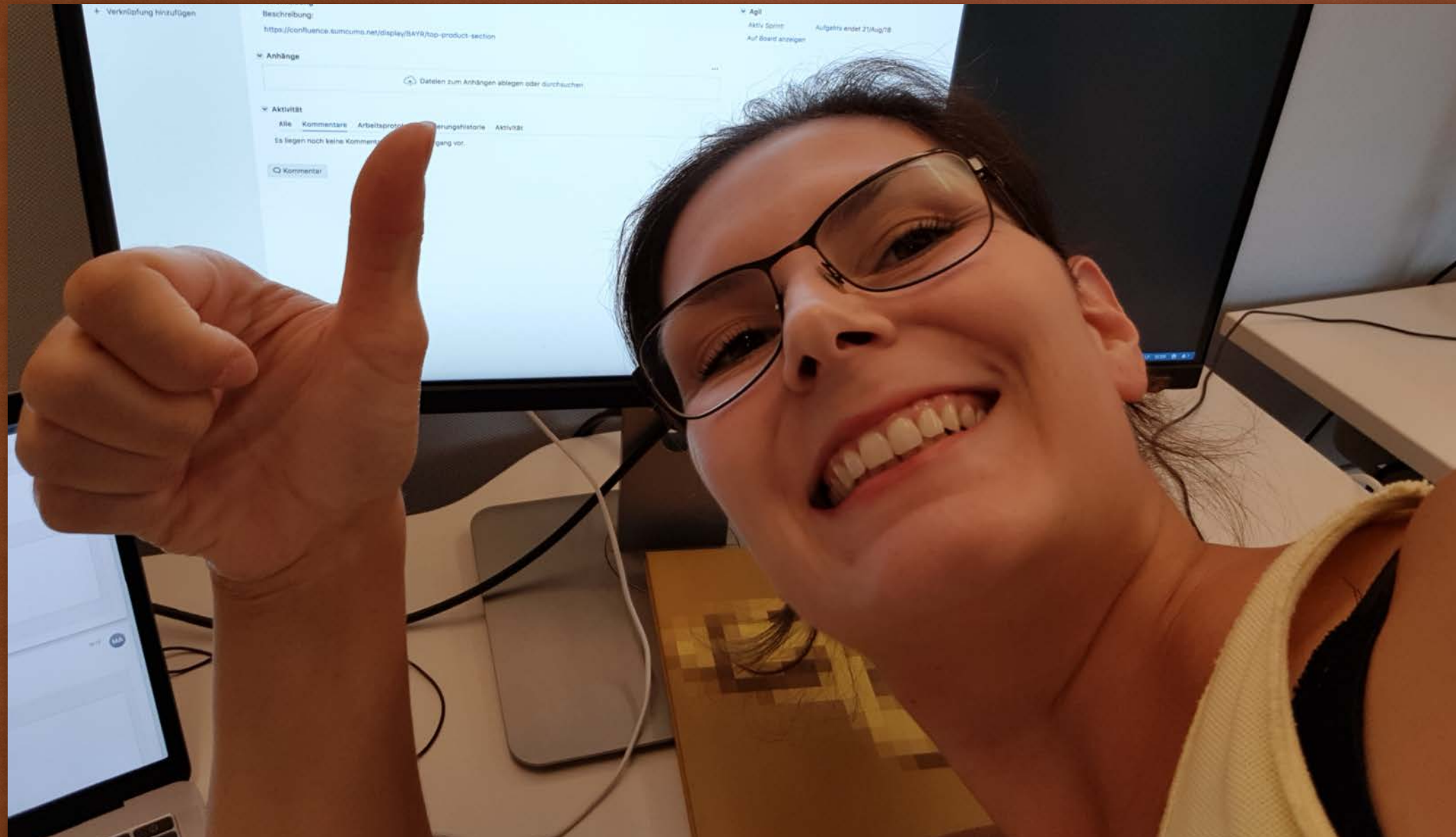


EMBRACE YOUR PROJECT
ANIMATION
WITH CONCEPT

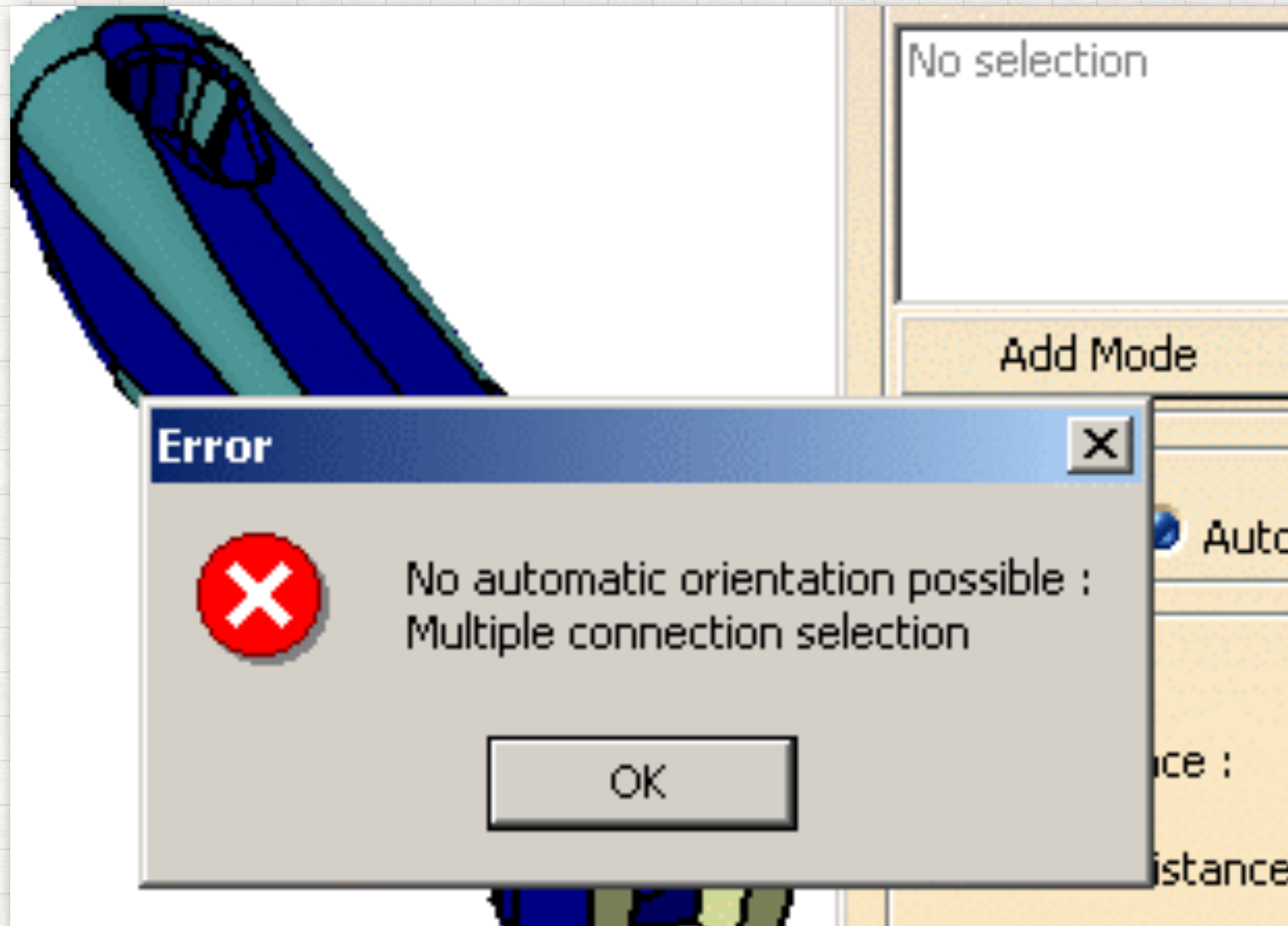
KERSTIN PUIGMARTI CONCHA

developer - @sumcumo - @bezierDev

