

# Google Design Sprint

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Espoo, January 15, 2024

# PLAN & PURPOSE

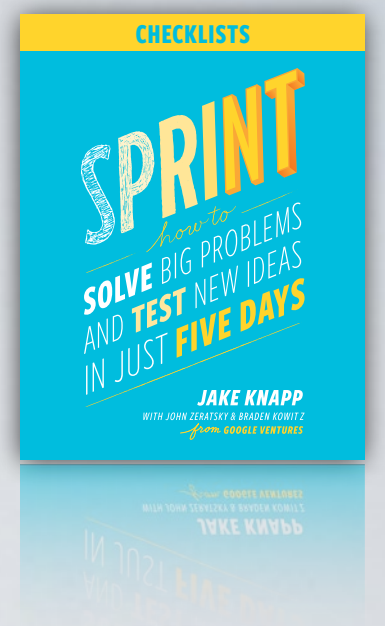
# Interaction Design (IXD) 2024 – Department of Design – Aalto University

Weeks 2-7: Mondays (9.15-12.00 and 13:00-17:00), Fridays (13:00-17:00) and 16-19.1 (8:30-9:00) Room F102 (M202 on 19.1) @ Väre

	Analyze Week 1	Sprint Week 2	Ideate: Concept Design Week 3
Lecture	<b>Interaction Design Intro</b> Mon 8.1 (AM)	<b>Sprint</b> Mon 15.1 (AM)	<b>Interaction Styles</b> Mon 22.1 (AM)
Reading	Chapter 1: What is IxD? (*)	Knapp et al. (2016) Sprint	Chapter 7: Interfaces (*)
Exercise	IxD Disciplines	F-formations Sprint	Mindful Touch
Lecture	<b>F-formations</b> Mon 8.1 (PM)	<b>Daily Sprint Intro</b> Tue 16.1-Fri 19.1 @ 8:45	<b>Prototyping</b> Mon 22.1 (PM)
Reading	Kendon (1990) Conducting Interaction	-	Chapter 12: Design, Prototyping (*)
Exercise	F-formations	Work on Sprint	Paper Prototype
Presentation	<b>F-formations Observations</b> Fri 12.1 (PM)	<b>Sprint Results</b> Fri 19.1 (PM)	<b>Concept Design Results</b> Fri 26.1 (PM)
	<b>Prototype: Detailed UI</b> Week 4	<b>Evaluate</b> Week 5	<b>Final Design</b> Week 6
Lecture	<b>Design Systems</b> Mon 29.1 (AM)	<b>Heuristic Evaluation</b> Mon 5.2 (AM)	<b>A/B Testing (cont'd)</b> Mon 12.2 (AM)
Reading	Benyon (2019) Designing UX (CH2: PACT)	Goodman et al. (2012) Observing UC (CH11)	Lucero (2015) Affinity Diagramming
Exercise	Detailed UI Design	Evaluation	Final Design
Lecture	<b>Design Systems (cont'd)</b> Mon 29.1 (PM)	<b>A/B Testing</b> Mon 5.2 (PM)	<b>A/B Testing (cont'd)</b> Mon 12.2 (PM)
Reading	Benyon (2019) Designing UX (CH 2: PACT)	Goodman et al. (2012) Observing UC (CH11)	Holtzblatt (2016) Contextual Design(CH6)
Exercise	Detailed UI Design	Evaluation	Final Design
Presentation	<b>Detailed UI Design</b> Fri 2.2 (PM)	<b>Evaluation Results</b> Fri 9.2 (PM)	<b>Final Design</b> Fri 16.2 (PM)

(\*) Sharp H, Preece J, Rogers Y. (2019) Interaction Design: Beyond Human-Computer Interaction (5: e ed.)

# PURPOSE & OVERVIEW



## Purpose

- Analyse user data to **develop** product **concepts** that meet users' needs (LO#2)
- **Construct** interaction design **prototypes** with a fidelity level that allows for their evaluation with users (LO#4)
- Carry out an **evaluation** of an interactive prototype or system (LO#5)

## Overview (45 min)

- [Sprint \(Knapp et al. 2016\)](#): 'real world' example how Google Ventures (GV) build and test a prototype in 5 days
- [Exercise](#): F-formations sprint

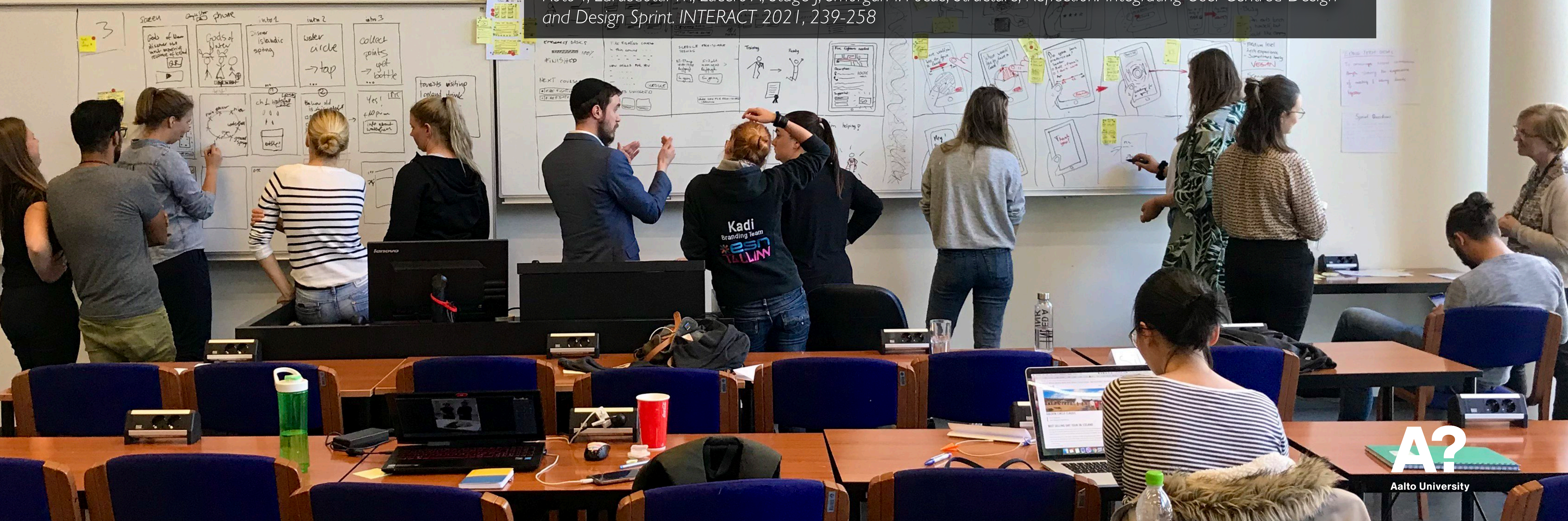
SPRINT

# Sprint (Knapp et al. 2016)

- User-Centered Design (UCD): combines design and evaluation in software development with a focus on its prospective users
- Teaching (UCD): intensive two-week courses in Tallinn, Reykjavik and Espoo
- Sprint: process to solve problems and test new ideas by building and testing a prototype in five days, introduced for the second version of the course

