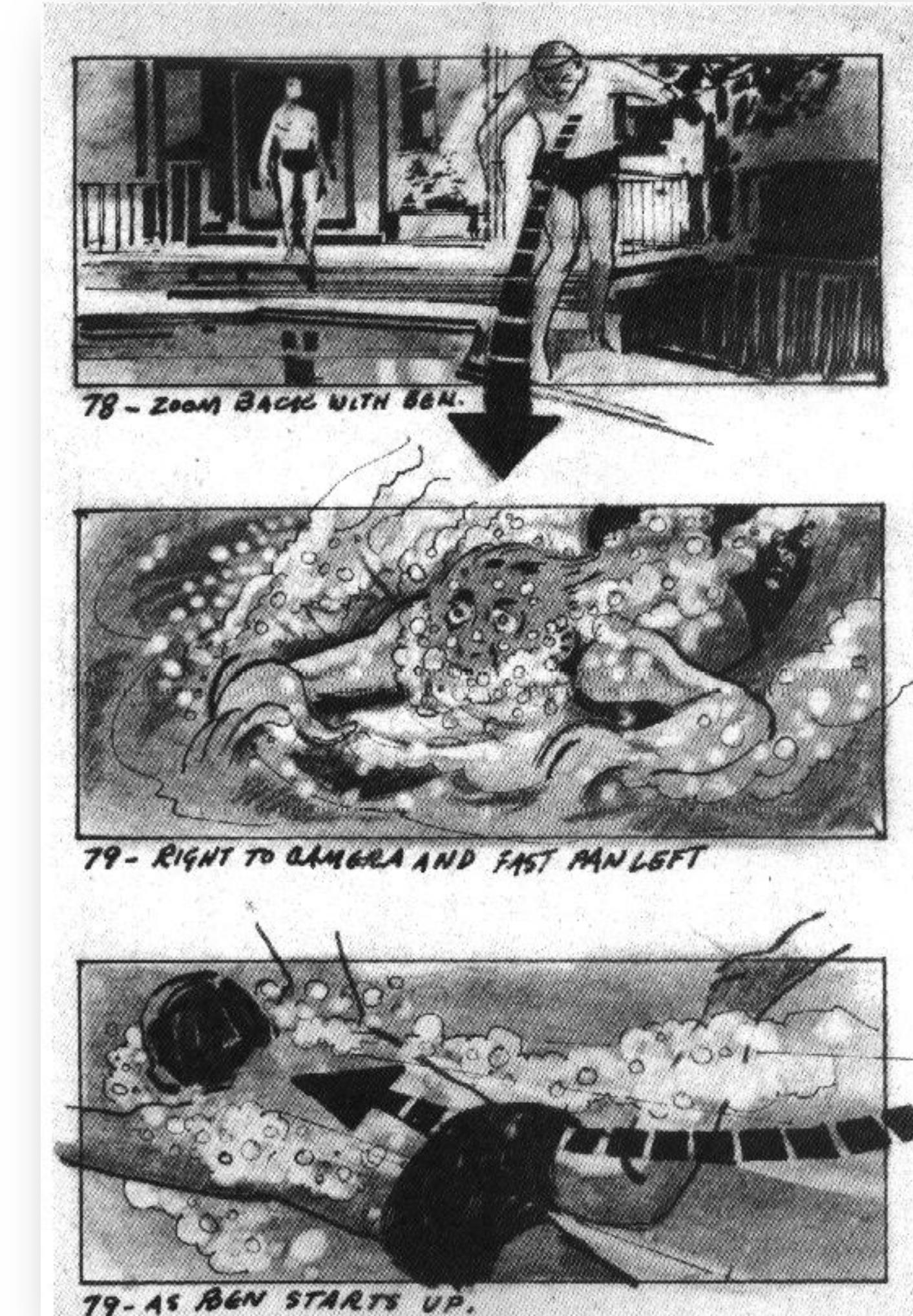
# Illustrating time

- Storyboards come from film and animation
- Give a “script” of important events
  - Leave out the details
  - Concentrate on the important interactions



# Storyboards

- Can be used to explore
- Again, much faster and less expensive to produce
  - Can therefore explore more potential approaches
- Notes help fill in missing pieces of the proposal



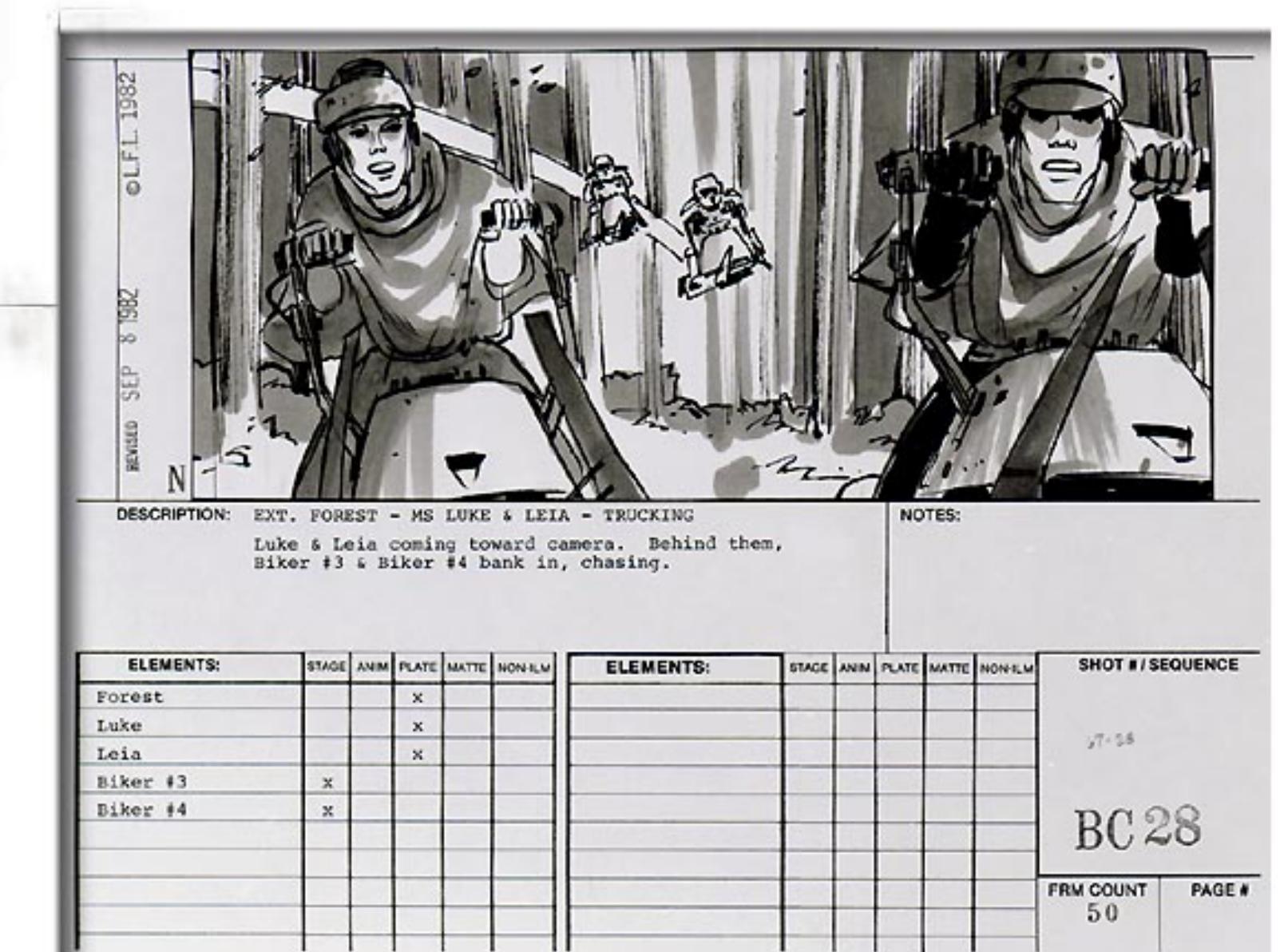
# Storyboards

- Can be used to convey
- Effective storyboards can quickly convey information that would be difficult to understand in text
- Imagine explaining this in text, for various audiences

