

VIDEOPROTOTYPING

Representing complex relationships, new behaviours and attitudes are an integral part of interaction design.

These can be represented through many means including sketching and making physical prototypes.

However, capturing a journey **over time** requires a linear medium like **video**.

Why Prototype ?

Prototypes help to validate the value of new ideas and test initial assumptions.

Prototypes can also help to convince others and yourself.

Benefits:

Low resource and time investment

Faster feedback and a participatory approach

Early Validation in the development life-cycle

"Just Enough Prototyping"

Understand your audience and choose the right level of resolution and fidelity.

Judge the time and resources available.

Go for the easiest and simplest track, don't overdo you prototype for a given context.

Low Fidelity

High Fidelity



Open Discussion

Sharp Opinions

Prompting Required

Self Explanatory

Quick and Dirty

Deliberate and Refined

Early Validation

Concrete Ideas

Low Resolution

High Resolution



Less Details

More Details

Focus on core interactions

Focus on the whole

Quick and Dirty

Deliberate and Refined

Early Validation

Concrete Ideas

Concept Development **applied**

Storyboard and **Keyframes**

Example: „Ensemble Computing“

Client : INTEL

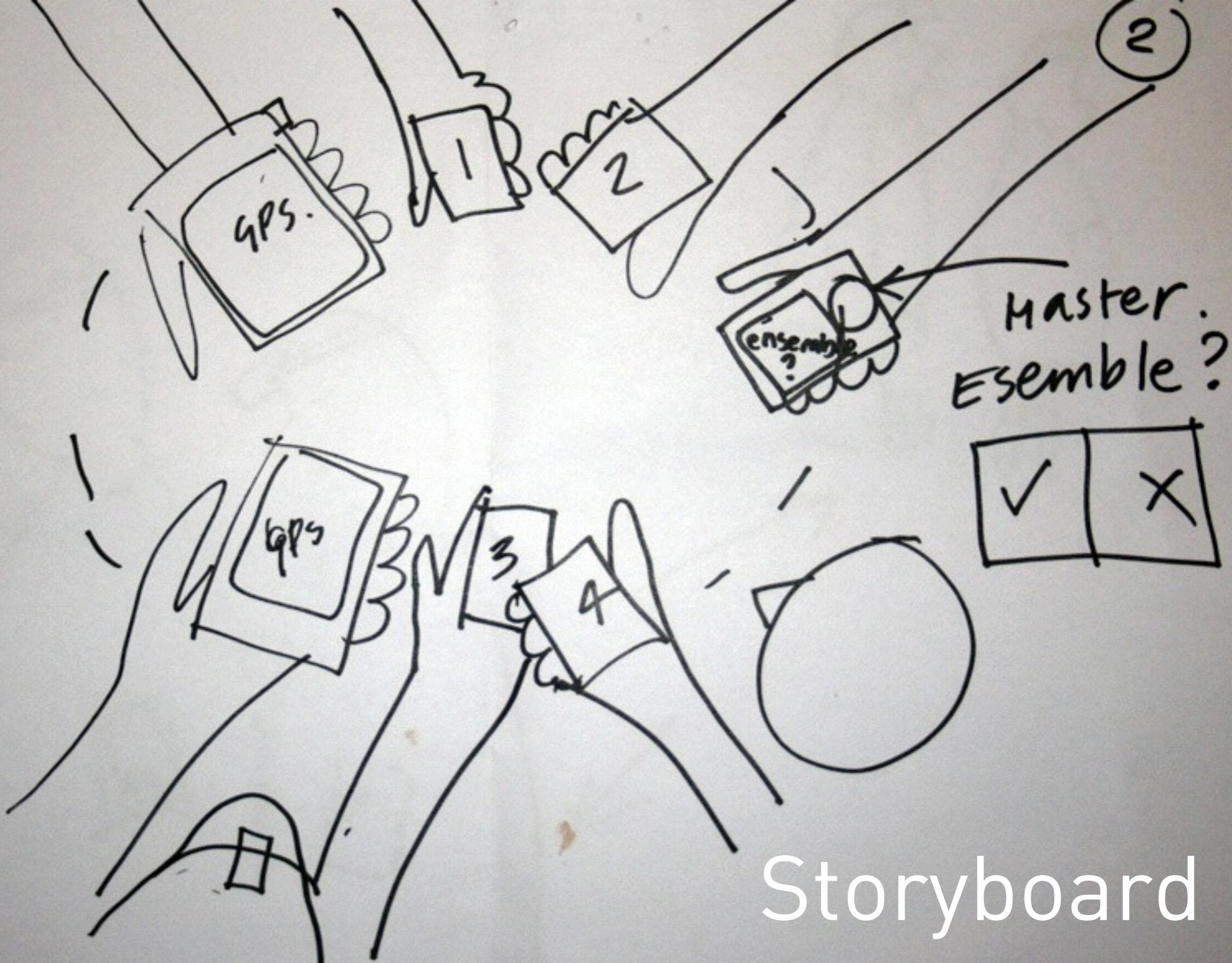
Deliverable : 4 High Fidelity Video Scenarios