Lárusdóttir M, Roto V, Stage J, Lucero A, Šmorgun I. Balance Talking and Doing! Using Google Design Sprint to Enhance an Intensive UCD Course. *INTERACT '19*, 95-113

Roto V, Lárusdóttir M, Lucero A, Stage J, Šmorgun I. Focus, Structure, Reflection! Integrating User-Centred Design and Design Sprint. *INTERACT 2021*, 239-258



# SPRINT

*how to*

SOLVE BIG PROBLEMS  
AND TEST NEW IDEAS  
IN JUST FIVE DAYS

**JAKE KNAPP**

WITH JOHN ZERATSKY & BRADEN KOWITZ  
*from* **GOOGLE VENTURES**

**Welcome to  
the sprint!**



**You're gonna  
build & test a  
realistic  
prototype  
in 5 days.**





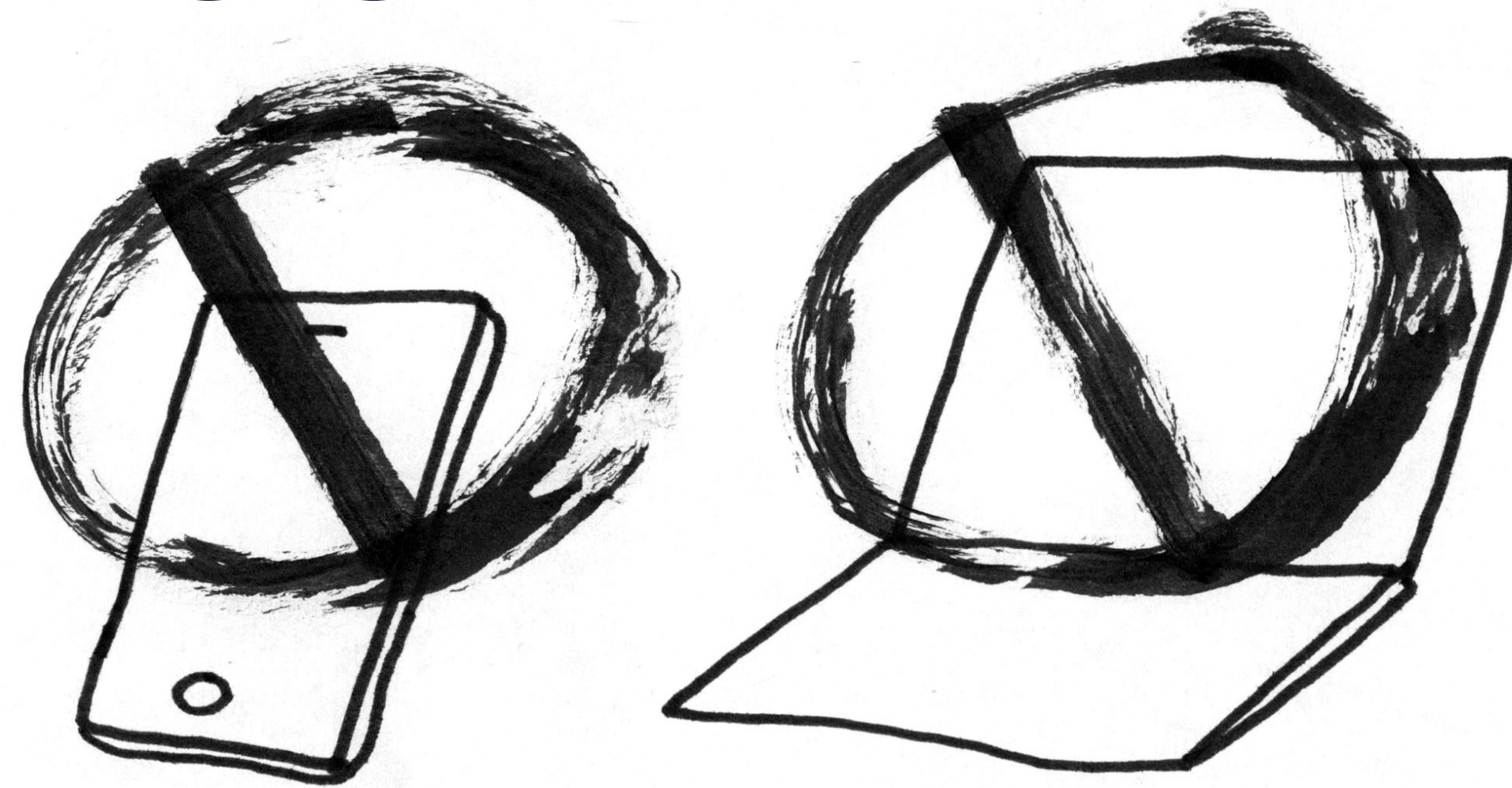
The Sprint process in 90 seconds. <https://youtu.be/K2vSQPh6MCE>