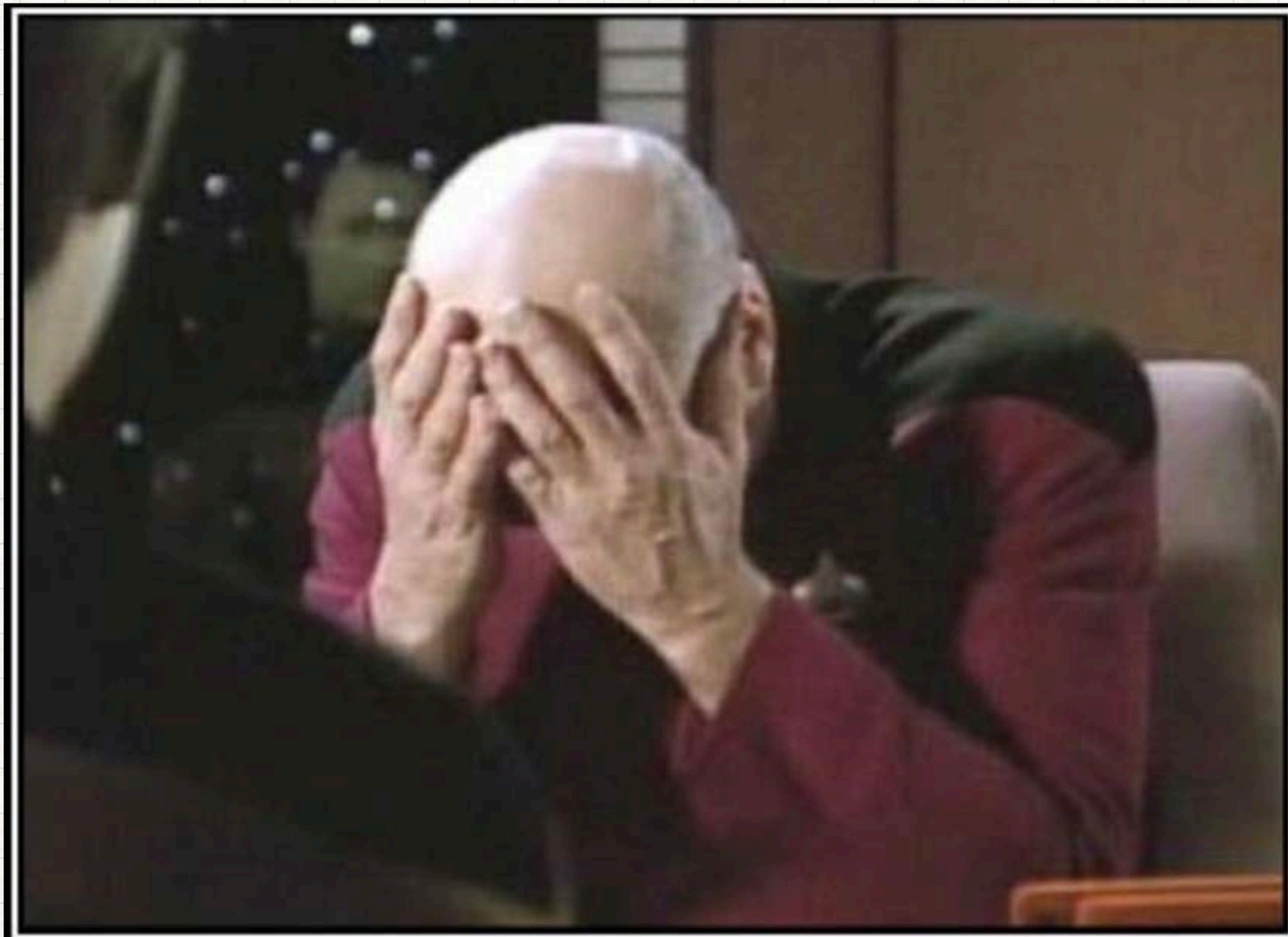


**DID YOU EVER HAVE ONE
OF THE FOLLOWING WEB
EXPERIENCES?**

LOSS OF ORIENTATION



INCREASING FRUSTRATION



LOSS OF TRUST



HOW DID IT COME
TO THESE FEELINGS?