First Step

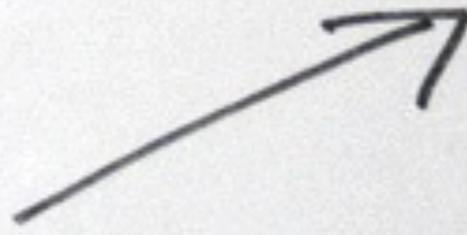
Scenario generation



Brainstorming

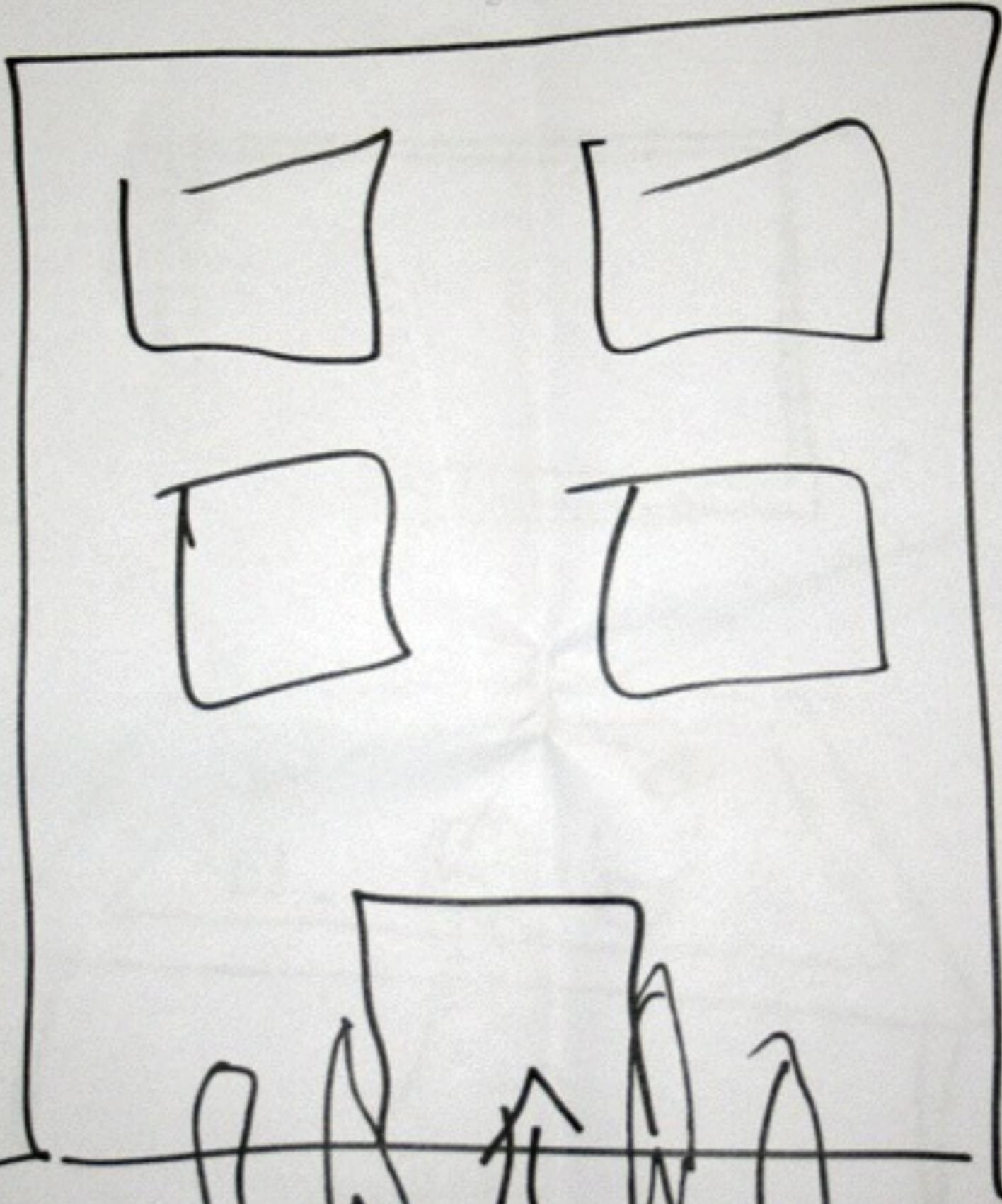


Storyboard

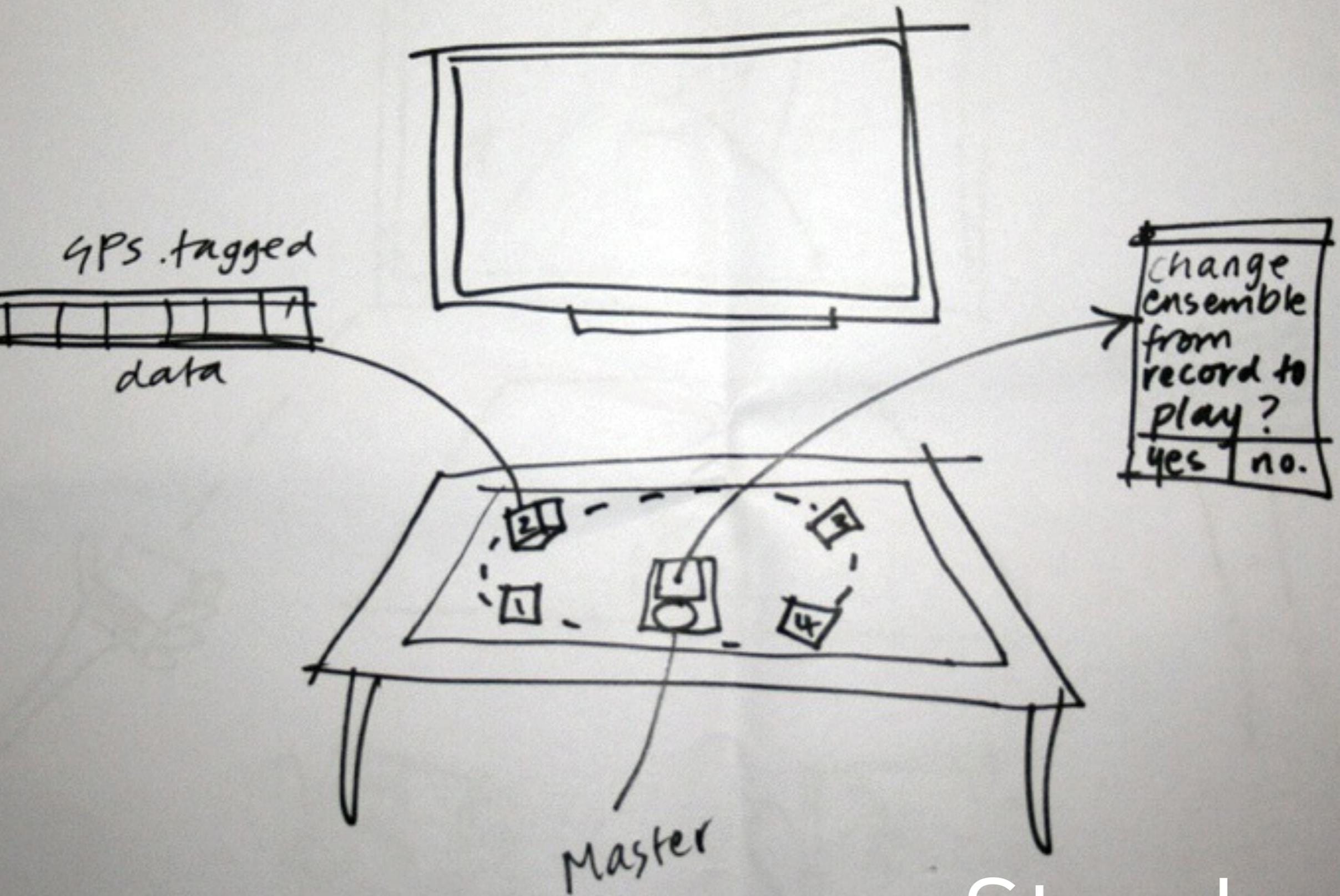


Storyboard