**Now, some  
quicks ground  
rules:**

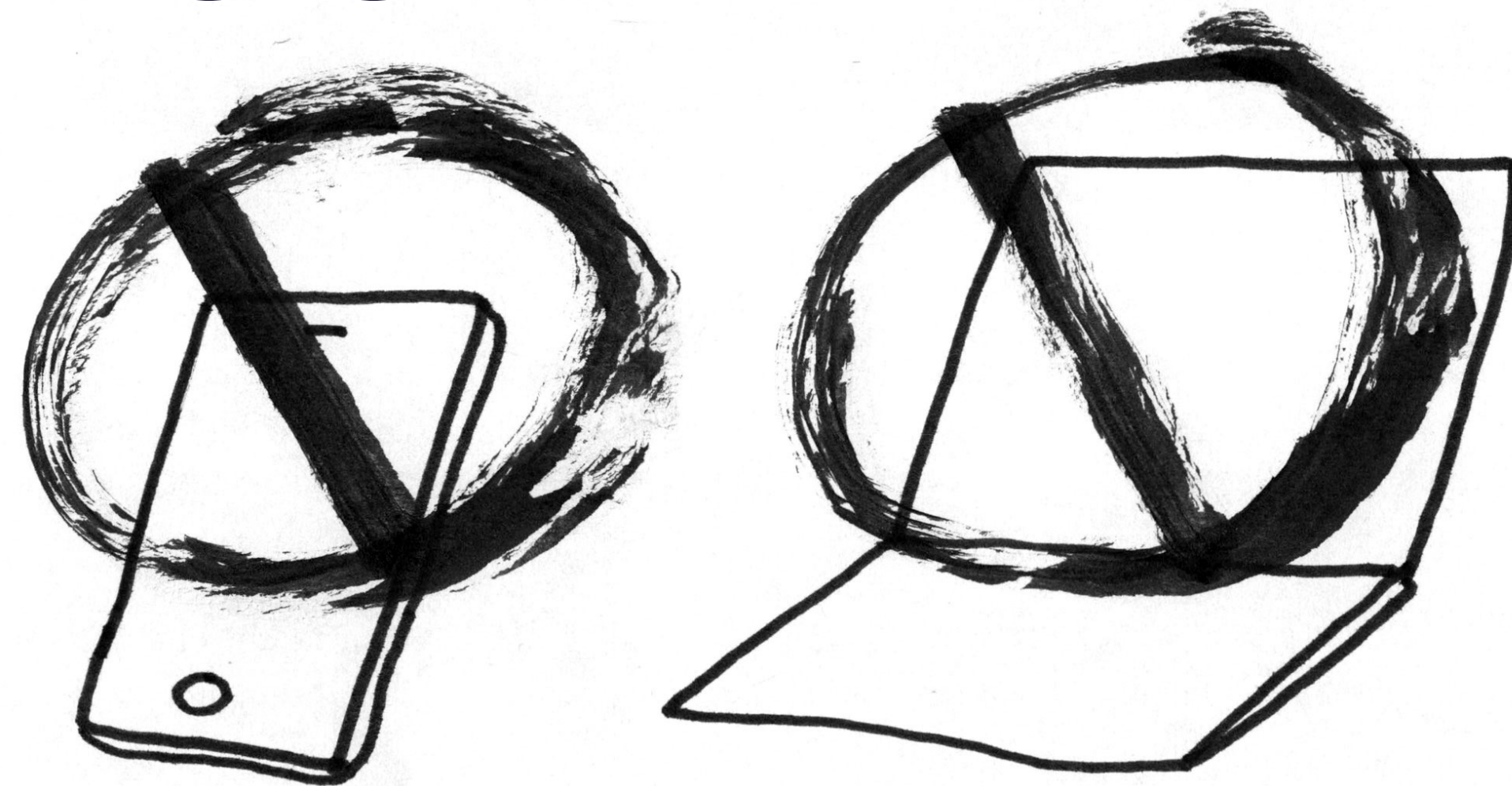
**1.  
The Facilitator  
is in charge of  
the schedule.**