Yale School of Art
1166 Chapel Street, POB 208339
New Haven, Connecticut, 06520-8339
(203) 432-2600

ABOUT THIS SITE

SEE ALSO: [HELP](#) [TRAVEL DIRECTIONS](#) [PROGRAM](#) [HISTORY](#) [FACILITIES](#)

This website is the continuously evolving effort of many people from many disciplines within the Yale School of Art and its wider circles. It is a [wiki](#), meaning that every graduate student, staff person, and faculty member of the School can change this website's content or add to it at any time. (Logins for other friends, alums, and members of the school are coming soon.)

When you click "Edit this page" on any page, you'll be prompted to log in using your Yale ID. Then you can proceed to make changes or additions to that page, which everyone else will see.

For practical reasons, not everyone in or associated with the School has access to edit every part of every page. For example, while students may offer their views on a course's page, or add information or resources, they cannot create official course descriptions. (At the moment, locked areas and content types are the exception rather than the rule.)

That said, we, as a collaborative community, are confident that the information on this website is as reliable as that on any website and more open to diverse voices and perspectives than most. In order that it remains so the site's interactivity is to be used freely but widely. As you move through it you may, in consequence of such openness, encounter content that surprises you or with which you don't agree. That will be the sign that this website reflects life in our institution in all its heterogeneous dimensions.

Some questions or concerns When you have questions about the appropriateness or the functioning of this website, please feel free to email art.help@yale.edu. We'd appreciate hearing from you.

More about this site The graphic templates and inner workings of this site were designed and programmed by Tamara Maletic and Dan Michaelson of the graphic design partnership Linked by Air; together with Takashi Okamoto of MudCorp. Dan is on the faculty here.

The site is unusual for being a module-based wiki. Authors choose a module appropriate to the content they're contributing, such as a calendar, an image gallery, a list, an official course description, or general text. Each module is put in a colorful and systemic way. Authors combine several



reviewed Yale School of Art — 1★
February 8, 2017 ·

Wow! I just saw your web page - can't unsee! - I certainly hope you're teaching web design! Yale should be embarrassed!



I agree it doesn't look professional at all



reviewed Yale School of Art — 1★
February 7, 2017 ·

web page - can't unsee! - I certainly hope you're teaching web design! Yale should be embarrassed!