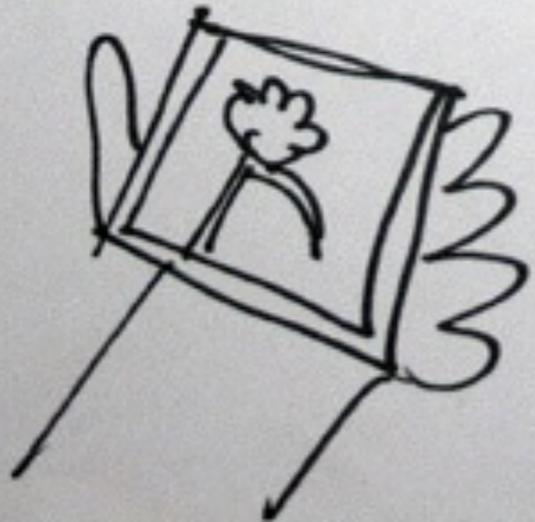
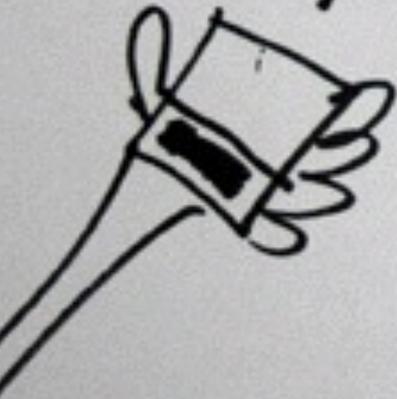
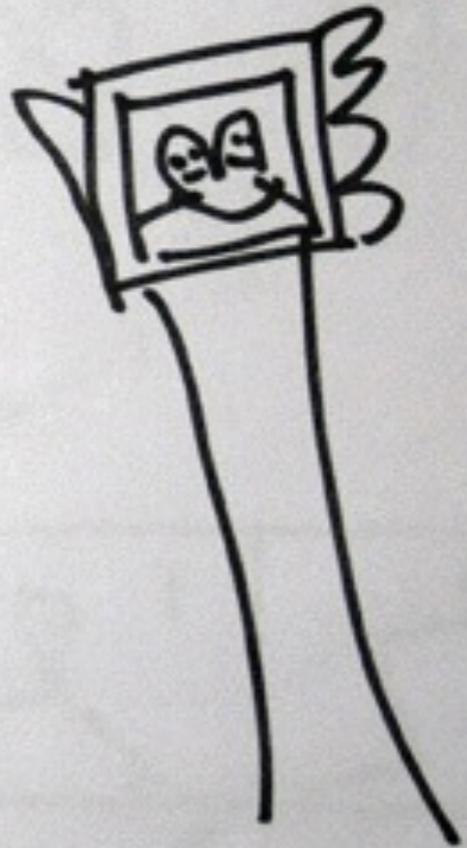
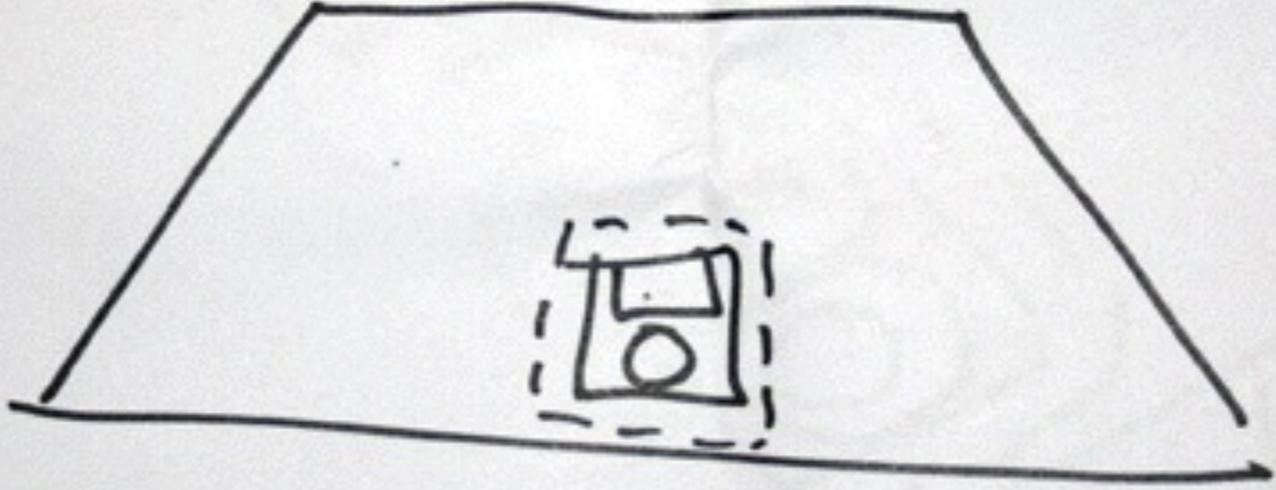
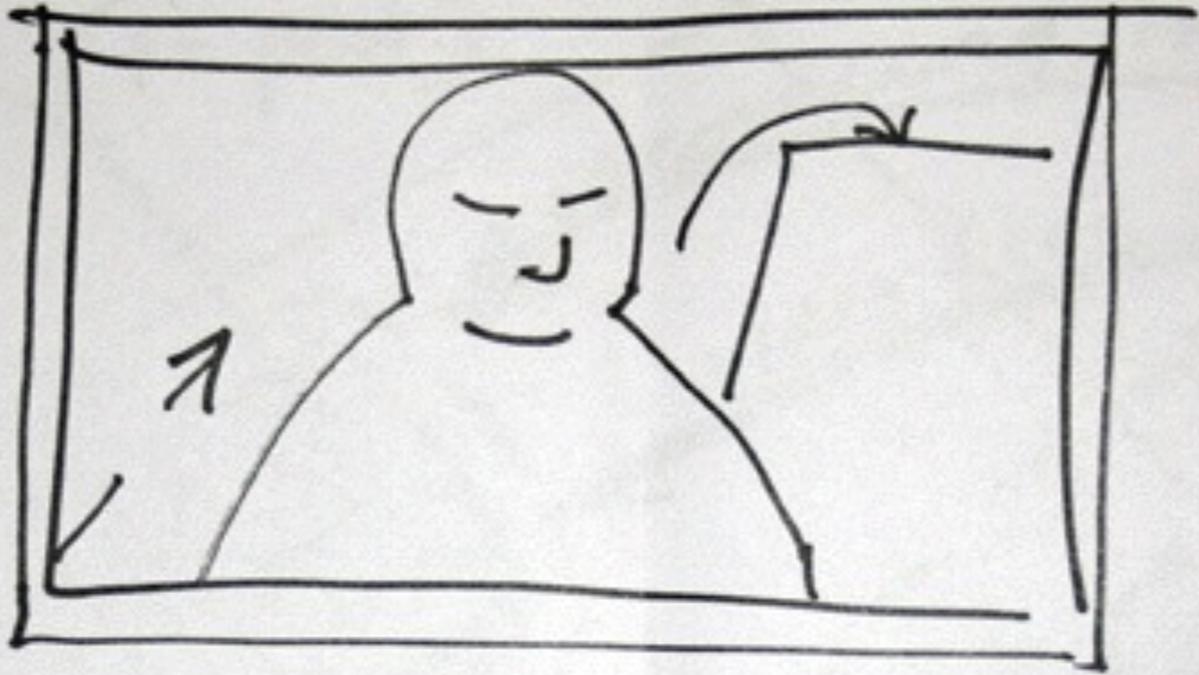
5