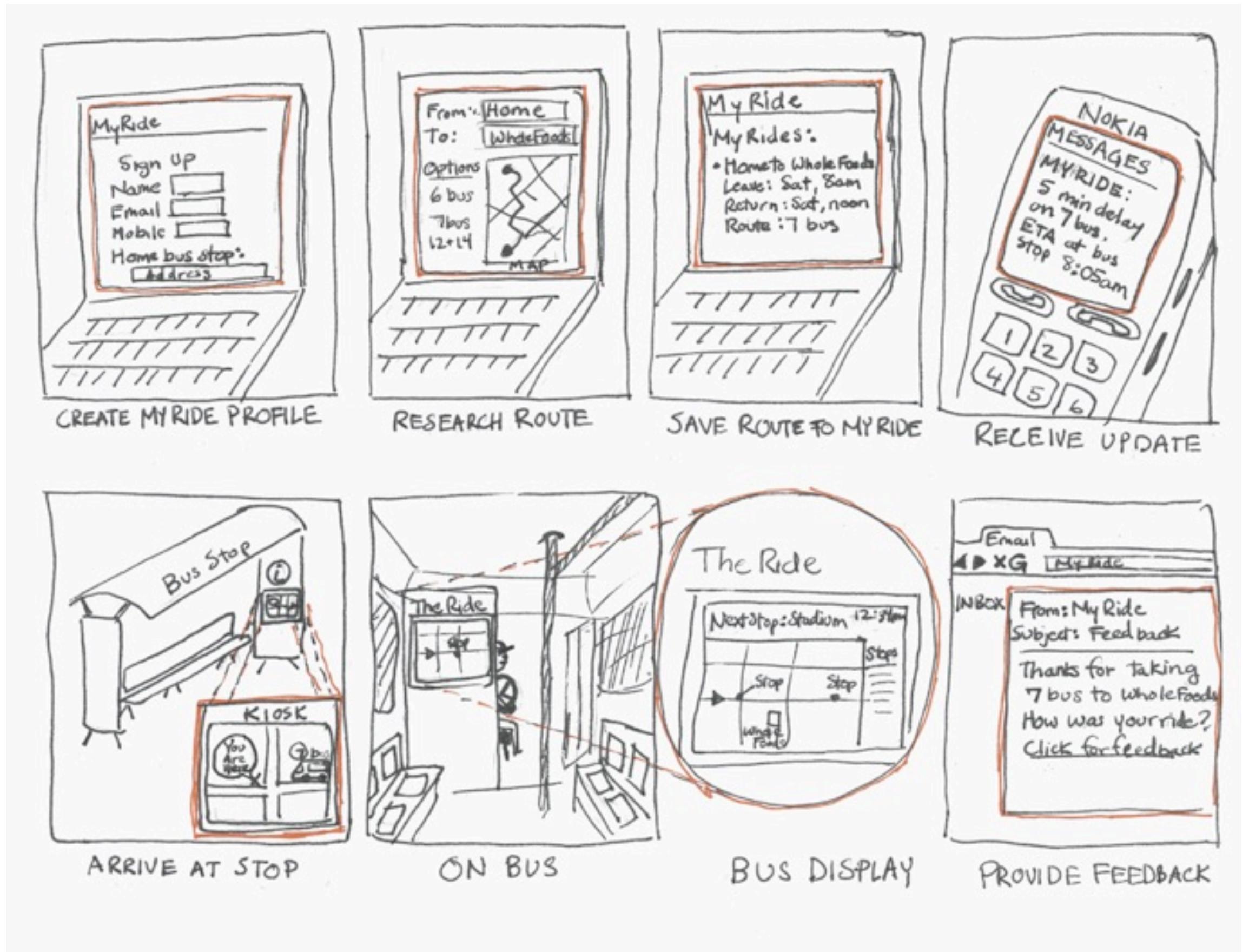


# Storyboards

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

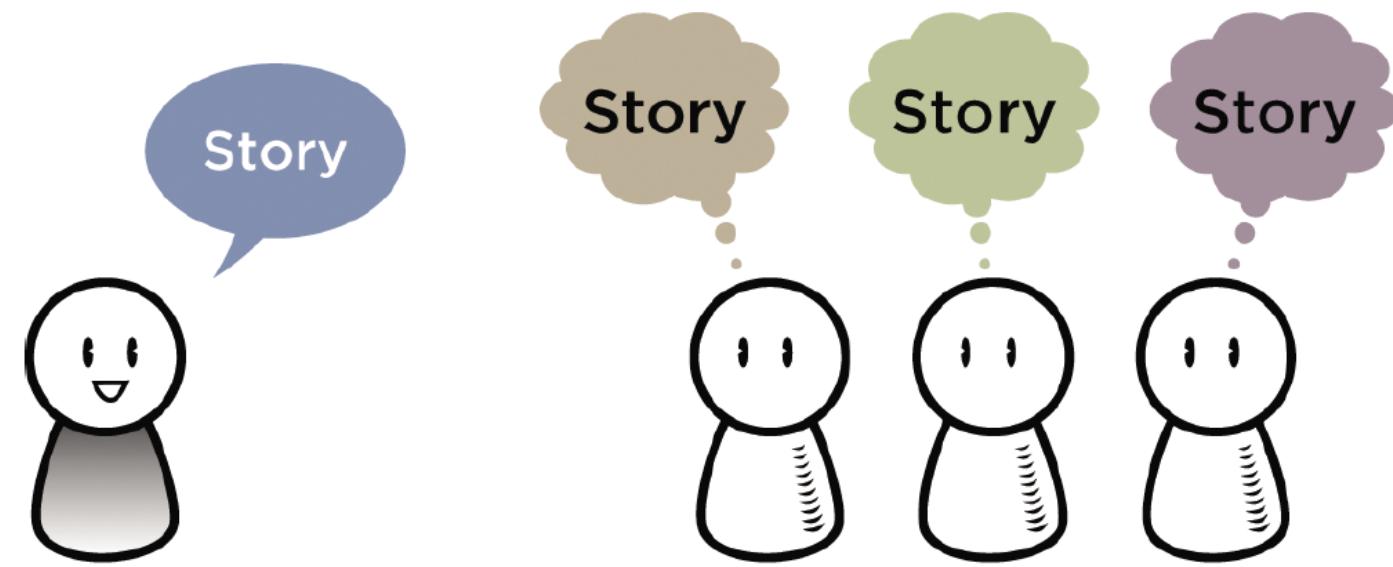


# Basic storyboard



# Storytelling

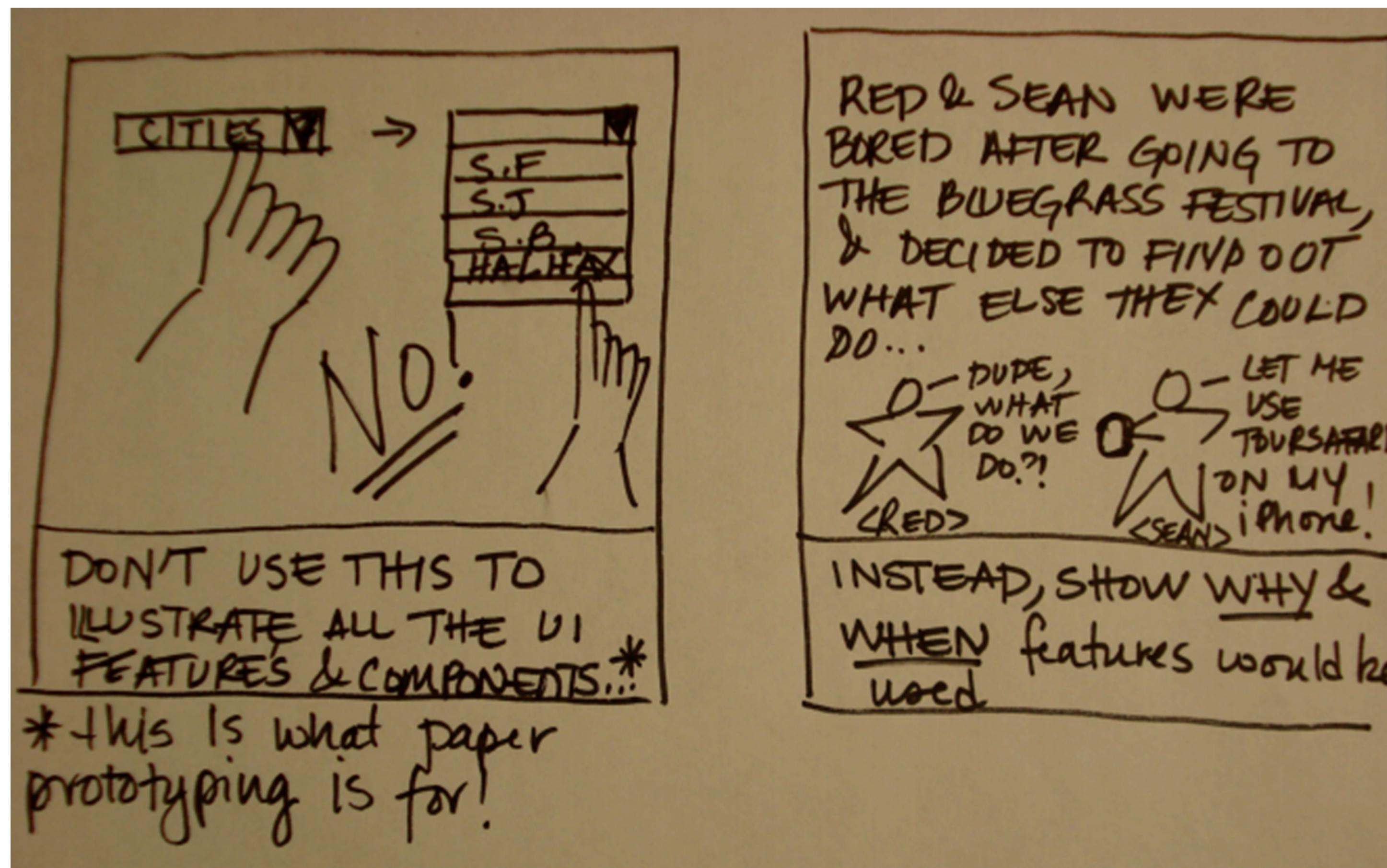
- Stories have an audience
  - Other designers, clients, potential end-users, stakeholders, managers, funding agencies
- Stories need to match audience and purpose