I agree it doesn't look professional at all

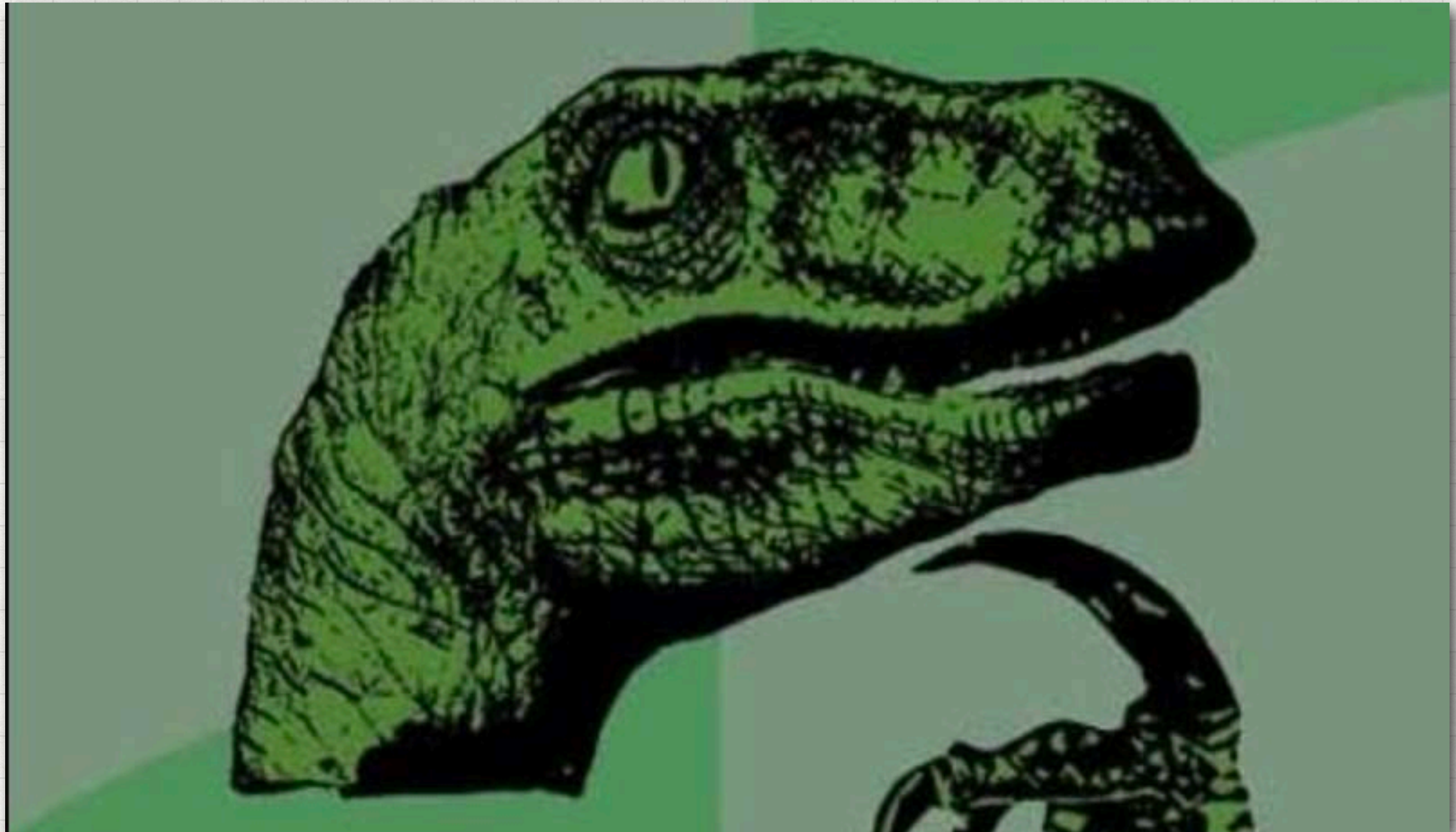


YOUR COGNITIVE LOAD

BECAME TOO HIGH

YOUR COGNITIVE LOAD
BECAME TOO HIGH

COGNITIVE LOAD



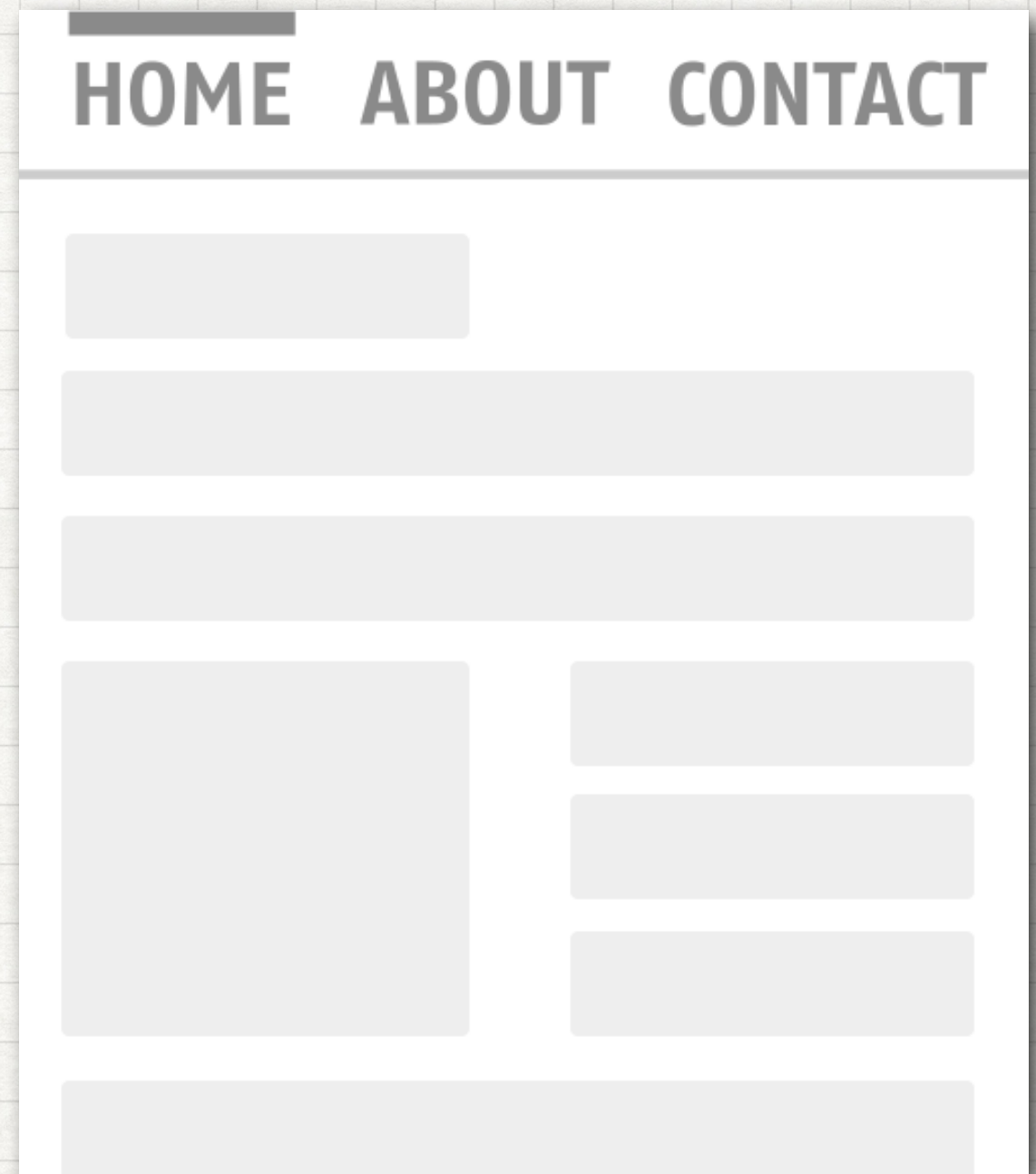
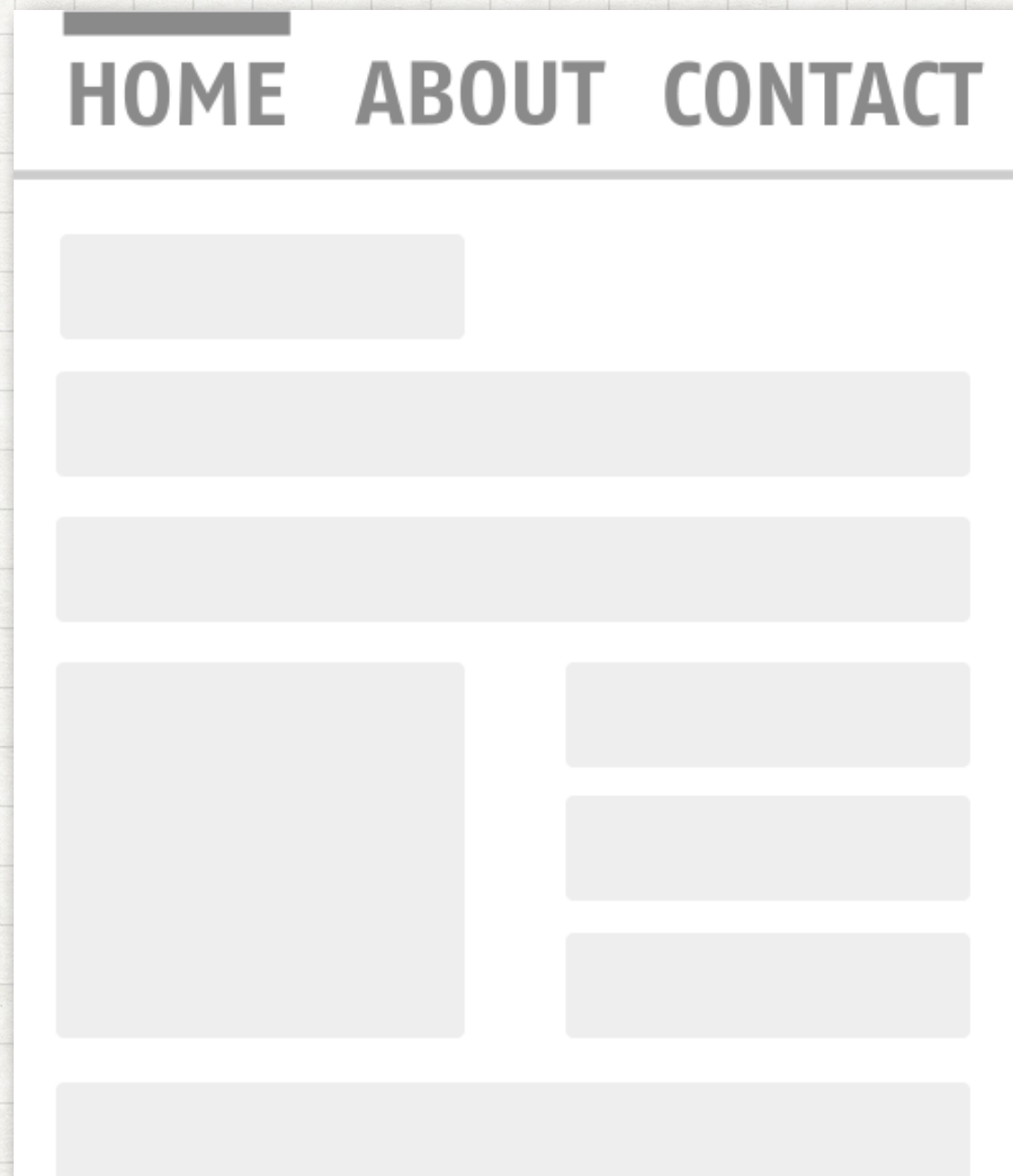
”