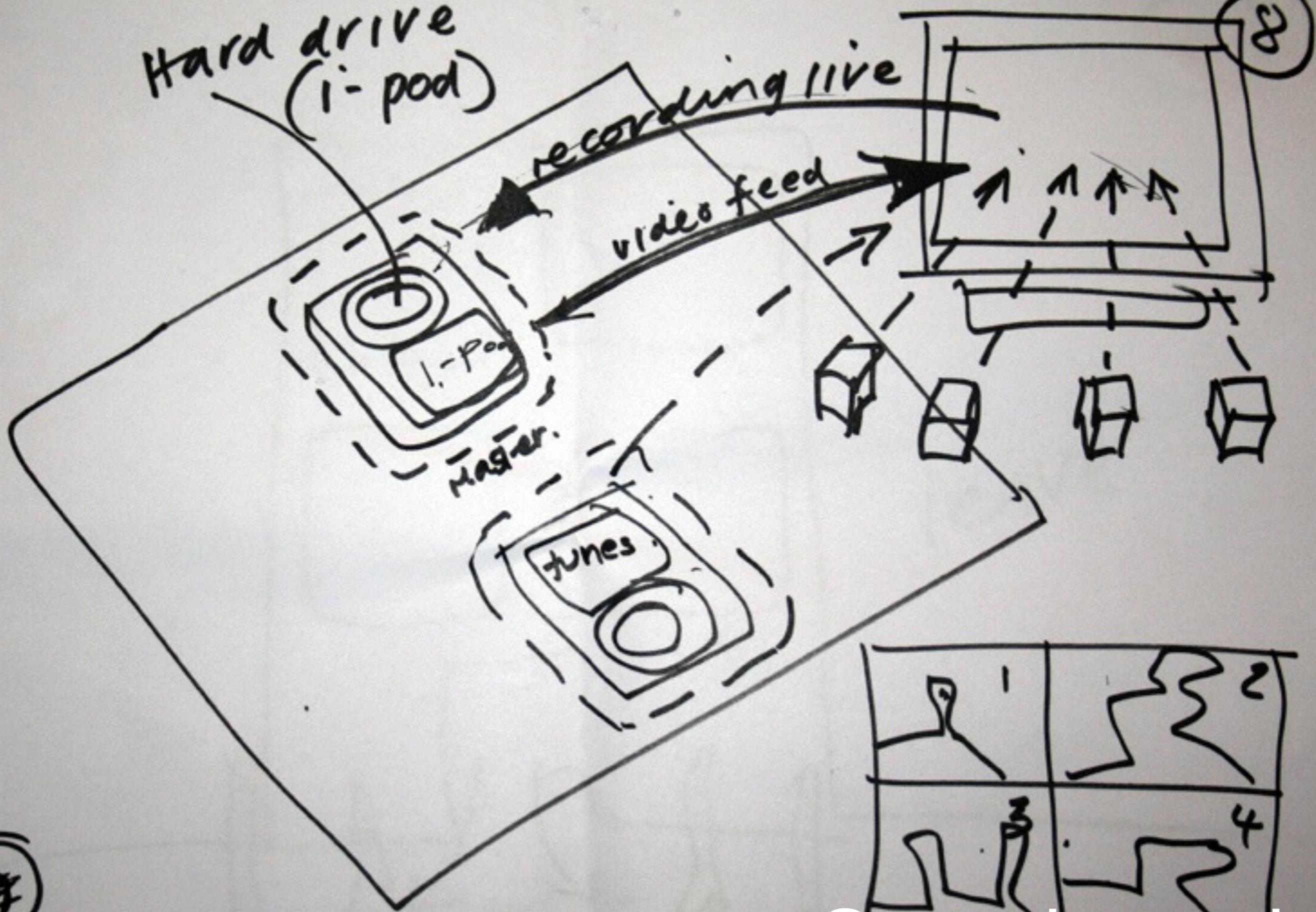
Storyboard



Storyboard



Storyboard



Storyboard

Second Step

Storyboard presentation



Mid-Presentation

Third Step

Shooting the Keyframes

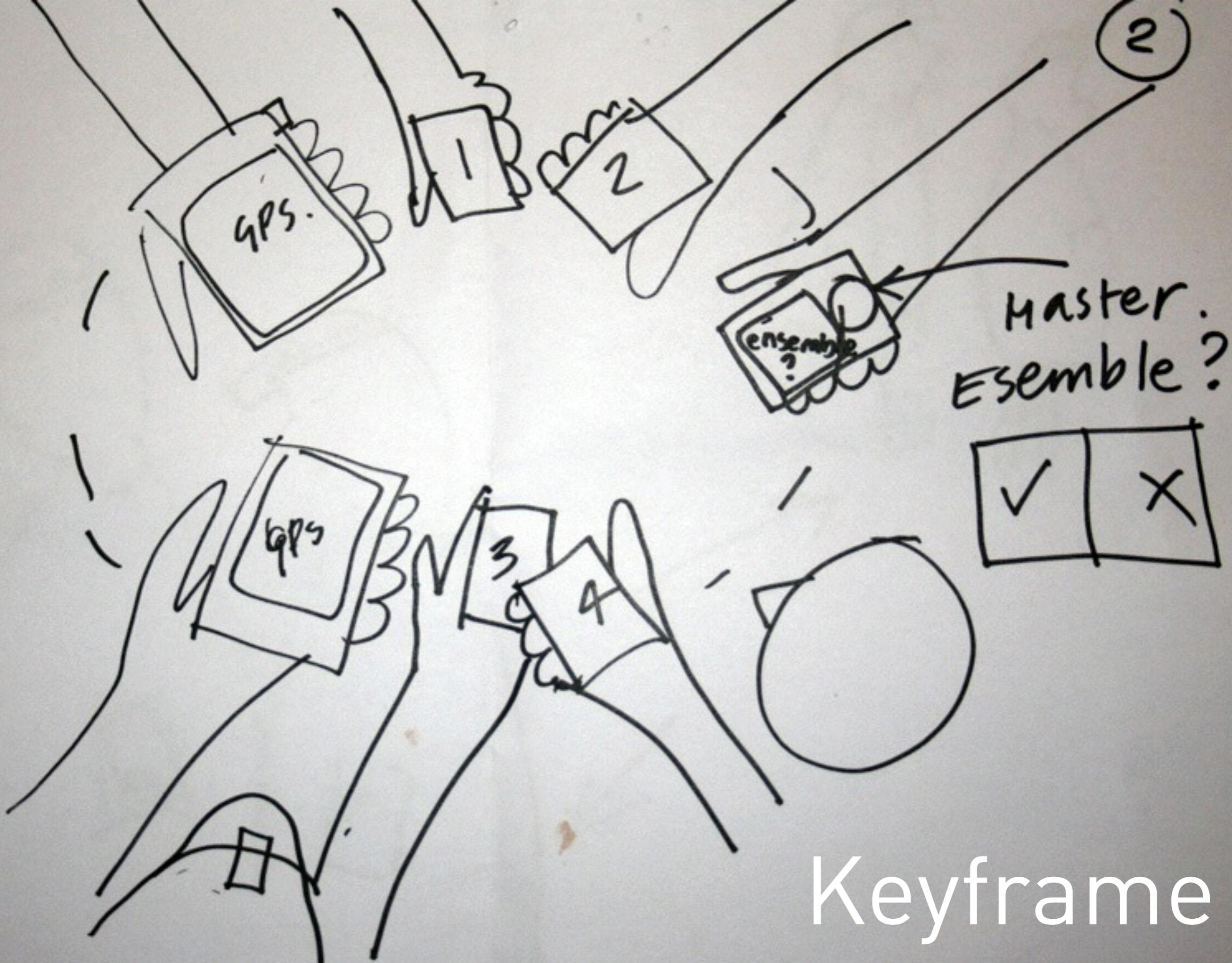


Video Shooting