**2.  
The Decider  
makes all  
tough decisions.**

# 3. No devices in the room.

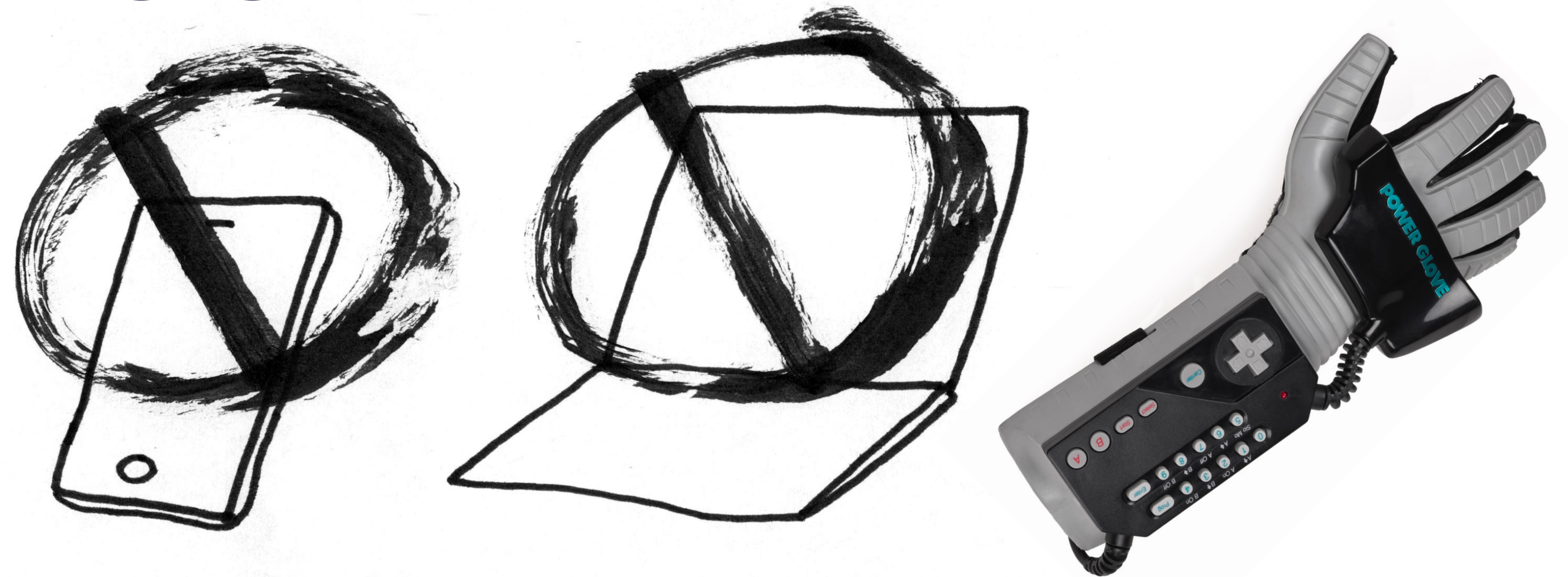


# 3. No devices in the room.



**(You can use them at breaks. Or step out of the room any time.)**

# 3. No devices in the room.



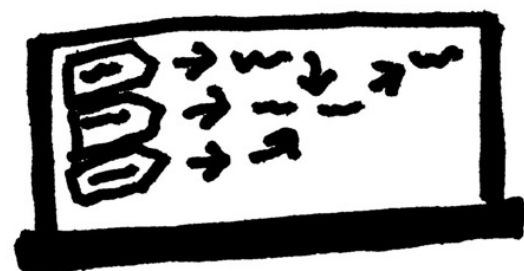
**(Power Gloves are okay.)**



# Preview of the sprint:

MONDAY

•Map



TUESDAY

•Sketch



