### Human Computer Interaction

#### Week 3: Sketching

by Henrik Lange



#### Plan

- → Week 1: Setting The Stage
- → Week 2: Mapping, Personas and Journeys

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- → Week 3: Sketching
- → Week 4: Decisions and Storyboards
- → Week 5: Prototyping
- → Week 6: Prototype Testing
- → Week 7: Graphic Design
- → Week 8: Building Modern UI (CSS)
- → Week 9: Building Modern UI (Bootstrap, jQuery & Leaflet)
- → Week 10: Accessibility and SEO
- → Week 11: Usability Testing
- → Week 12: Building Modern UI



#### Agenda

- → Groups
- → Last Week Catch Up
- → Sketching
  - → Lightning Demos
  - → Divide or Swarm
  - → The Four-Step Sketch
  - → Remix and Improve
- → Tomorrows Instructor Session
- → Next Week Preparation



### Last Week



#### How are instructor classes going?



#### My feedback

- → This course is about shaping ideas in the right direction
  - → If you already know what your project will end up looking like then you are doing it wrong!
- → All artifacts should be around the user journey
  - → Making a UML diagram is not a valid "goal" in this context as it provides no value to an end user or overall organization
    - → Surely, we want a UML diagram, but it is not important to this process
  - → The same can be said for Business Model Canvas's and other artfects



#### Tell me about your goals and risks

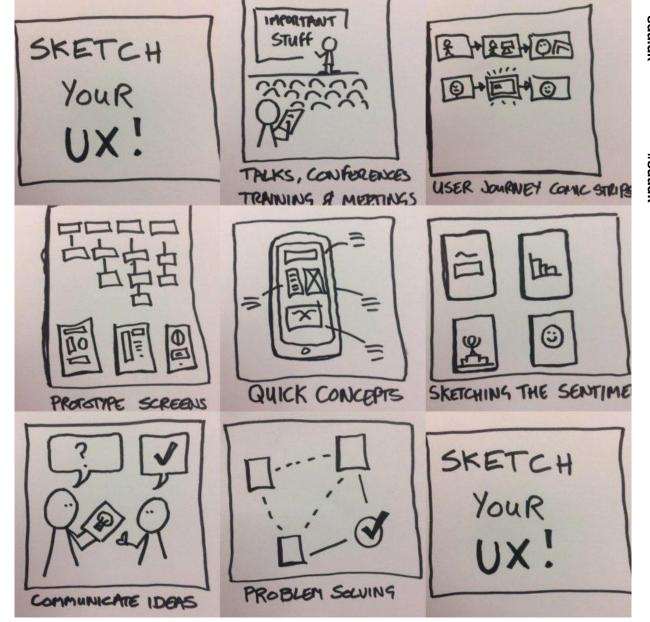
Especially if you have doubts about their direction.



# This Week: Sketching

#### Sketching

- → The overall theme of this day is sketching as a visual way of brainstorming
- → Sketches are not meant to be pretty