Video Shooting

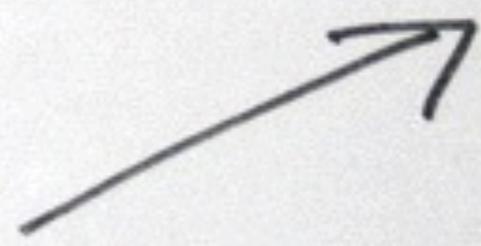




Keyframe



Video Shooting

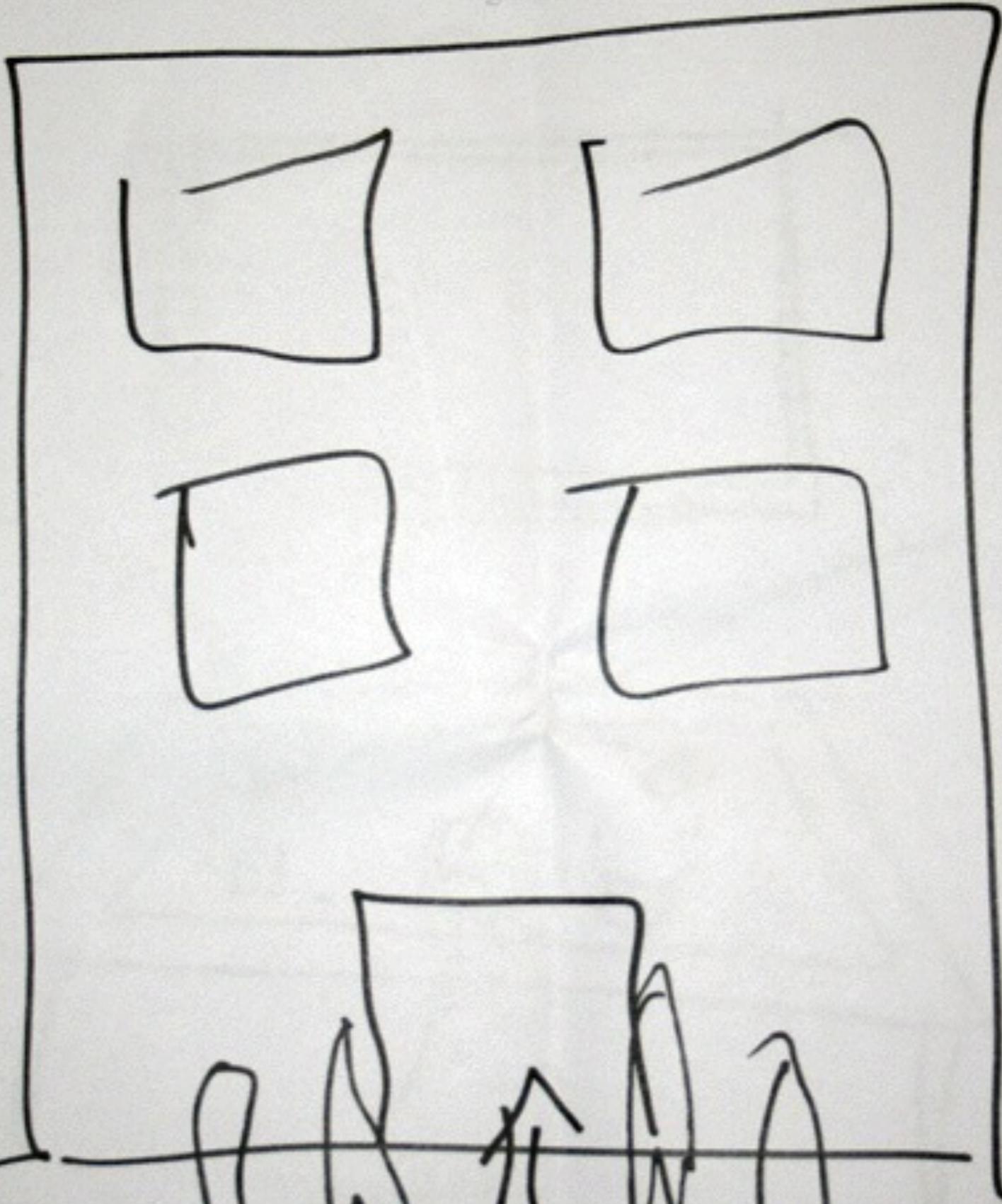


Keyframe



Video Shooting

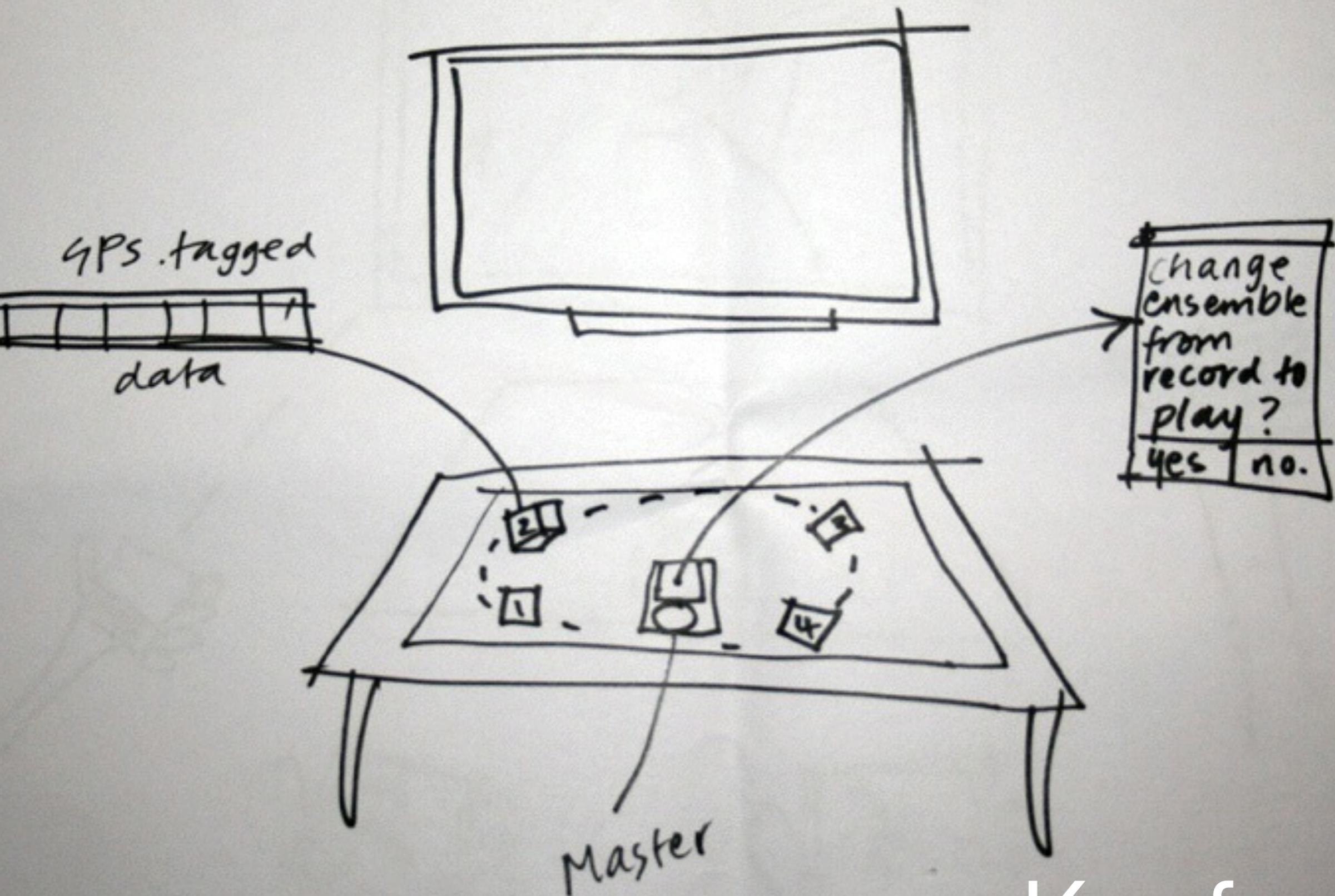
5



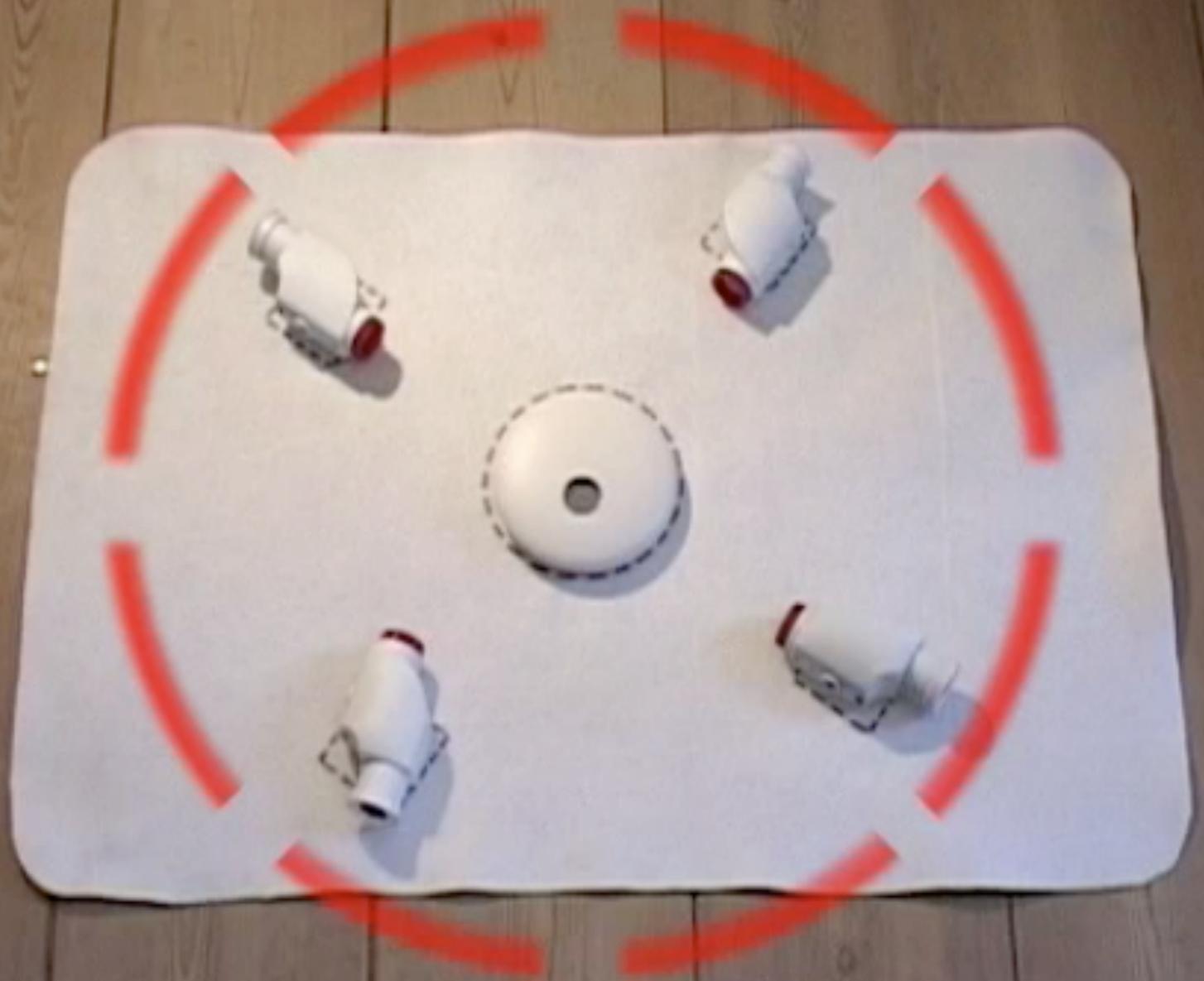