WEDNESDAY

•Decide



THURSDAY

•Proto-  
type



FRIDAY

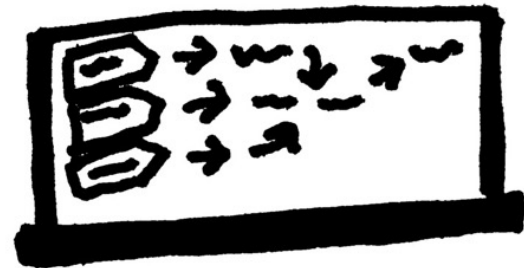
•Test



SPRINT: MONDAY

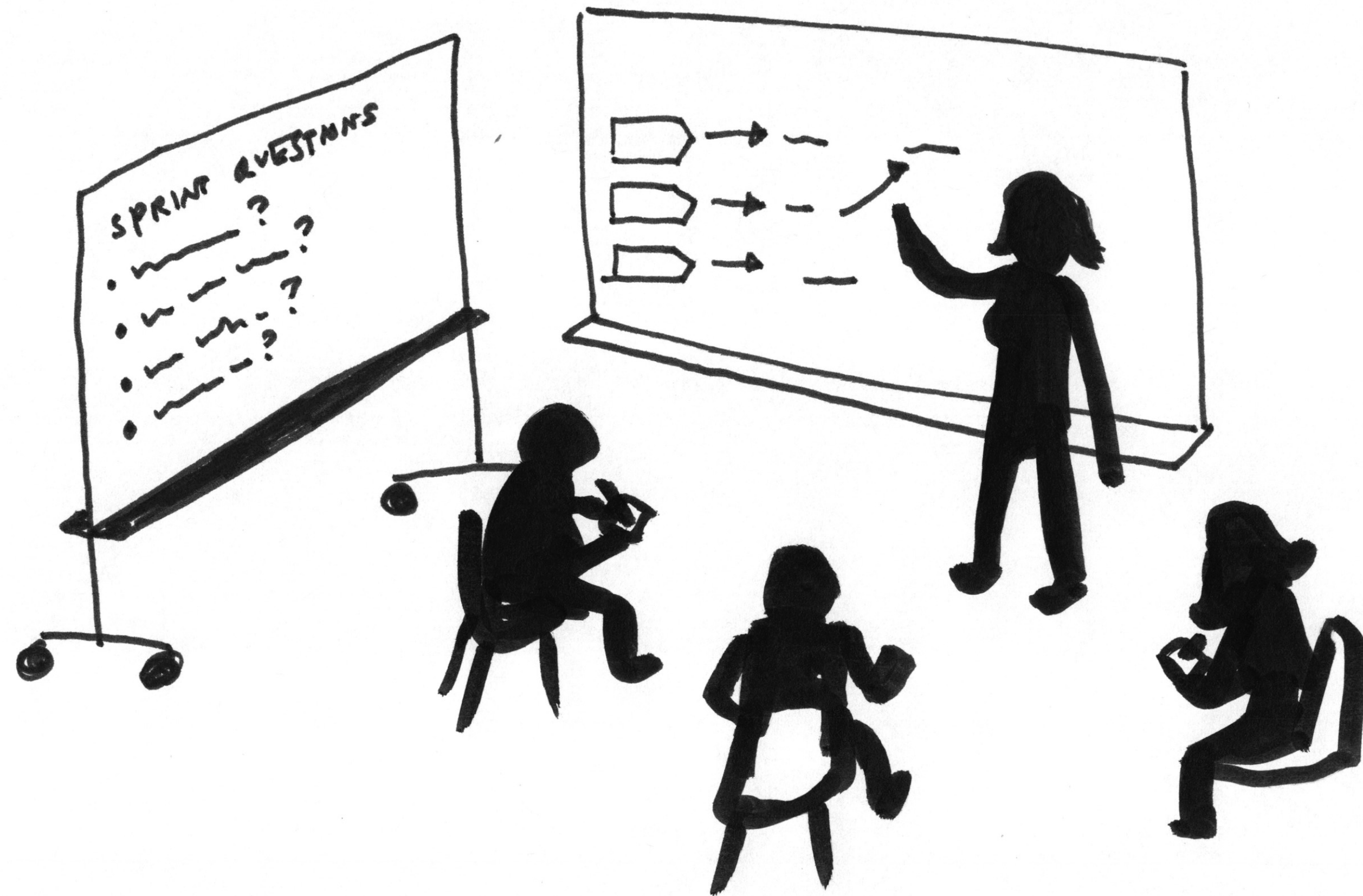
**MONDAY**

**•Map**



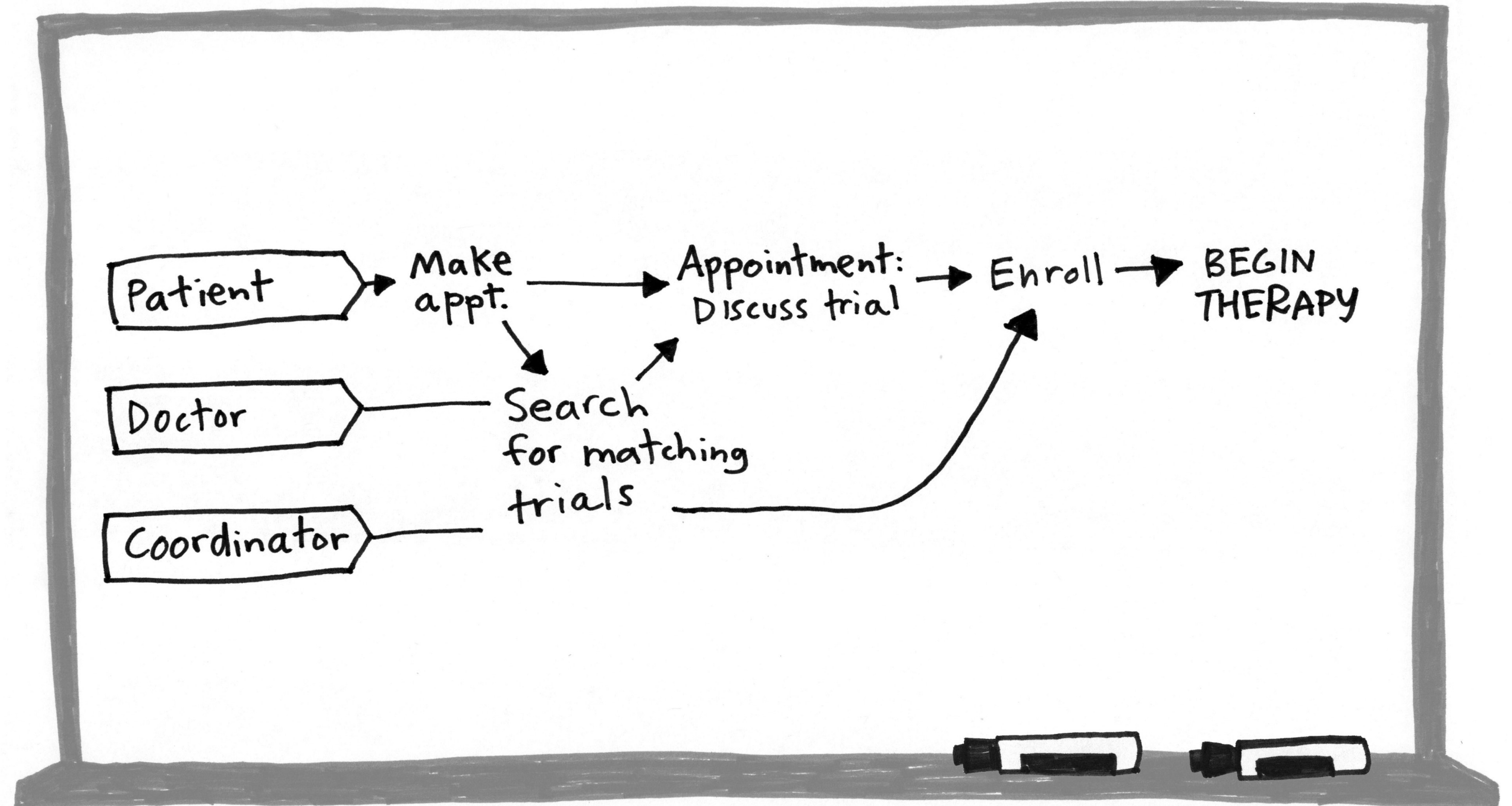
**Nobody  
knows  
everything,  
so you'll  
share info.**

# Ask the experts



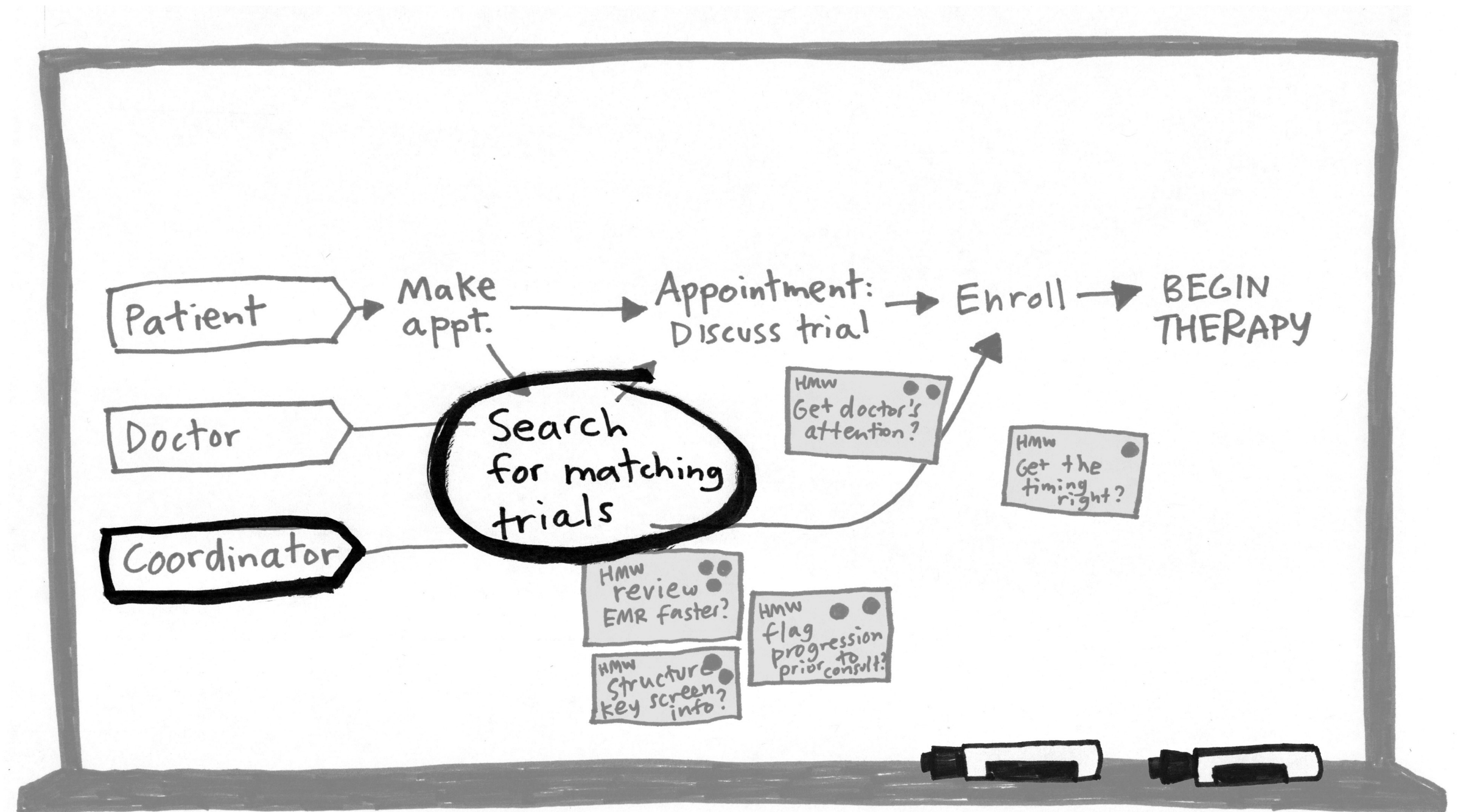
**Talk to one person at a time and take notes.**