THE TOTAL AMOUNT OF MENTAL
EFFORT THAT IS REQUIRED TO
COMPLETE A TASK INVOLVING
PROCESSING OF INFORMATION

– Malgorzata Piernik
“8 ways to reduce cognitive load”

“

**ANIMATION CAN FILL THE
GAP BETWEEN VIEWING
AND UNDERSTANDING**



– Adrian Zumbrunnen
"Smart transitions in user experience design"

SIMPLE
AS THAT.

WHAT DO WE WANT?



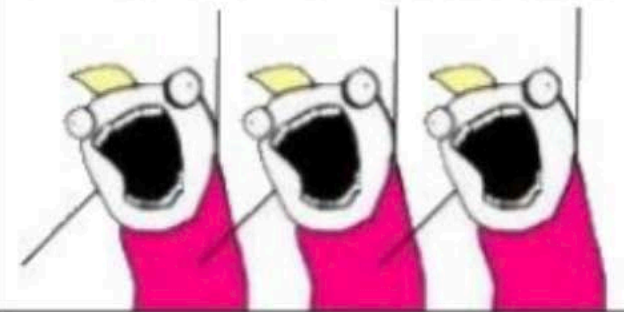
CLOSING THE GAP!



HOW DO WE DO THAT?



WITH ANIMATION!



WHAT DO WE ANIMATE?



EVERYTHING!





BE BRAVE AND GO FOR IT

The screenshot displays the Bewegen website interface. On the left, a dark vertical sidebar contains the Bewegen logo (a stylized 'W' with a red lightning bolt) and a hamburger menu icon. The main content area has a white header with navigation links: 'Our technology', 'Our DNA', and 'Our experts'. A 'Reach us' button with a calendar icon is in the top right. The central headline reads 'The Bewegen Bike Share System' in a large, black, sans-serif font, with the tagline 'Power Your Ride' in red below it. The bottom half of the page features a large image of a red and black bicycle. On the right side of the page, there is a 'FR' language selector and a 'Build Your Bike Share' button with a bicycle icon.

Our technology

Our DNA

Our experts

Reach us

The Bewegen Bike Share System

Power Your Ride

FR

Build Your Bike Share

WAIT
WHAT?



OVERACTING ELEMENTS



EVERYWHERE

WHAT ABOUT ANIMATING WITH CONCEPT?