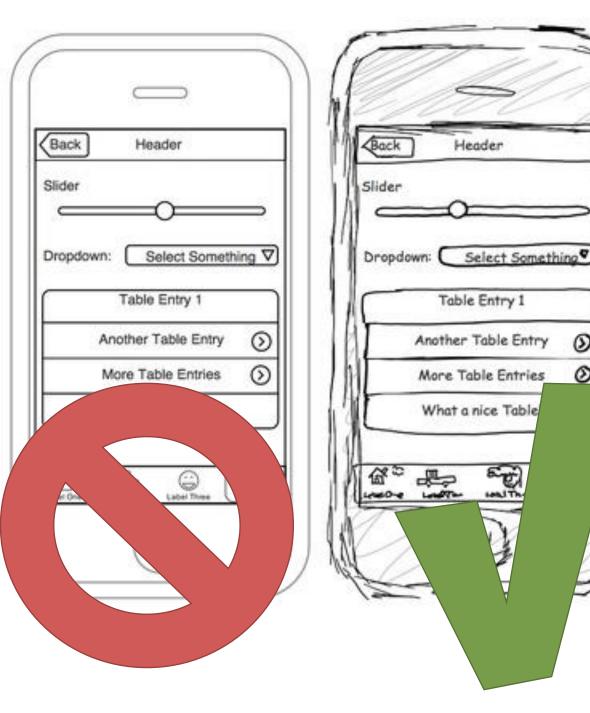




#### **Anyone can sketch**

- → Most of a sketch is boxes, lines and the occasional word.
- → If you are concerned with the aesthetics of your sketch, remind yourself what a "sketch" is.
- → A picture says more than a thousand words
  - → And you could spend all afternoon explaining what you would have drawn, without ever conveying the content of a sketch
- → Your sketch matters!
  - → Sure some of your sketches might be duplicated by someone else's. But what is logical to you is not necessarily logical to others.
  - → Even the simplest sketch might kickstart your brainstorming process.





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#### You should always sketch on paper

- No matter if the process is in a design sprint or more lose.
- → A pencil drawing on a piece of paper is the best way to work with your ideas with a customer.
  - → When you present it, have the pencil and eraser visible on the table
- → Everyone knows the exact effort of drawing or erasing a button on a piece of paper.
- → ANY piece of technology will start a subconscious doubt in the customers mind about the effort of changing something and the effort that went into creating it.
  - → This means they will hesitate to suggest changes!



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#### **Lightning Demos**

- → If your experts mentioned a system in the expert interviews, ask them to come back and do a 3-minute presentation on Tuesday!
- → All team members make a list of demo system candidates
- → Select 1-2 systems each and write them on the whiteboard (or common list)
- → Give a 3 minute demo start with the overall system and get into the part you really want to demo
- → Draw the best ideas
  - → Best != good (you might be surprised later)
  - → New idea = new piece of paper
  - → New component = new piece of paper

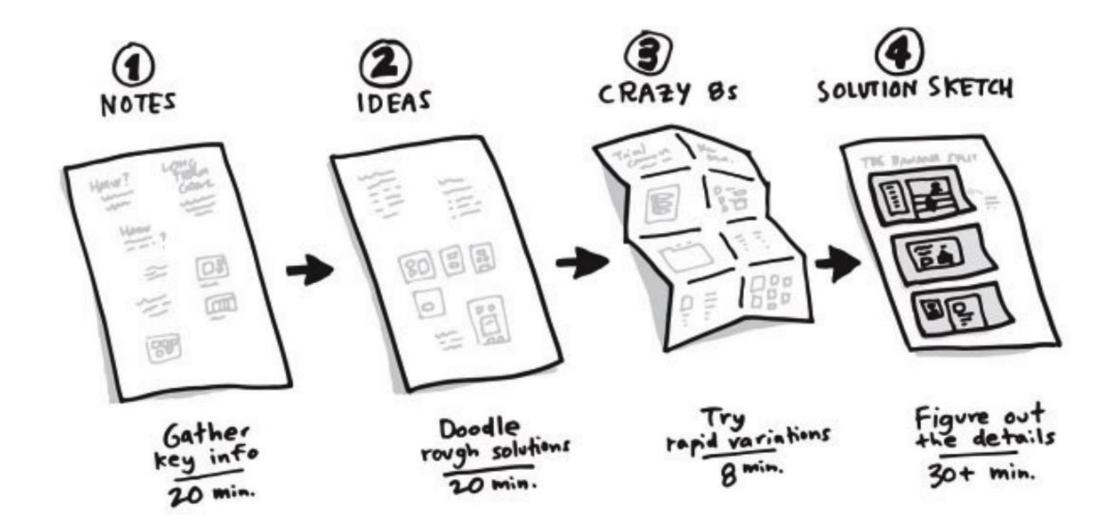
→ Make sure someone draws the component that the presenter is most excited about!





#### Divide or swarm

- → How many steps are there in the selected journey on your map?
- → If there are many, you should split up and handle a step each
- → Group sizes should be decided by complexity of step
  - → No 1-man groups!
  - → Some steps can be left out
- → If everyone is focusing on the same step, swarm



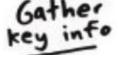


#### **Notes**

- → Take 20 minutes to look at your current data and take notes (5 minutes in instructor class)
  - → What are you going to draw
  - → Start the thinking process
  - → If you think of something useful outside of the room/board go for it!