# Make a map



**This will be a simple diagram with around 5-15 steps.**

# Pick a target



Choose a customer type and a focus on the map. ►



# MONDAY

Sprint: Monday. <https://youtu.be/7zOBMxRYJ7I>

SPRINT:TUESDAY

MONDAY

TUESDAY

•Map

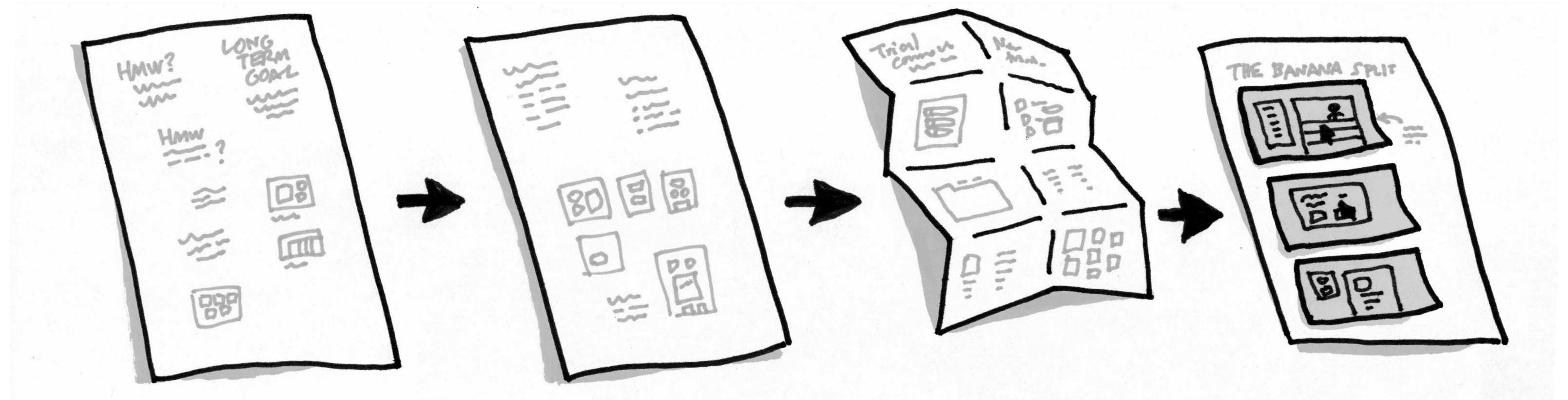


•Sketch



**Group  
brainstorms  
don't work,  
so you'll  
sketch alone.**

# Sketch



**The process goes step-by-step to make it easy.**

**Your  
sketches  
will look  
like this:**



Handwritten text in a cursive script, likely Hebrew or Arabic, located at the top left of the page. The text is arranged in several lines and appears to be technical descriptions or instructions related to the machinery shown.

Handwritten text in a cursive script, likely Hebrew or Arabic, located at the top right of the page. The text is arranged in several lines and appears to be technical descriptions or instructions related to the machinery shown.

Handwritten text in a cursive script, likely Hebrew or Arabic, located on the left side of the page. The text is arranged in several lines and appears to be technical descriptions or instructions related to the machinery shown.

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24

Handwritten text in a cursive script, likely Hebrew or Arabic, located near the bottom left of the page. The text is arranged in a single line and appears to be a label or part of the technical description.

Handwritten text in a cursive script, likely Hebrew or Arabic, located at the bottom center of the page. The text is arranged in a single line and appears to be a label or part of the technical description.

**Haha!**  
**Just kidding.**  
**More like**  
**this:**



WELCOME BACK



QUICK ORDER  
 GIANT STEPS  
 BLUE BOWL  
 DECAF BLEND

### QUICK REORDER IN 3 CLICKS

SIGNED IN HOME

RECENT PURCHASES AND FAVORITE BLENDS

1<sup>st</sup> CLICK  
TELL US WHAT YOU WANT

### QUICK ORDER

GIANT STEPS

BLUE BOWL

DECAF BLEND

OR

2<sup>nd</sup> CLICK

QUANTITY, KEEP SHIPPING?

### CONFIRM ORDER

GIANT STEPS   
- SHIP TODAY, FRESHLY ROASTED

ADD ITEMS

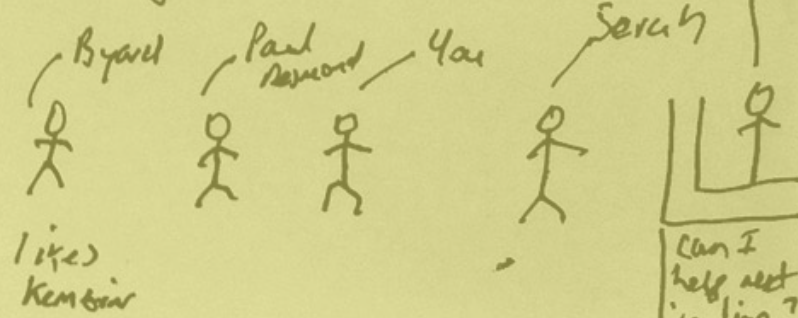
QUANTITY	SHIPPING	TOTAL
1	\$5.00	\$10.00
CHANGE	CHANGE	\$

3<sup>rd</sup> CLICK

CONFIRM, DONE!

### SOCIAL SCENE

See the famous BB line on screen —  
Click on each person so you can see what they are ordering - whats hot!



Bricks  
You can use ~~to~~ to chat online

### CHOOSE YOUR LEVEL Just like skis

⓪ Easy → - Filter  
- Drip  
- Espresso

Ⓛ Advanced looking for something  
smooth → Bold  
Destructive → Bold  
finely → Earthy

List best sellers by use with ~~img~~ images of use + product  
or

Go deeper into  
- Single origin  
- Small lots  
- Whats hot  
This week Diversified → best choice

### THE "CART CONVERTER"

HTTP://BBC.COM/CART

Shopping CART

x 2 = \$35

Hey! Turn this order into a subscription. We'll send this to you every 2 wks.