Keyframe



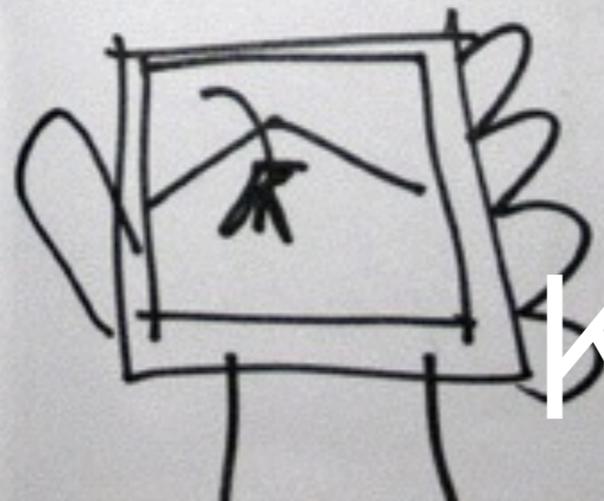
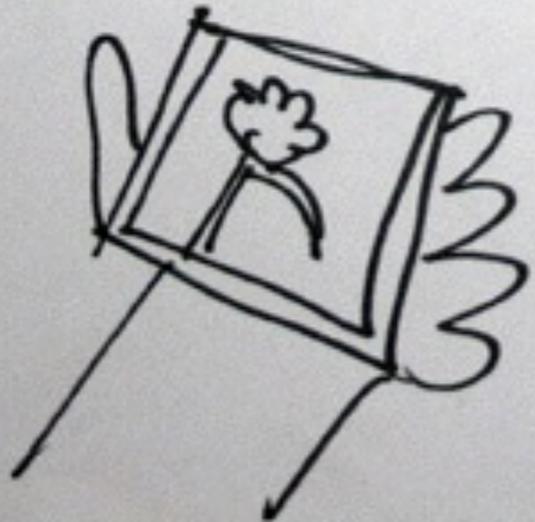
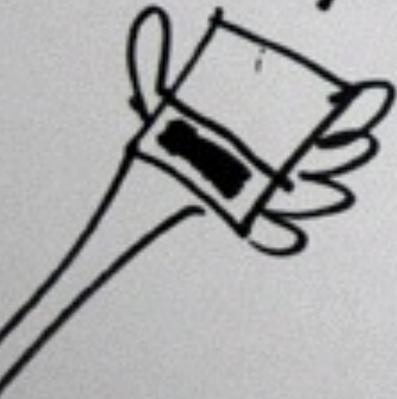
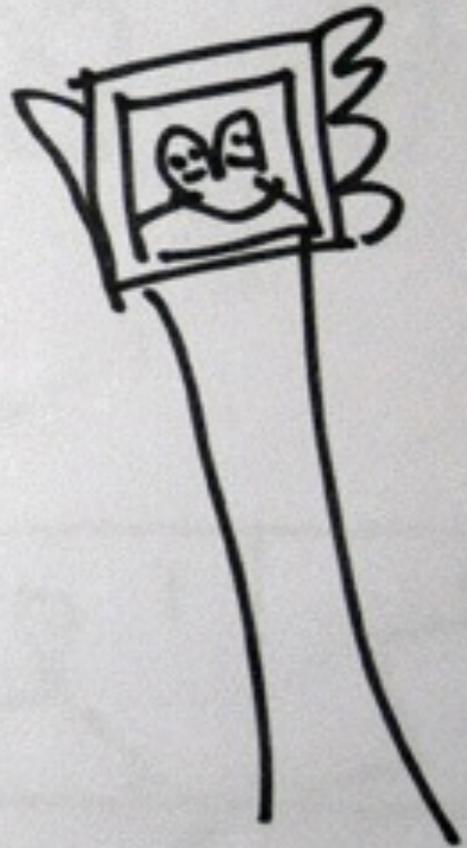
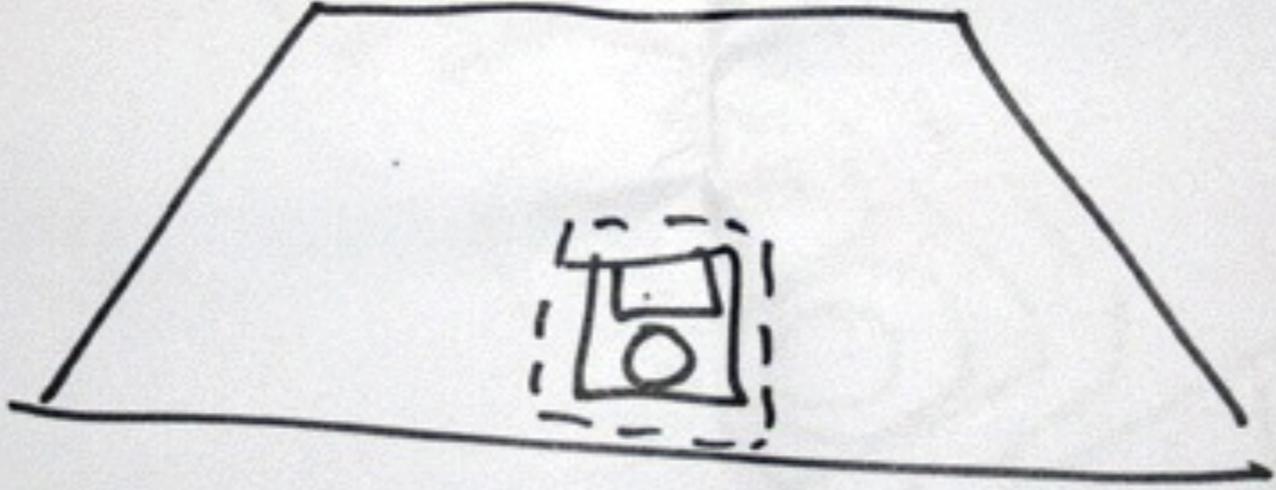
Video Shooting