WHAT YOU NEED
TO KNOW FIRST

WHAT YOU NEED TO KNOW FIRST

WHAT YOU NEED TO KNOW FIRST

- natural movements give comfort

DON'T POP IN



THEY HAVE WEIGHT



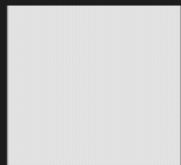
WHAT YOU NEED TO KNOW FIRST

- natural movements give comfort
- there are 12 principles of animation

GET TO KNOW THE PRINCIPLES OF MOTION

The 12 Principles of UX in Motion CREATING USABILITY WITH MOTION

Easing



Overlay

Offset & Delay

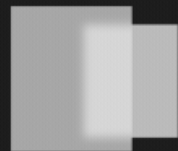


Cloning

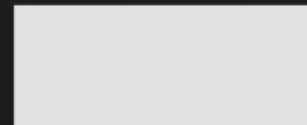
Parenting



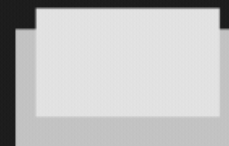
Obscuration



Transformation



Parallax

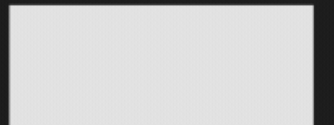


Value change



Dimensionality

Masking



Dolly & Zoom



uxinmotion.net

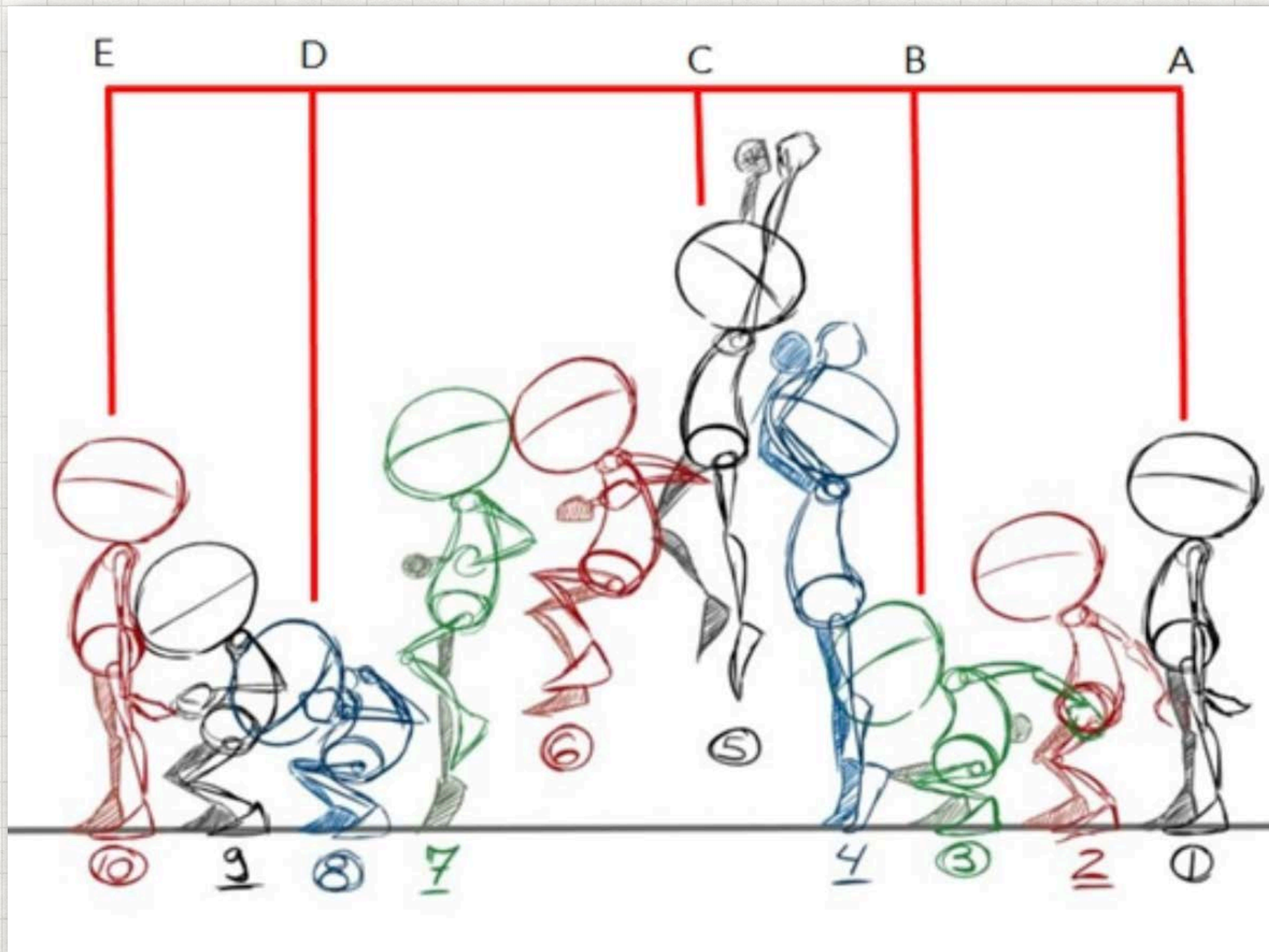
– Issara Willenskomer

“Creating Usability with Motion: The UX in Motion Manifesto”

WHAT YOU NEED TO KNOW FIRST

- natural movements give comfort
- there are 12 principles of animation
- you need minimum 2 poses and 1 tween