Shopping Cart Page  
→ Interactive selector

HTTP://BBC.COM/CONFIRM

OK Bryan, we got you down for 2 lbs of Hayes very every 4 wks. We'll ship your first order today & your next fresh roast batch 4 wks from now.

HTTP://BBC.COM/SUCCESS!!

Success! You're now signed up for the ultimate fresh coffee experience.

to adjust

to cancel anytime

to tell a loved one about our subscriptions & how cool

# TUESDAY

Sprint: Tuesday. <https://youtu.be/ITJ5lAXQhg>

SPRINT: WEDNESDAY

MONDAY

TUESDAY

WEDNESDAY

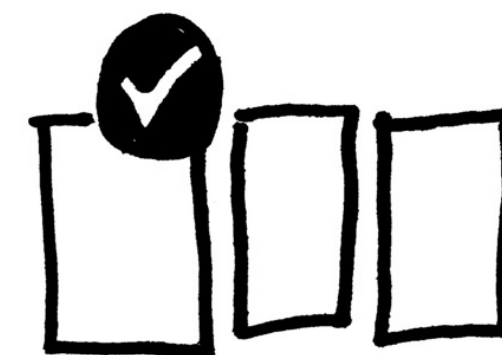
•Map



•Sketch

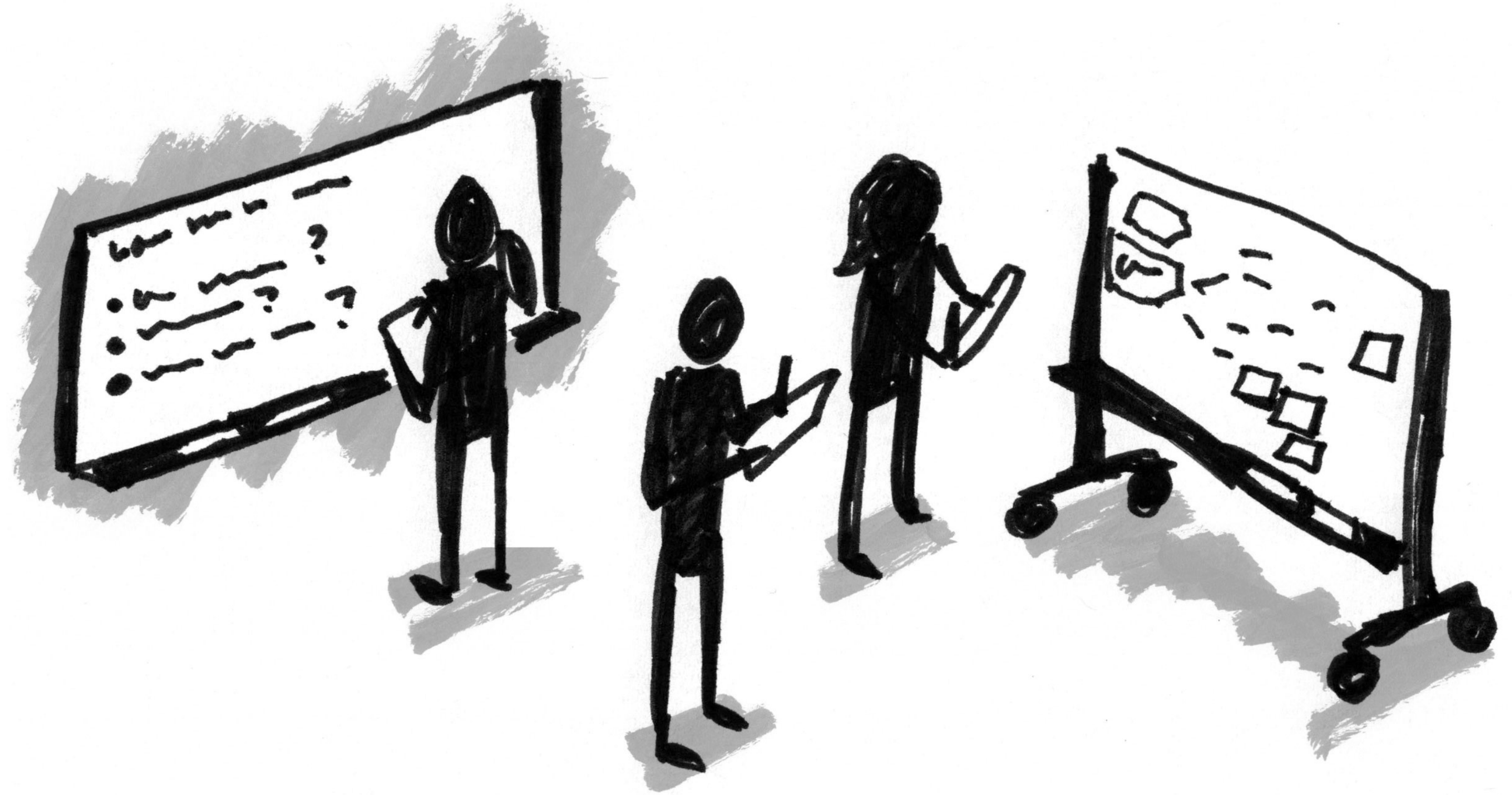


•Decide



**You'll make  
fast decisions  
without  
groupthink or  
sales pitches.**

# Sticky decision



**Choose the best sketches  
with silent review and structured critique.**

**Turn the  
winning  
sketches  
into a  
storyboard:**

New York Times  
roasters you should know about

Potting shed  
Linden alley  
4pm Roasters  
Blue Bottle  
Stumptown

Potting Shed Coffee  
How do you brew?  
Pour over espresso

What do you like?  
Floral Bright

Bright Pour over coffees

Linden Alley  
How? Tone?

4pm Roasters  
Pity about us story

Best coffee for Pour Over  
How to  
Heat it up?

Giant steps  
ADD SUBSCRIBE  
How it tastes  
Bright, Chocolate, RC Cola  
How to make it  
Change French press  
Tech specs

Tech specs  
Founders notes  
Also great for pour over

Also great

17 foot ceiling  
ADD SUBSCRIBE  
How it tastes  
Tech

17 foot ceiling  
Added to cart  
CHECKOUT  
Suggestions  
Filters  
Cannis drupe

Shipping  
Billing

4pm Roasters  
GREAT COFFEE BY METHOD  
Pour over espresso Drip  
BY TONE  
Floral Bright Churn

Shipping  
We'll roast it tomorrow!  
NEXT

Payment  
BK

Thanks!  
BK

2 days later...  
You get the coffee  
BK

1 week later...  
1 week later...  
You run out  
BK

4pm Roasters  
By Method By Tone RECENT  
17 foot ceiling

17 foot ceiling  
BUY SUBSCRIBE

Start a subscription  
17 feet ceiling  
1 bag every 2 weeks  
You'll be billed \$18 every 2 weeks.  
You can cancel, pause any time.  
ADD

Added SUBSCRIPTION  
1 bag of 17 ft ceiling every 2 weeks  
CHECKOUT  
BK

Checkout  
...