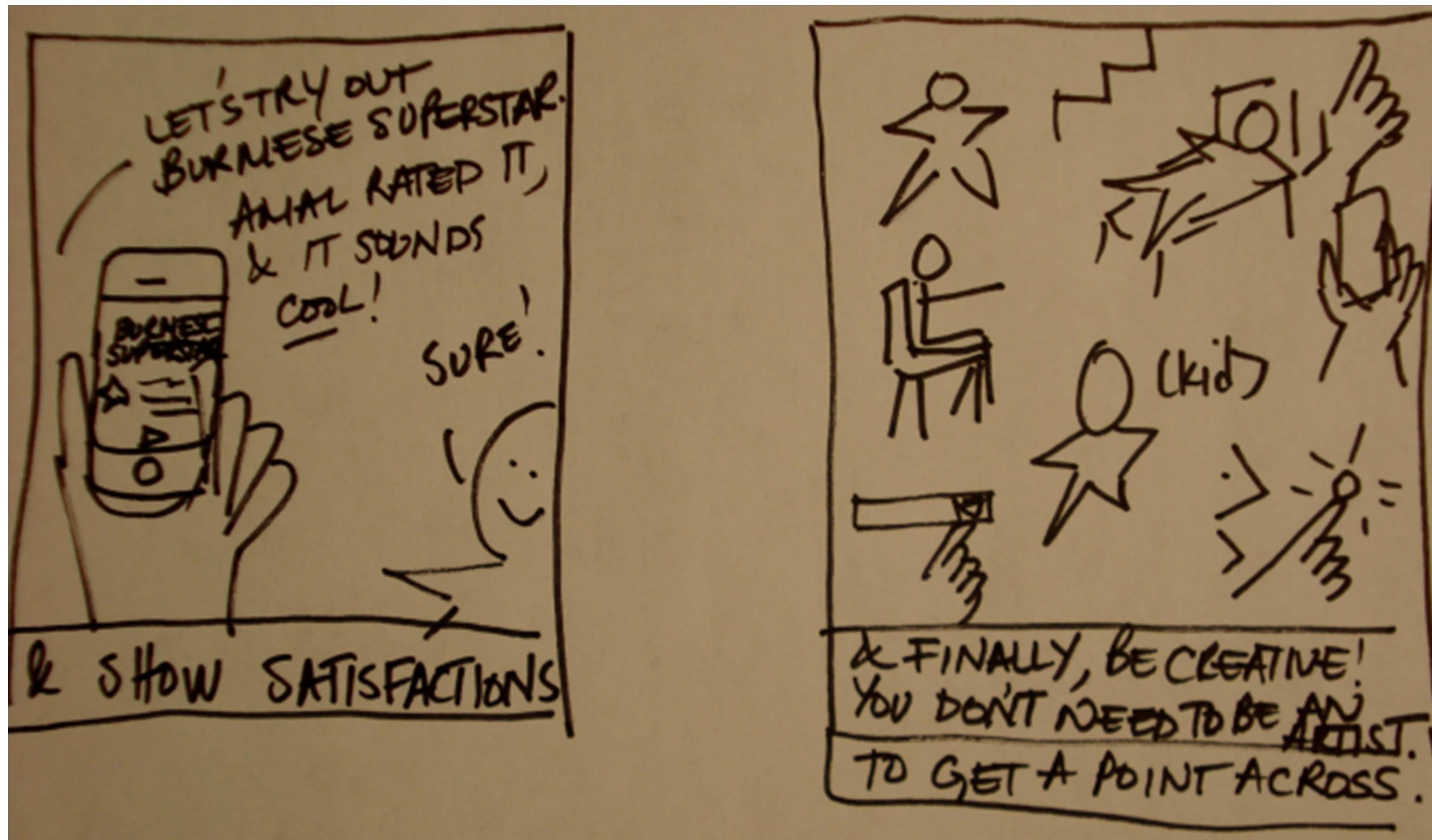
# Potential purpose of a story

- Stories should have a purpose
  - Share information about people, tasks, and goals
  - Giving insight into people who are not like us, convey details that might be lost in generalities
  - Put a human face on analytic data
  - Spark design concepts and encourage innovation
  - Share ideas and persuade on potential value

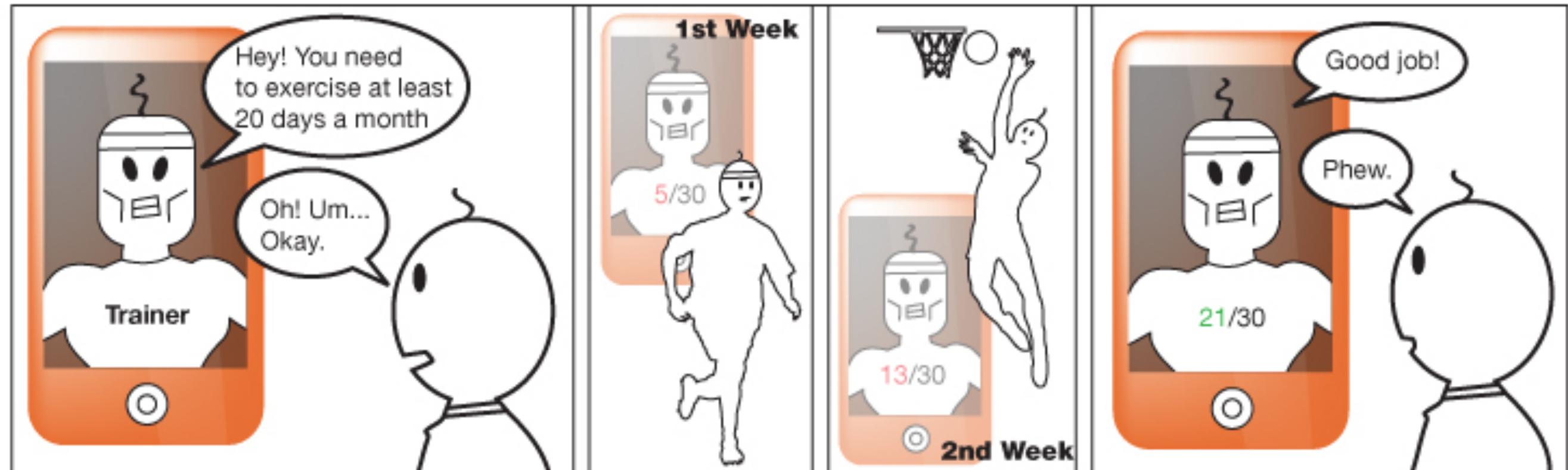
# Amal Dar Aziz's guide to storyboarding