THE TWEEN IS THE KEY



ANIMATION SUPERPOWERS

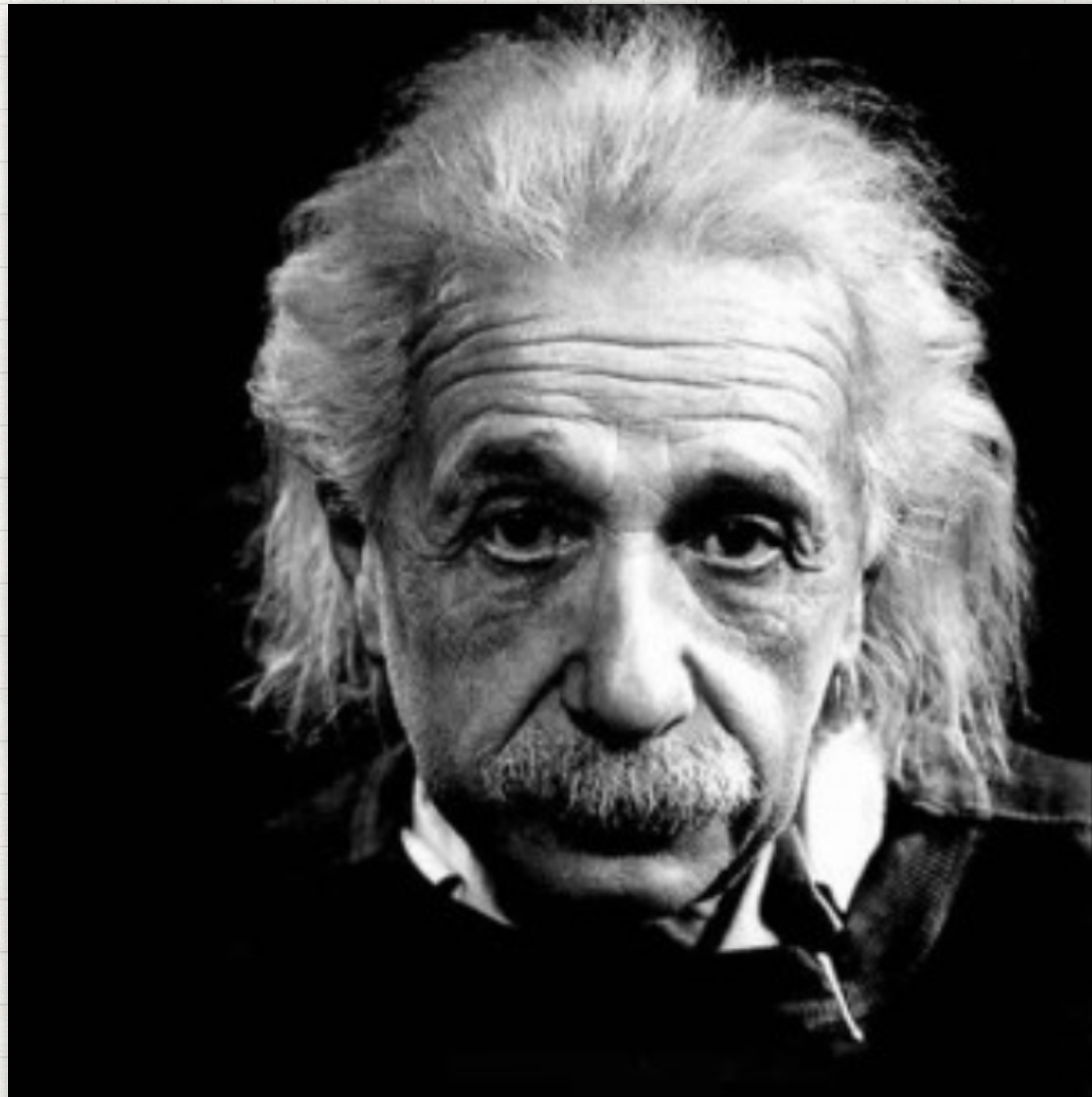
MAKING CONTEXT CLEAR



DISPLAYING HIERARCHIES



MAKING USAGE INTUITIVE



“The only
real valuable
thing is
intuition.”

-Albert Einstein

ARTIFICIAL SHORTENING OF WAITING TIME

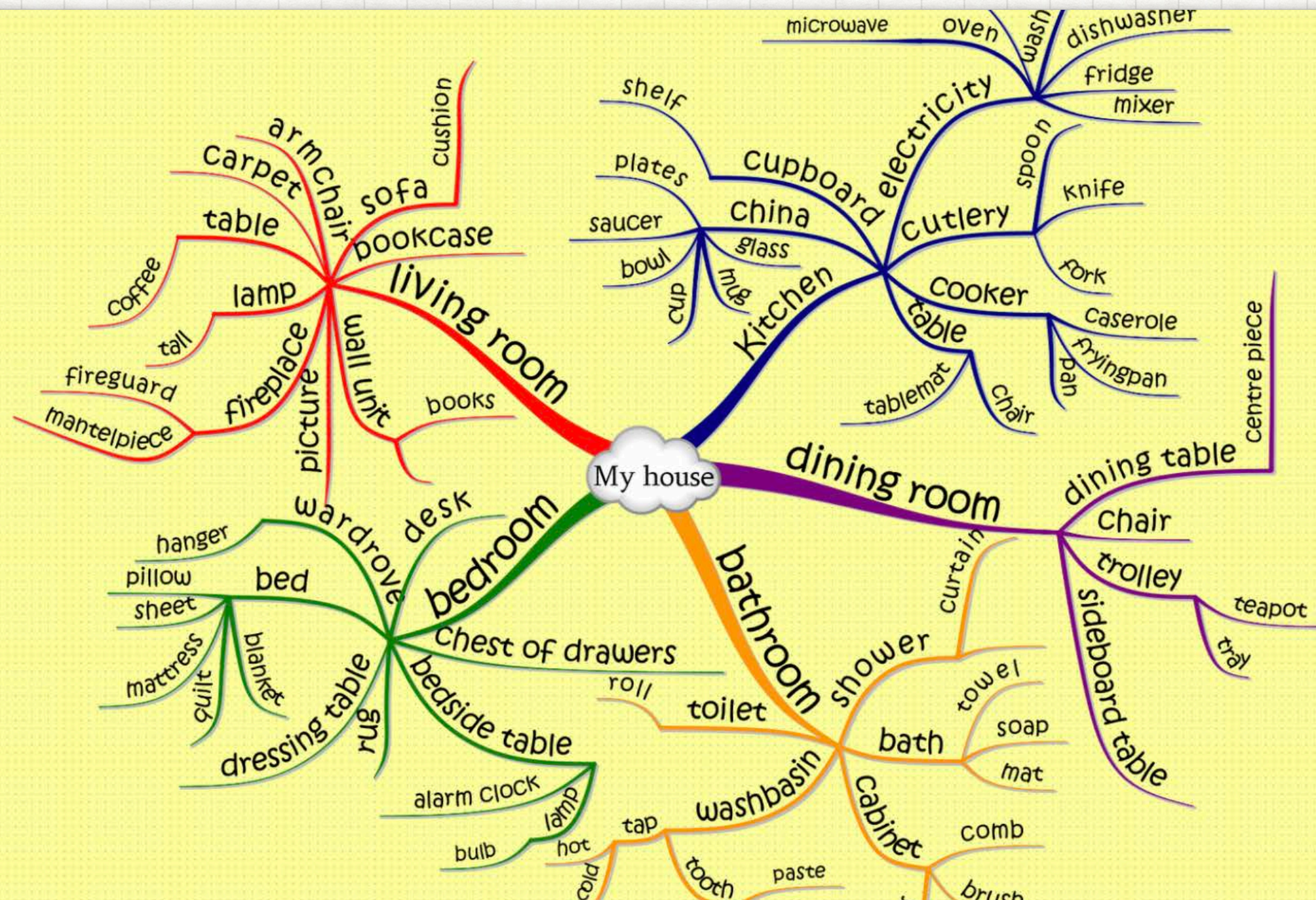


NATURAL

**NATURAL
PREDICTABLE**

**NATURAL
PREDICTABLE
COMPREHENSIVE**

CREATE A MIND MAP



YOU ALREADY HAVE
A LOT OF THEM

LET'S MAKE AN EXPERIMENT

THINK ABOUT YOUR HOME



THINK ABOUT YOUR FAVORITE MUG



WHERE DO YOU STORE IT?