You're subscribed!  
Any time you can  
PAUSE  
ADJUST  
CANCEL  
BK



# WEDNESDAY

Sprint: Wednesday. <https://youtu.be/7BKBF00KbNo>

SPRINT:THURSDAY

MONDAY

•Map



TUESDAY

•Sketch



WEDNESDAY

•Decide



THURSDAY

•Proto-  
type



**A realistic  
façade is all  
you need to  
learn from  
customers.**

**If your product is on a  
screen,  
try tools like  
Keynote or  
PowerPoint and  
InVision or Marvel.**

If it's on  
paper,  
design it with  
Keynote,  
PowerPoint,  
or Word.

**If it's a  
service,  
use your sprint  
team as actors.**

**If it's a  
physical space,  
modify an  
existing space.**



If it's an  
object,  
modify an  
existing object,  
3D print a  
prototype,  
or prototype the  
marketing.



# THURSDAY

Sprint: Thursday. <https://youtu.be/IGcwFV76t7o>

SPRINT: FRIDAY

MONDAY

•Map



TUESDAY

•Sketch



WEDNESDAY

•Decide



THURSDAY

•Proto-  
type



FRIDAY

•Test



**5 customer  
interviews  
are enough  
to reveal big  
patterns.**



**Interview 5 customers, 1:1.**

# The team watches over video from another room.



**At the end of  
the sprint,  
you'll know  
what to do  
next.**



**Often, it's  
helpful to fix  
the prototype  
and test it  
again.**

**If you do 3 sprints in a row...**



**...they won't all take 5 days. ▶**

# FRIDAY

Sprint: Friday. <https://youtu.be/jQmBuKN10VY>

Okay,  
let's do  
it!

EXERCISE:  
F-FORMATIONS SPRINT

# EXERCISE: F-FORMATIONS SPRINT

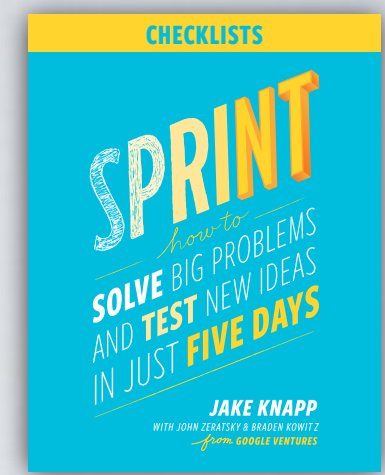
Test a prototype (5 days)

- Task: based on last week's F-formations observations in Helsinki/Espoo/world **build** and **test** a **prototype** in 5 days using **Google Design Sprint**
- Groups: same 5 groups as last week
- Process: **follow Sprint** as closely as possible; **adapt** if needed and **reflect** on changes (if any)
- MyCourses: these **slides** plus **'Sprint Checklist'** available in materials
- Rooms: use this room/CoID home base/Learning Center today. We can book a few meeting rooms for Tuesday-Friday
- Kick off: every day at 8:45 sharp in room F102

Present results (15 + 5 minutes per group)

Day	Time	Activity
Monday	09:15	Google Design Sprint introduction
	10:00	Set long-term goal, list sprint questions
	11:00	Make a map (lunch 12:00)
	13:00	Ask the experts
	14:00	Explain How Might We (HMW) notes
	15:00	Organize HMW notes, vote HMW notes, pick target (end 16:00)
Tuesday	09:15	Lightning demos
	11:30	Divide or swarm (lunch 12:00)
	13:00	The four-four-step sketch (end 16:00)
Wednesday	09:15	Sticky decision
	10:30	Divide winners from maybe later, rumble or all-in-one, fake brand names, note-and-vote (lunch 12:00)
	13:00	Make a storyboard (end 16:00)
Thursday	09:15	Pick right tools, divide and conquer, prototype! (lunch 12:00)
	13:00	Prototype! Stitch it together
	14:00	Do a trial run, finish up the prototype (end 16:00)
Friday	09:15	Prepare 5-act interviews, conduct interviews
	11:00	Look for patterns, wrap up (lunch 12:00)
	13:15	Presentations (end 16:00)

# FURTHER READING



# FURTHER READING

## Books

- Knapp J, Zeratsky J, Kowitz B (2016) *Sprint: How to solve big problems and test new ideas in just five days*. Simon and Schuster. <https://www.thesprintbook.com/how>

## Articles

- Lárusdóttir M, Roto V, Stage J, Lucero A, Šmorgun I. Balance Talking and Doing! Using Google Design Sprint to Enhance an Intensive UCD Course. *INTERACT '19*, 95-113. [https://doi.org/10.1007/978-3-030-29384-0\\_6](https://doi.org/10.1007/978-3-030-29384-0_6)
- Roto V, Larusdottir M, Lucero A, Stage J, Šmorgun I. Focus, Structure, Reflection! Integrating User-Centred Design and Design Sprint. *INTERACT 2021*, 239-258. [https://doi.org/10.1007/978-3-030-85616-8\\_15](https://doi.org/10.1007/978-3-030-85616-8_15)

## Videos

- The Sprint process in 90 seconds. <https://youtu.be/K2vSQPh6MCE>
  - Sprint: Monday. <https://youtu.be/7zOBMxRYJ7I>
  - Sprint: Tuesday. [https://youtu.be/\\_ITJ5IAXQhg](https://youtu.be/_ITJ5IAXQhg)
  - Sprint: Wednesday. <https://youtu.be/7BKBFOOKbNo>
  - Sprint: Thursday. <https://youtu.be/lGcwFV76t7o>
- Sprint: Friday. <https://youtu.be/jQmBuKN1OVY>
  - The Five-Act Interview: <https://youtu.be/U9ZG19XTbd4>



# QUESTIONS?

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 [@andrikos](https://twitter.com/andrikos)