Keyframe



Video Shooting



Keyframe



Video Shooting

Fourth Step

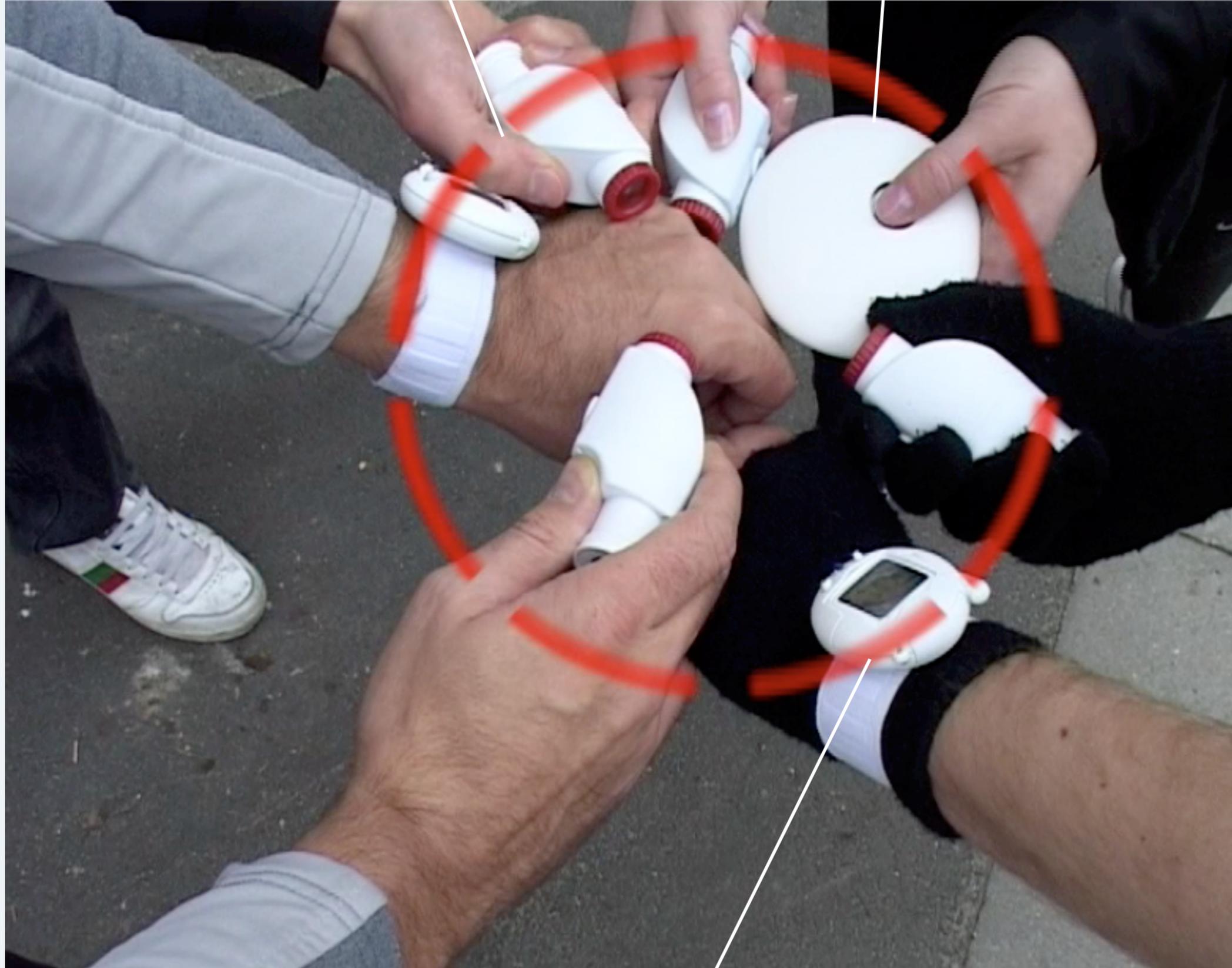
Editing



Editing

WiFi video camera

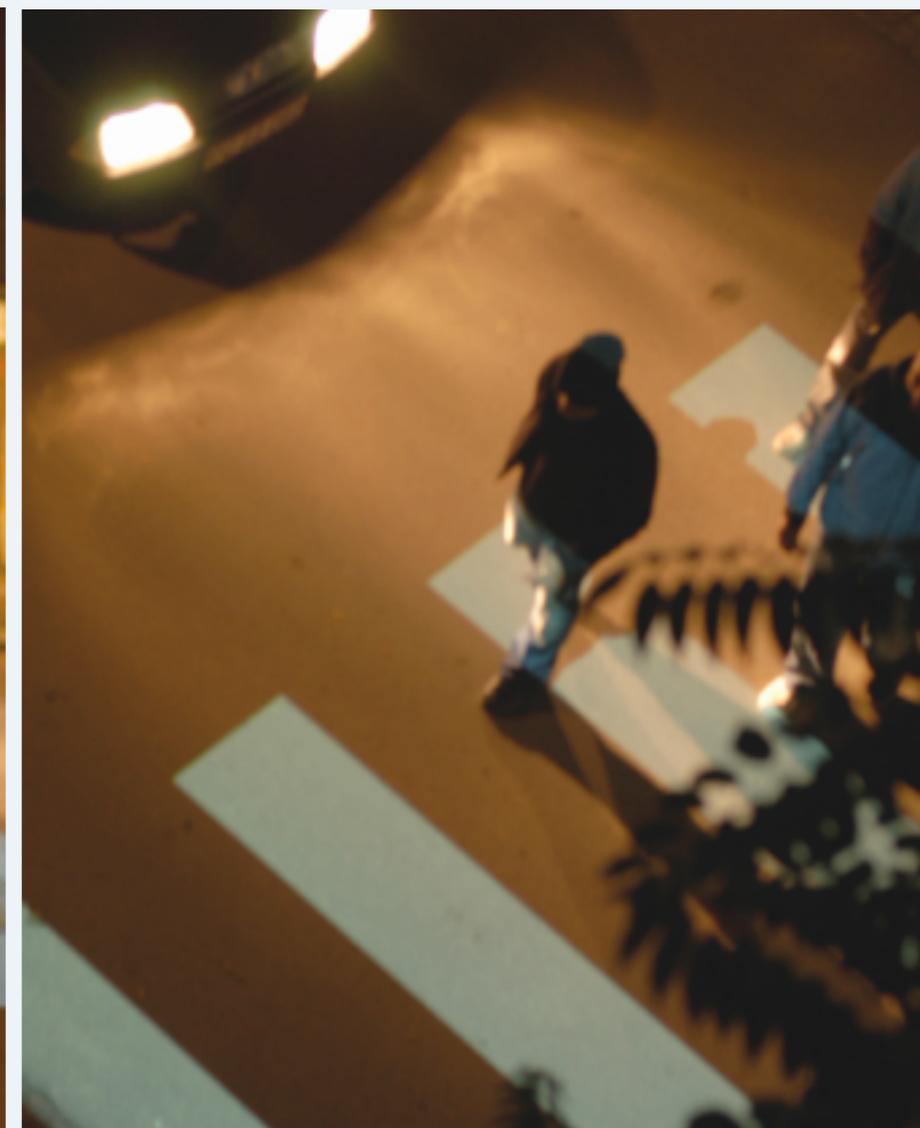
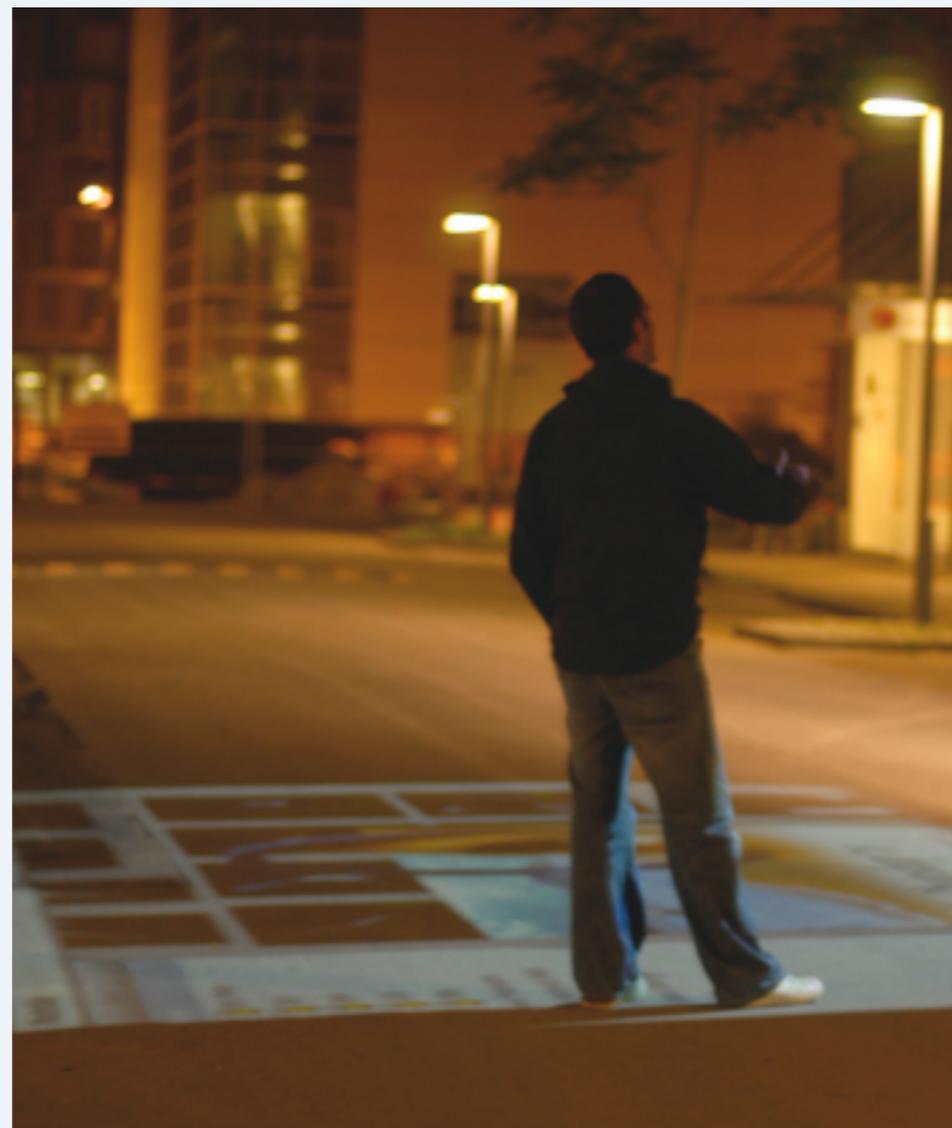
Wireless hard drive



Bluetooth GPS system

Video Prototype

The Smoke & Mirror Approach





Scenarios as Prototypes

Creating scenarios as a video is an interesting way to prototype intangible experiences or services. It works as both a process tool and a communication medium.

Inspiration from camera shots and film making



**Extreme long shot
(wide shot)**
A view showing details of
the setting, location, etc.



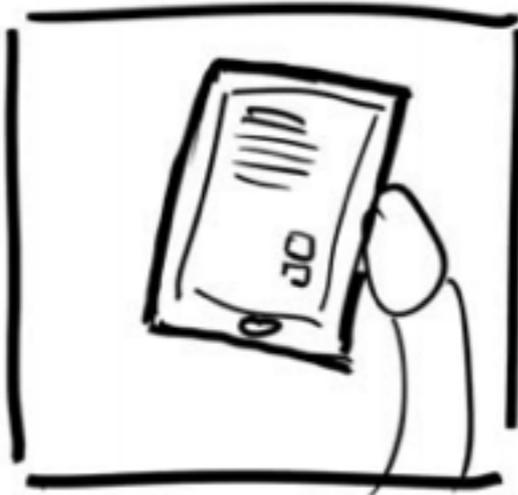
Long shot
Showing the full height
of a person.



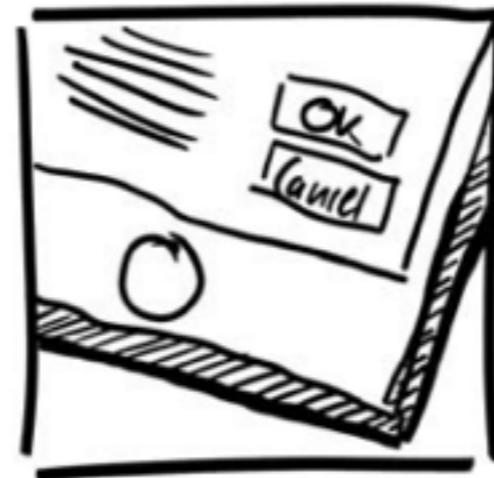
Medium shot
Shows a person's head
and shoulders.



Over-the-shoulder shot
Looking over the shoulder
of a person.



**Point of view shot
(POV)**
Seeing everything
that a person sees
themselves.



Close-up
such as showing details of
a user interface a device
the person is holding.