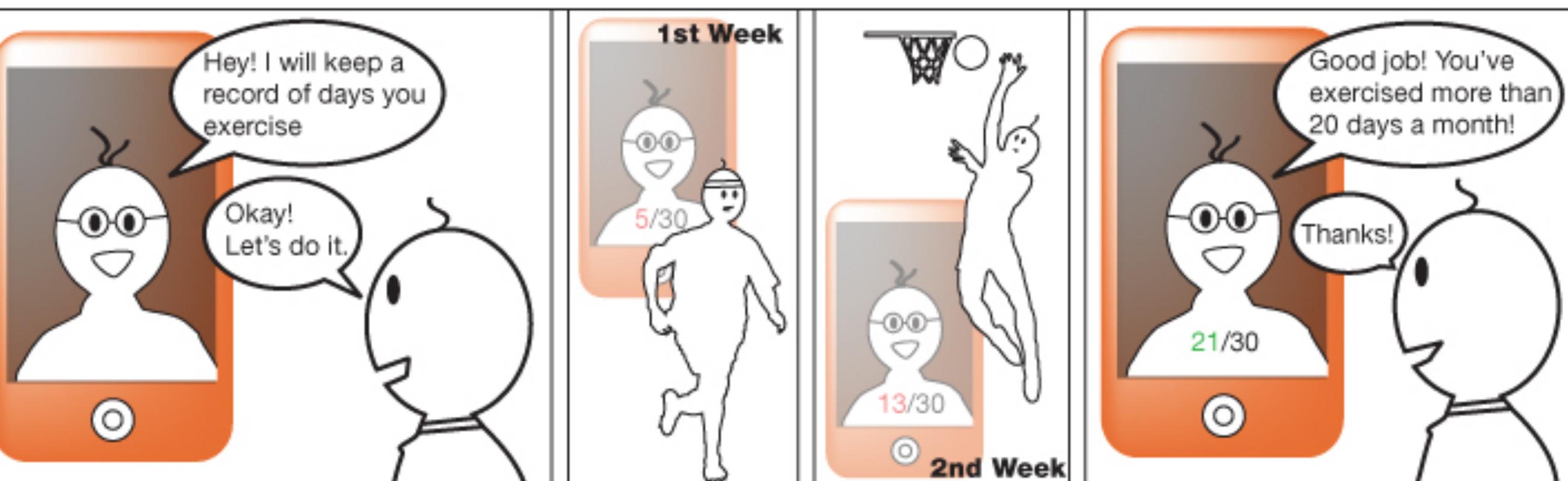
# Amal Dar Aziz's guide to storyboarding