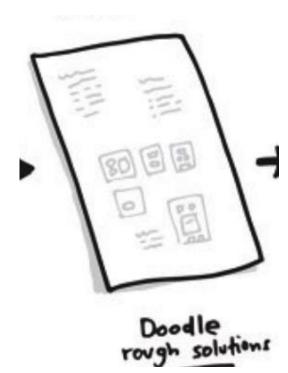






#### **Ideas**

- → Spend 20 minutes plotting out rough ideas
  - → Could be journeys, components, tree structures, whatever you feel is appropriate-
  - → If you have a har time getting started, look over someone elses shoulder
    - → Not to copy, but to get a starting point it's not a competition





#### Crazy 8s

- → Fold a piece of paper in 8 sections (or 2 pieces into 4 sections each)
- → You will draw 8 sketches in 8 minutes!
- → The idea is to force you to think fast and keep switching direction
- → The first couple of sketches might be the simple and logical ideas you had since this morning, but by going back to skratch, looking for a new way to achieve the same thing, again and again, you are bound to see things from different angles.
  - → Some ideas will suck! draw them anyway!
    - → They might be amazing once you're done with them
    - → Your team mates might know that little tweak that turns terrible into incredible
    - → Drawing a terrible idea might inspire you for the next one, which might be great!

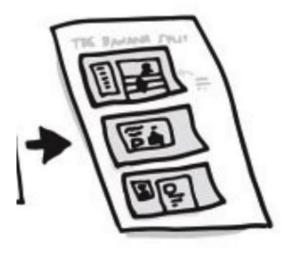




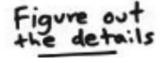
#### **Solution Sketch**

- → Select your best idea and draw it in greater detail
- → If it has multiple steps, draw them
- → Think a bit more about the details











#### Present your sketches

- → The book recommends anonymous sketches. I disagree.
  - → As engineers, we present ideas!
- → Each person presents their sketch
  - → Build up by pointing to one or two of your crazy 8s that led to your final design
  - → Then show your design and explain the details

After the presentation, hang your sketch on the wall After all presentations, all the sketches will be next to each other on the wall

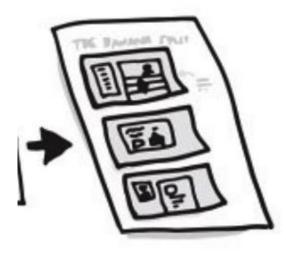




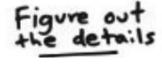
#### Iterate!

- → Now that you have seen everyones presentation, you should draw a new one
- → It might combine components in a different way or introduce a missing component
- → The second round should be faster than the first
- → The second presentation should be faster than the first
  - → And some presentations will boil down to a simple "mine is exactly the same".
- → You will NOT discard the first round of sketches
- → You will only do one extra iteration







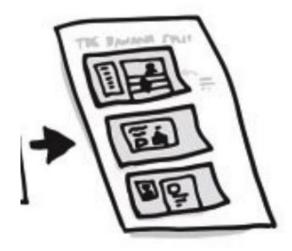




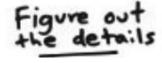
#### The Remix Technique

- → The last job today is to draw tiny lines between components on your sketches
- → This will help everyone get an overview of the components and actual options
- → You can mentally envision system components now
- → Tomorrow (next week) we will be cutting along those lines. Bring scissors!











# Exercise Class: "Tuesday"



## A 2 hour design sprint "Tuesday", using the sketching principles we discussed today



### If you wish to continue after the session, feel free to do so.

(After all, we are boiling a 6 hour day down to a 2 hour workshop)



## Bring the following: Paper (yes, physical paper this time) Drawing Tools (colors not necessary)

Stickers for voting Post-its for modularity



## When you are done, all your sketches should be on a table or a wall. Take a picture for your portfolio!



# Next Week: Deciding



#### Reading Material: Sprint by Jake Knapp p. 92-123 & 241-242

(The "Wednesday" chapter and checklist)