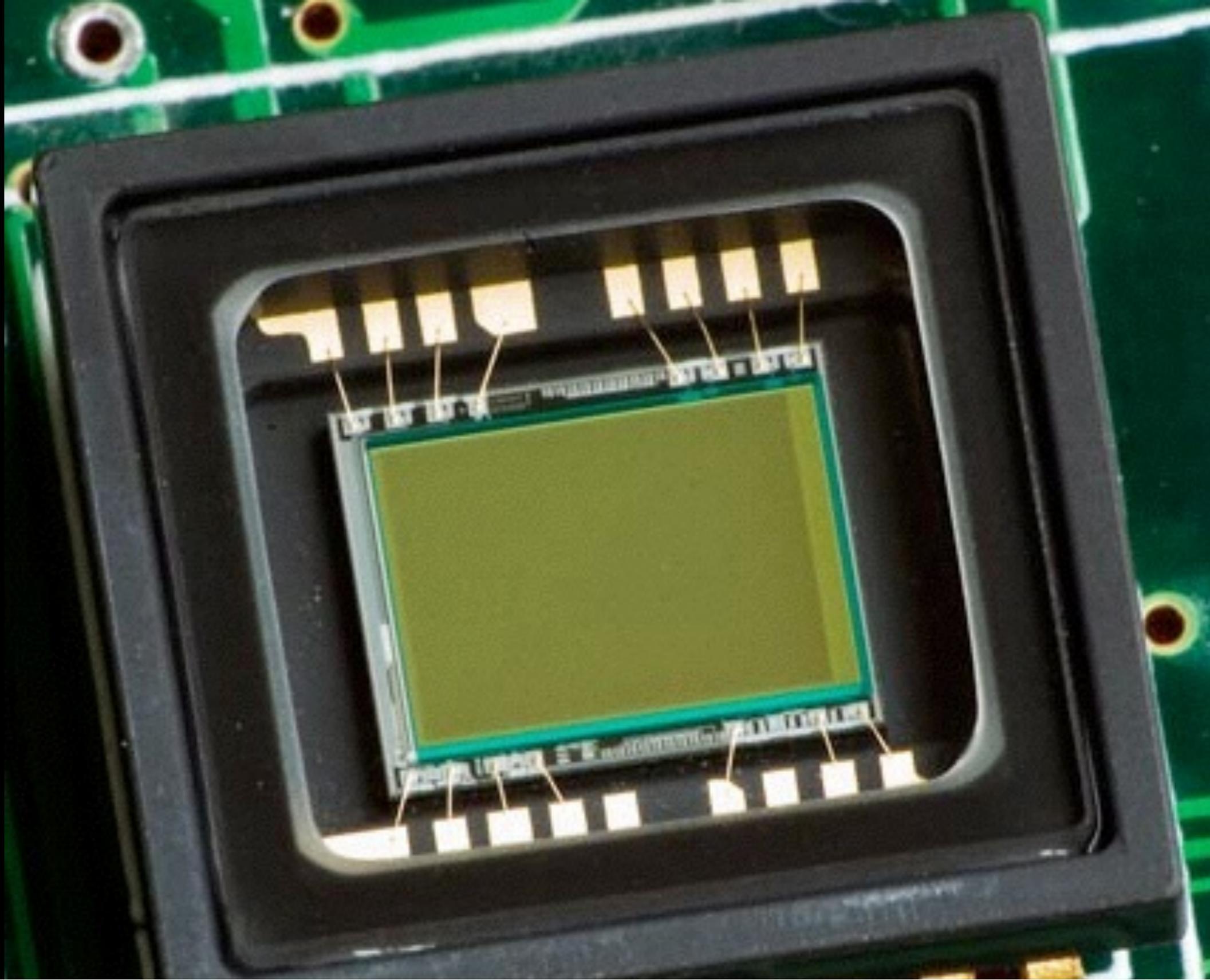


Choosing the right camera

Choosing The Right Camera

A “3 CCD” camera which uses a separate chip for red, blue, and green, giving a more “true to life” look to the video.

HD (high definition) camera’s have a much higher video quality than both one chip and three chip SD (standard definition camera’s)



CCD chip in a camera

Plan

What's the video about (in one sentence)?

Who's the audience? (YouTube vs. Client)

What are we going to see? (Scenario)

What about audio? (Audio can make or break it)

Editing Basics :

Montage vs. Continuity

Example:

Continuity

Nike Commercial



Continuity :

- a logical coherence between shots
- the viewer shouldn't "feel" the cut
- the focus is on the story

Example: Montage

Alfred Hitchcock



Montage :

- new assembly of material to create new meanings
- artistic approach
- the viewer “feels” the effect

Combining Images and Sound through Editing

Example: Amateur

Lasse Gjertsen

Example : Star Guitar

Michel Gondry



STAR GUITAR - CHEMICAL BROTHERS

Video Source: YouTube



- material was produced and edited to match the audio
- layout of the compete “sound scape”
- objects (oranges) were used to represent “events”

Editing Rules:

Cut on the beat to match the audio.

Be ruthless about the cut's: judge shots critical to filter out the unimportant material

Rule of thumb : one minute action can be described in max 10 sec

From the Task Analysis
to Video Shoot:

Making Tea!

Goal

Make cup of tea

Sub-Goals

Heat water

Infuse tea

Add milk/sugar/lemon

Unit Tasks

**Fill
kettle**

**Boil
kettle**

**Place tea
bag in cup**

**Add hot
water**

**Add
milk**

**Add
sugar**

**Add
lemon**

Artifacts

water, kettle

tea bag, cup, hot water

**milk, sugar,
lemon, spoon**

Liv Media

Number	Cut	Type	Visual Content	Sound	Colour	Time	Actors	Drawn by
1			TITLE SEQUENCE					Olivia
2		ELS	DAY: Car enters Rainthorpe, shot from horses field.	Actor on phone Sound of car driving along gravel down the drive. (Music)		8 seconds	Charlotte	Olivia
3		CU	Hand taking Bag from car, meanwhile still on the phone	Girl on phone (Music)		1 second	Charlotte	Olivia
4		CU	Car boot slams	Girl on phone (music)		1 second	Charlotte	Olivia
5		ECU	Front door handle opens door	The clanking of the door handle opening, and girl on phone		1 second	Charlotte	Olivia
6		LS	Door opens - actor enters - shot from inside			2 seconds	Charlotte	Olivia
7		CU	Actor on phone, jammed into shoulder	"see u soon" (phone conversation)		2 seconds	Charlotte	Olivia

Video-format and Duration

The video you submit should have the following format:

- MPEG-4, max 3min.
- resolution 640 x 480, codec: AAC, H.264
- be sure that the video is self-explanatory
 - explain necessary background information in the beginning of the video
- consider that font sizes should be big enough and readable when your video is being presented

Free Music:

<http://www.jamendo.com/en/>

or

Album “Royalty Free” on iTunes

Next Steps

Now

- Quick mockup storyboard (6 Key Frames)
- Consider angles and shots
- Film the keyframes with available means
- Edit and combine it with sound/voiceover
- Presentation on Friday 09:15 (s.t.)

Final Presentation

- 5 Minutes + 5 Q&A
- Elevator Pitch (Abstract)
- User + Problems
- Concept Video (self explanatory/ Uploaded via youTube or Vimeo)
- Next Steps & Expansions

Next Steps Till Thursday

- individual group-work : Videoprototyping
- materials you need : laptop & camera (video & photo)
- feedback and reviews on demand

Gather back here: 15:00 (s.t.)

Next Steps Thursday

- Morning: Prepare Presentation
- Morning & Afternoon: Individual Feedback
- Video 26/03/2015 16:00 s.t.
- Clean up rooms & bring back materials!

References

What do Prototypes Prototype? Stephanie Houde and Charles Hill, Apple Computer, Inc. Cupertino, CA, USA

Erickson, T. (1995). Notes on Design Practice: Stories and Prototypes as Catalysts for Communication. "Envisioning Technology: The Scenario as a Framework for the System Development Life Cycle" (ed. Carroll, J.). Addison-Wesley.

Marion Buchenau and Jane Fulton Suri. Experience Prototype, in the Proceedings of ACM DIS '00, pp. 424–433, 2000.

Michael McCurdy, Christopher Connors, Guy Pyrzak, Bob Kanefsky and Alonso Vera.
Breaking the Fidelity Barrier: An Examination of our Current Characterization of Prototypes and an Example of a Mixed-Fidelity Success, in the Proceedings of ACM CHI 2006, pp. 1233–1242, April 22–27, 2006.

Jonas Löwgren, Animated use sketches as design representations, interactions, v.11 n.6, November + December 2004

Raghu Kolli, Using video scenarios to present consumer product interfaces, INTERACT '93 and CHI '93 conference companion on Human factors in computing systems, p.61-62, April 24-29, 1993, Amsterdam, The Netherlands

Chris Crawford on Interactive Storytelling (New Riders Games) by Chris Crawford (Oct 16, 2004) , ISBN-10: 0321278909