# Storyboards for comparing ideas



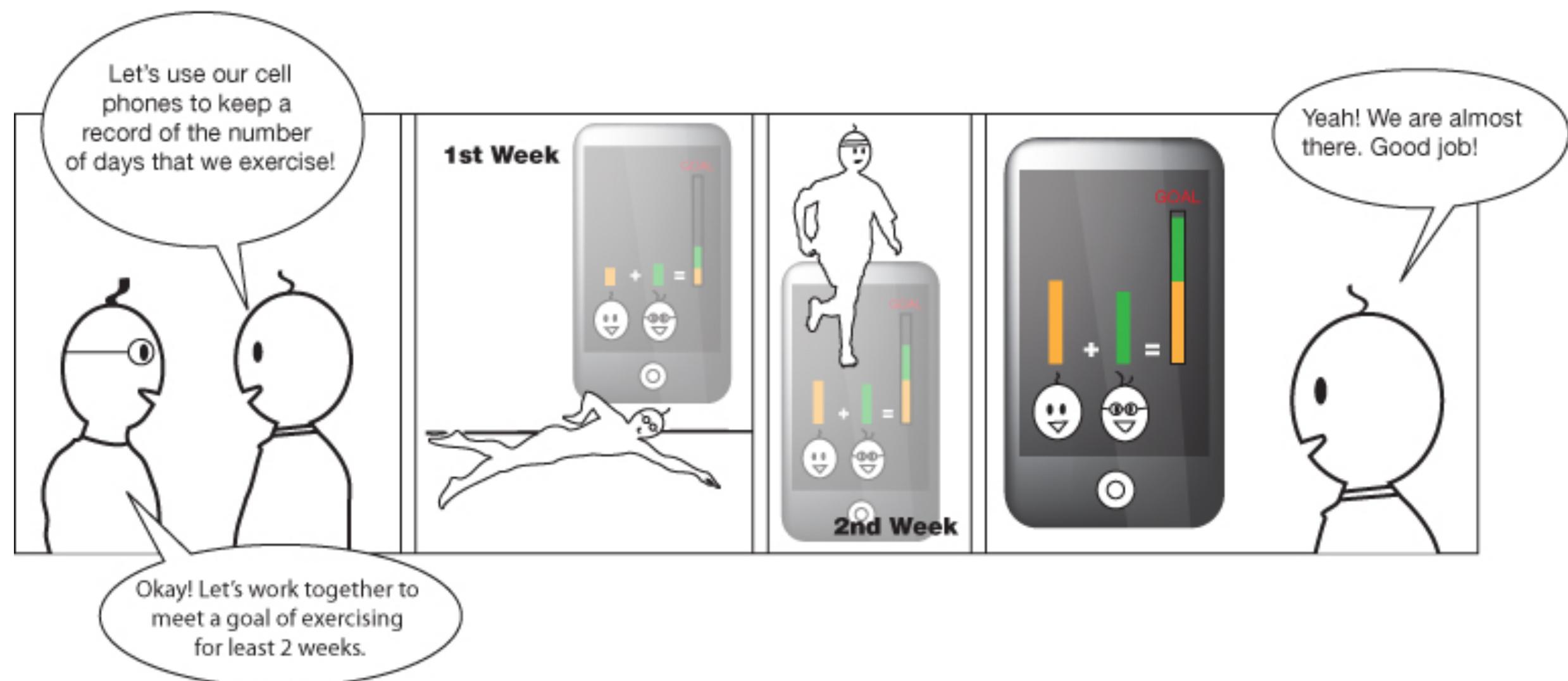
Authoritative



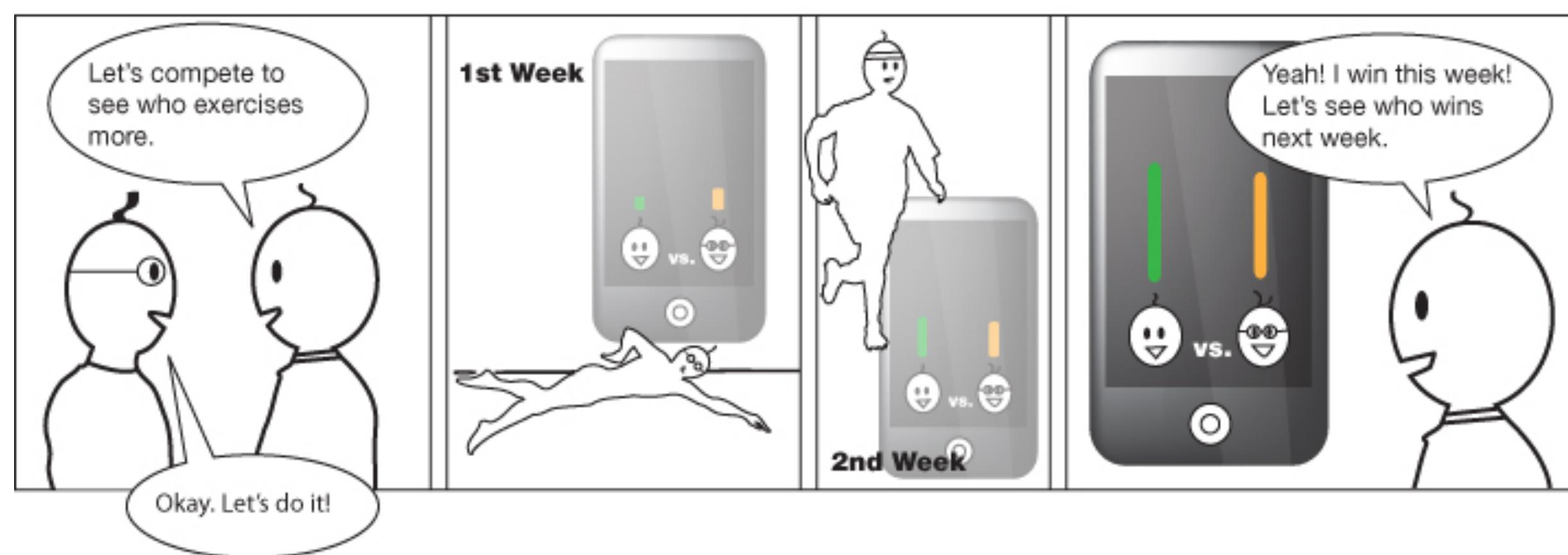
Supportive

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

# Storyboards for comparing ideas



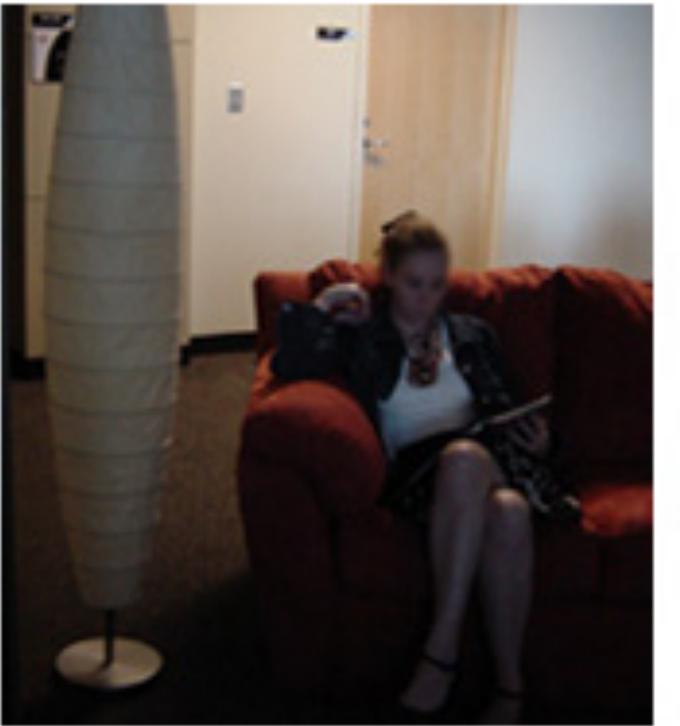
Cooperative



Competitive

# Drawing is hard

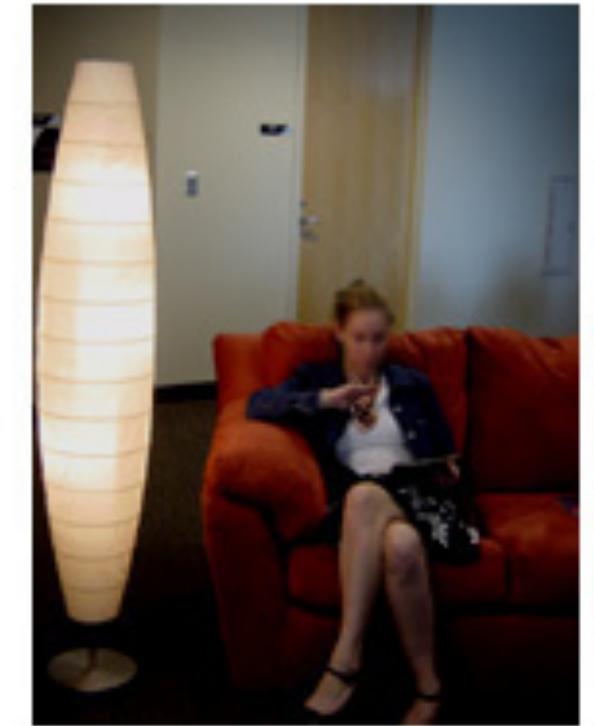
- Will a picture work instead?



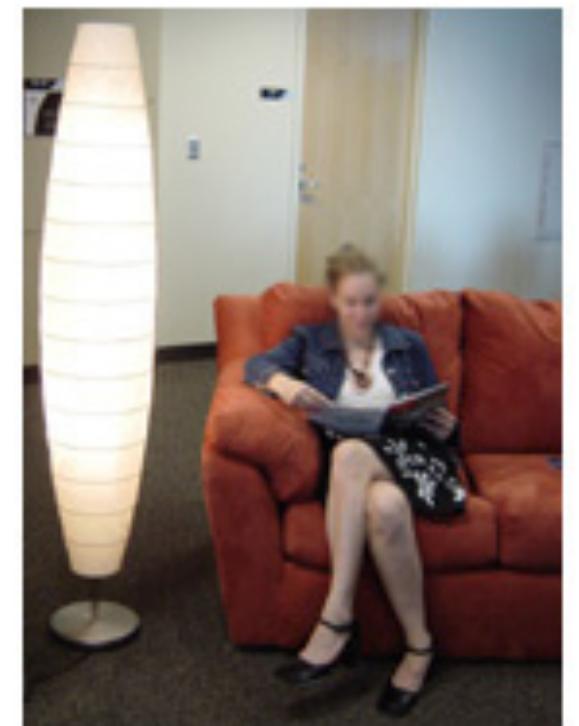
IT IS SO DARK JANE CAN  
HARDLY READ HER BOOK



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

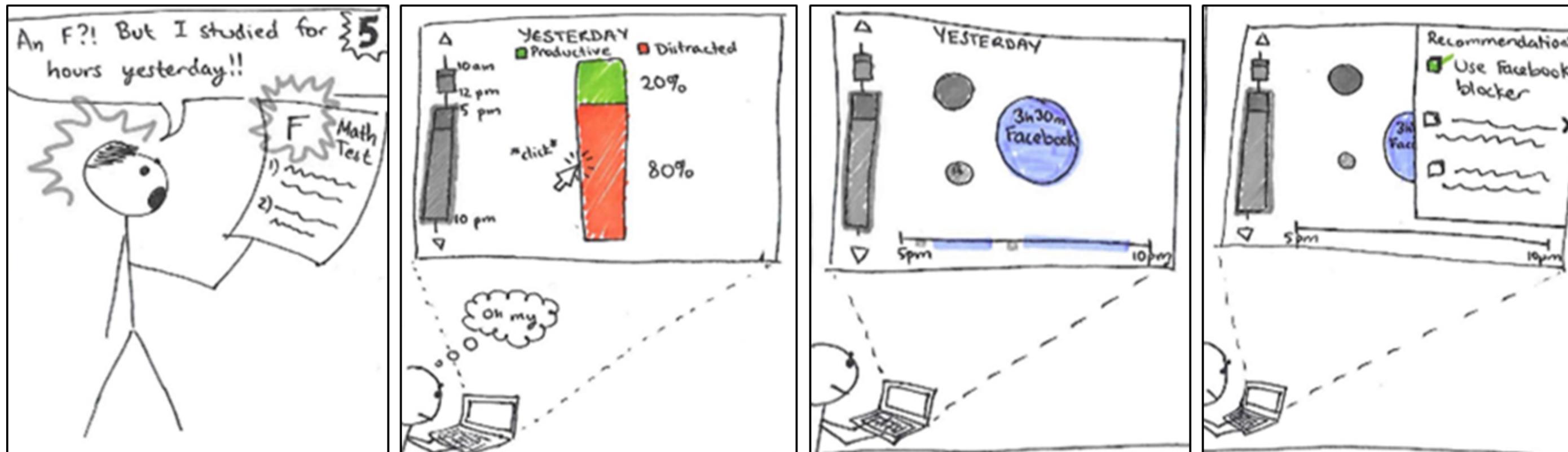


THE LIGHTS TURN ON!



FINALLY, SHE CAN  
READ HAPPILY.

# Selective use of color



# Storyboard activity



- Sketch a storyboard for the following scenario:
  - Mary Jo is using AutoAuto, an app to help people keep track of their car maintenance records and expenses.
  - On her way to work, Mary Jo stops at a gas station to fill up. The app reminds her to take a photo of the odometer and the gas pump.
  - The app tells her to an oil change is due and calls her favorite car place to schedule an appointment.

# Storyboard activity



<https://freshpractices.com/fresh-practices/storyboards/>

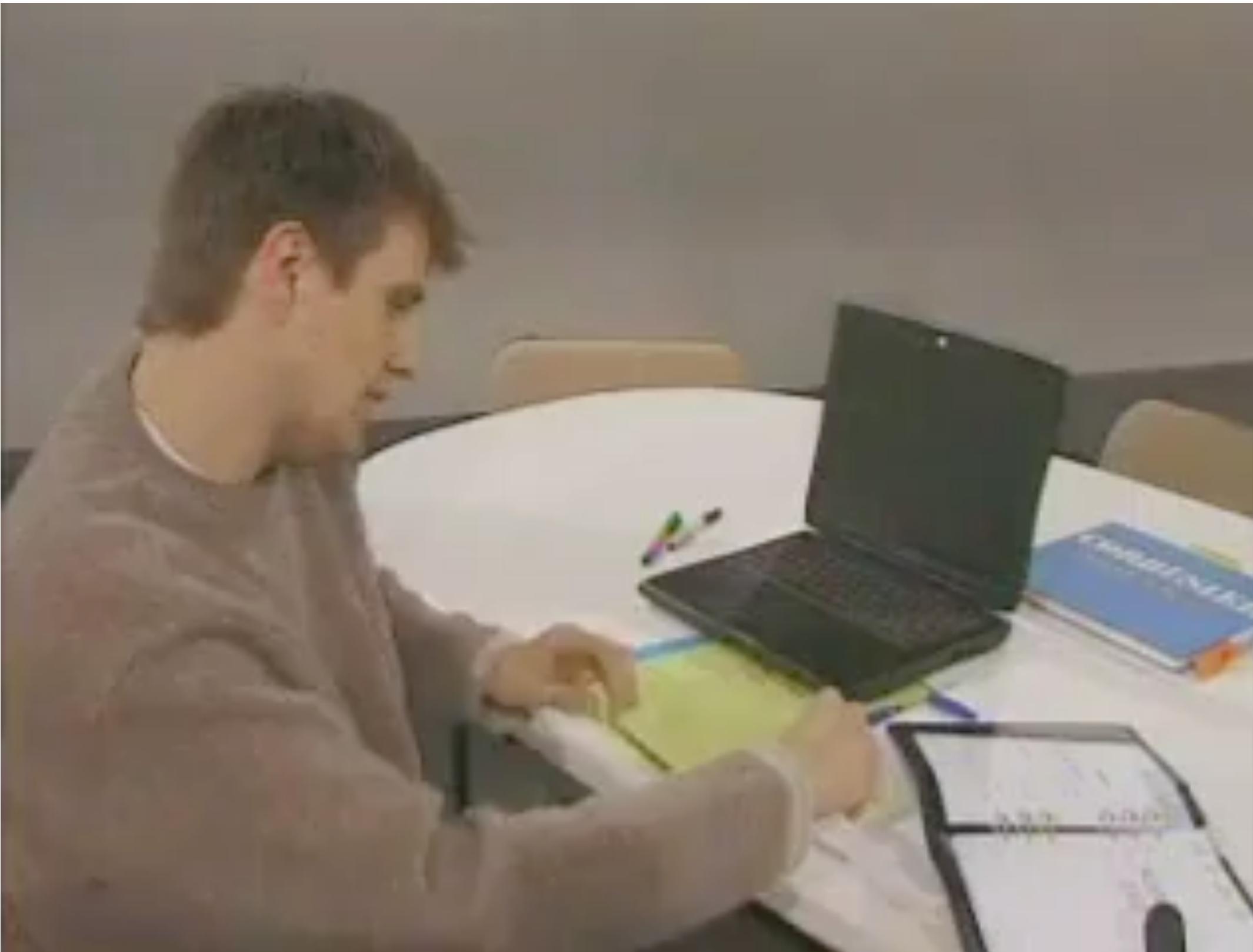
# Value of animation or video

- Can illustrate critical timing
- Can be more engaging than written or storyboard
- Can help convey emotion (e.g., voice, music)
- Can show interactive elements more clearly
- Can be self-explanatory
  - If done well, can be an effective pitch
  - But, you need to keep it quick and effective

# Most important trick: stop motion



# Most important trick: stop motion



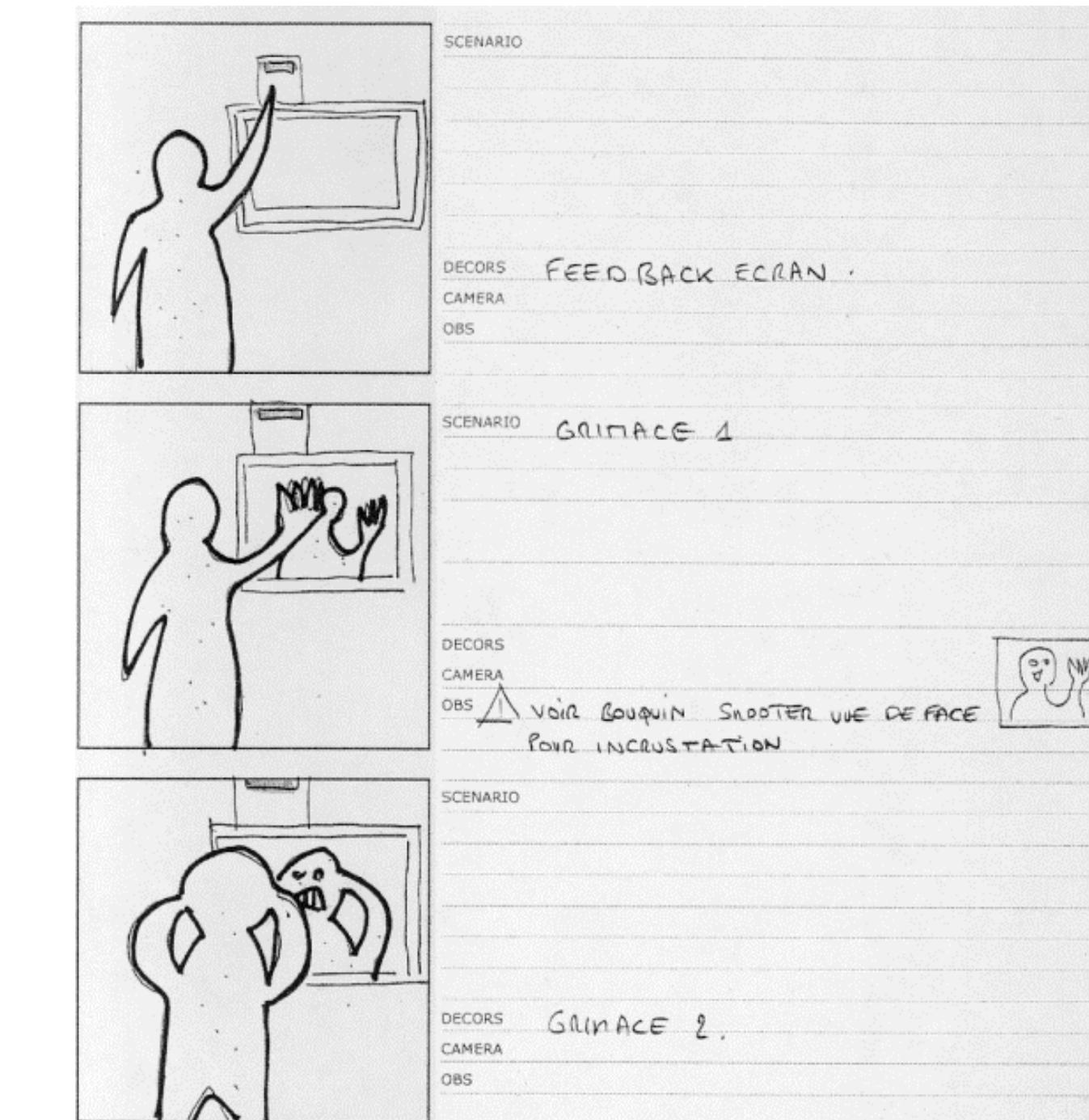
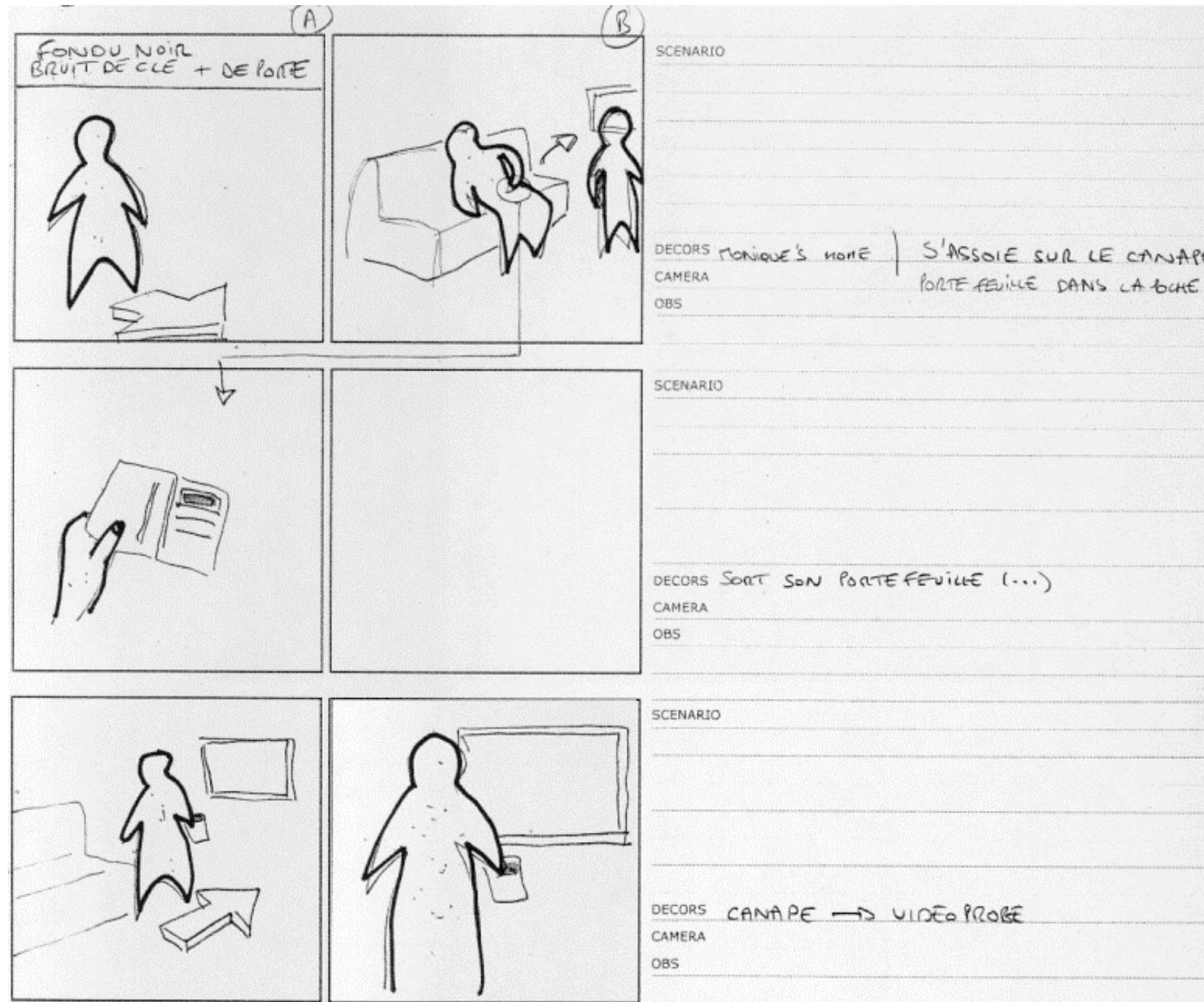
# Video prototypes

- May build on paper prototypes, existing software, and images of real settings
- Narration optional

# Steps to create a video prototype

- Review needfinding data
- Review ideas from design brainstorm
- Create text for usage scenarios
- Develop storyboard, with each scene on a card, illustrating each action/event with annotations explaining what is happening

# Steps to create a video prototype



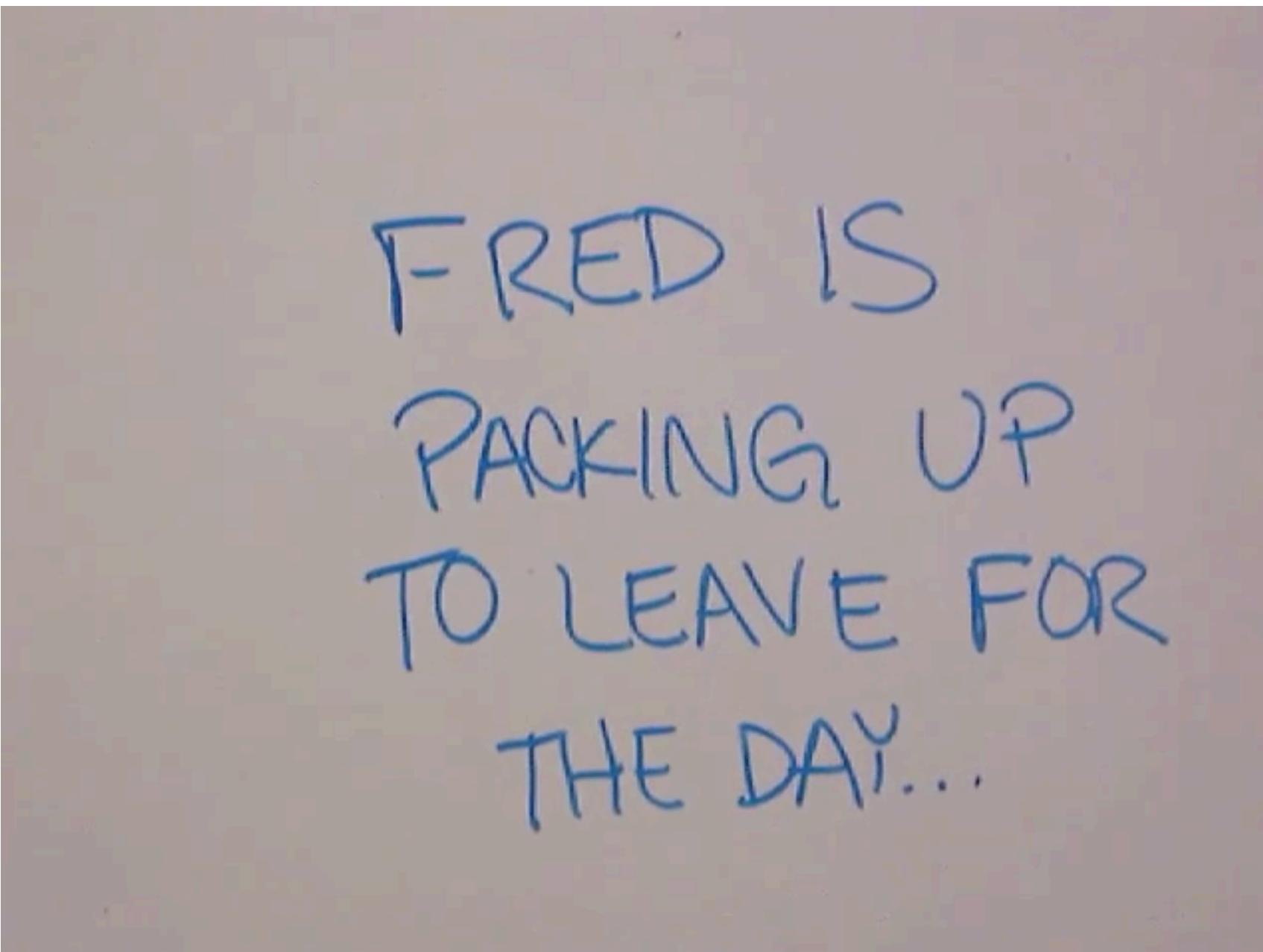
# Steps to create a video prototype

- Shoot a video clip for each storyboard card
  - Avoid editing in the camera, just shoot scenes
- Use titles to separate clips
  - Like a silent movie
- Digital changes these tradeoffs, but respect the spirit of doing this quickly to get the point across
  - If you make an error, just reshoot it

# Lessons from other video prototypes

- Narration, pace, and flair
- Using projectors and simple props
- Watch for pace and scene relevance
- Can be playful while keeping pace
- Choose appropriate fidelity

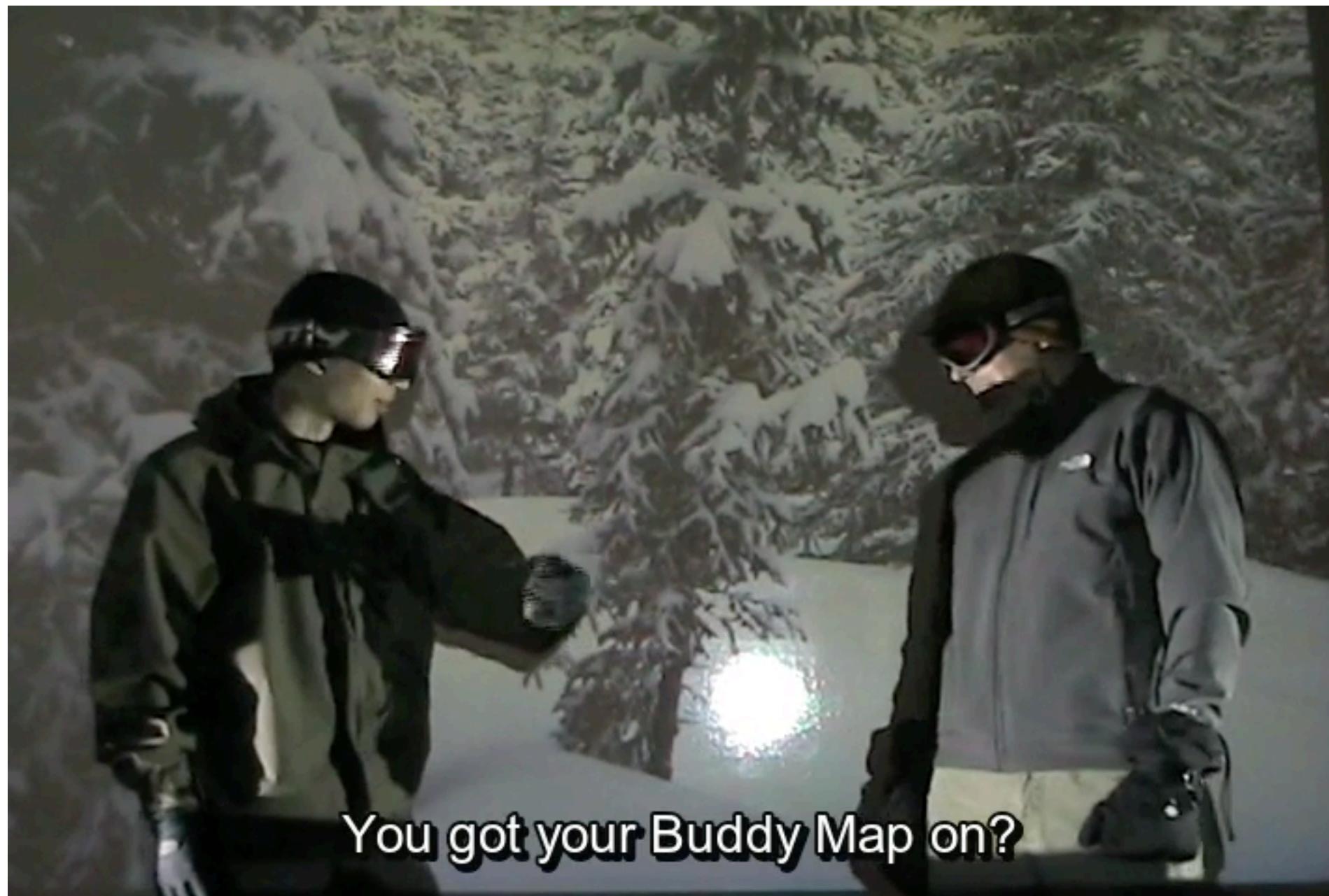
# Narration, pace, and flair



# Narration, pace, and flair



# Using projectors and simple props



# Watch for pace and scene relevance



# Can be playful while keeping pace



# Choose appropriate fidelity



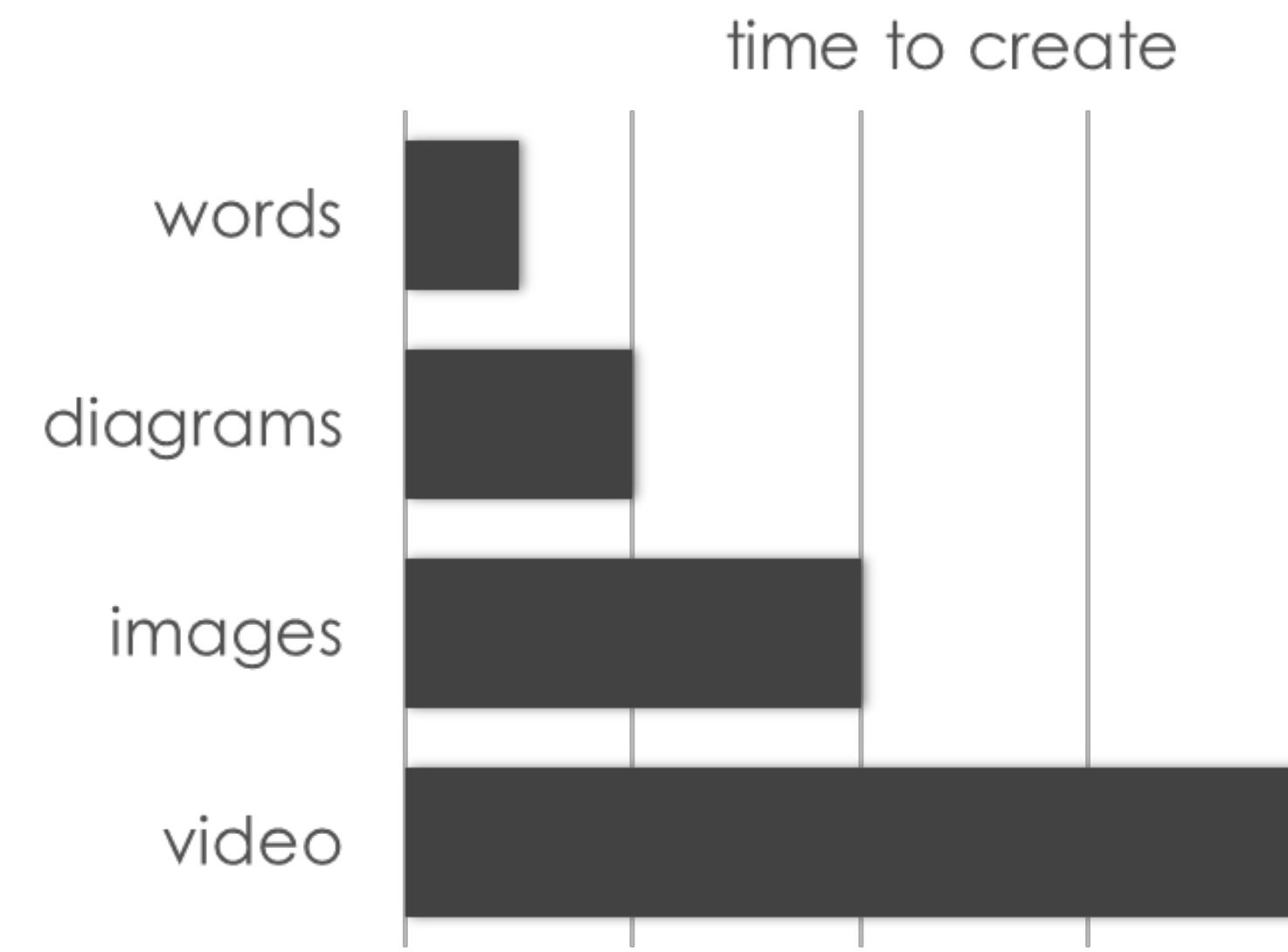
FLUIDUM



FLUIDUM

# Fidelity takes time: stay low fidelity

- If you need a video,  
do you really need footage?
- If you need an animation,  
do you really need Flash?
- If you need a photo,  
do you really need to shoot?



Completely made-up bar length

But it is probably at least this bad

# Range of purposes

- Illustrating low-level interaction techniques
- Illustrate designs in context, convey satisfactions
- High-level visions

# Corning's "A day made of glass" (2011)



# Today's goals

**By the end of today, you should be able to...**

- Describe the purpose of storyboards, as differentiated from sketches and prototypes
- Describe varying purposes of video prototypes (e.g., why the name is a poor fit)

# **IN4MATX 231:**

# **User Interface Design & Evaluation**

**Class 8:  
Storyboarding &  
Video Prototyping**

Daniel Epstein