HOW DO YOU GET ACCESS TO IT?



JUST... WHY?!



JUST... WHY?!

KIDDING ;)



**USERS
NEED A MIND MAP
TOO**

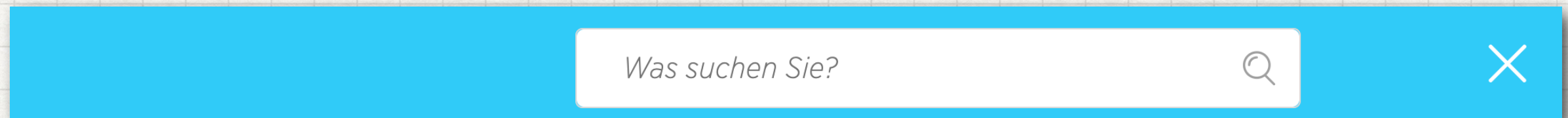
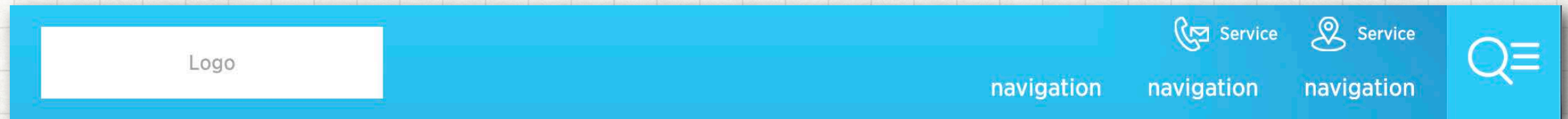
**USERS
NEED A MIND MAP TOO
ABOUT YOUR PROJECT**

ORIENTATION

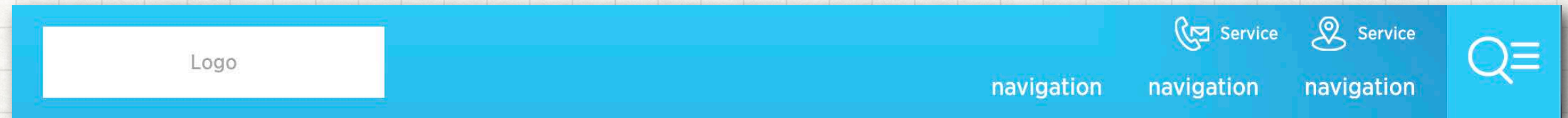
Orientation



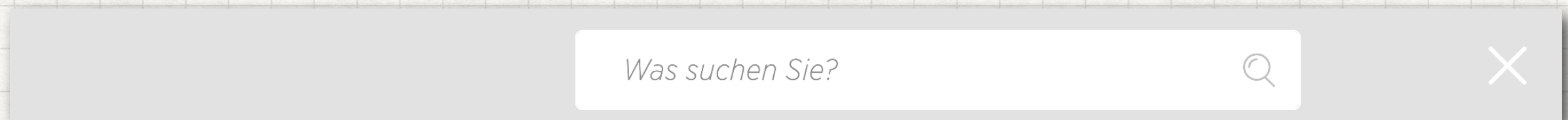
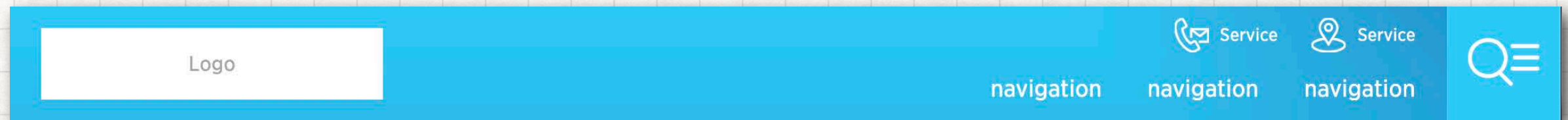
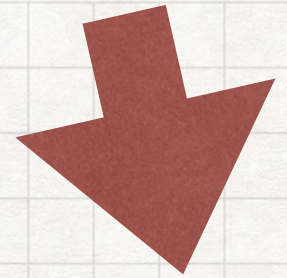
FROM A TO C



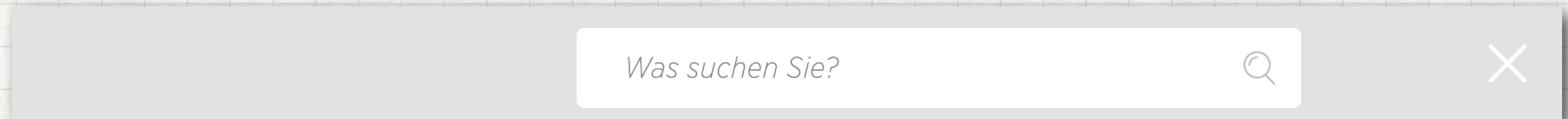
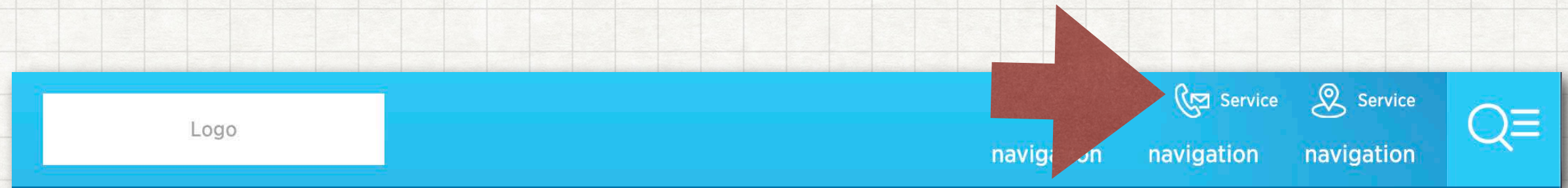
FROM A TO C



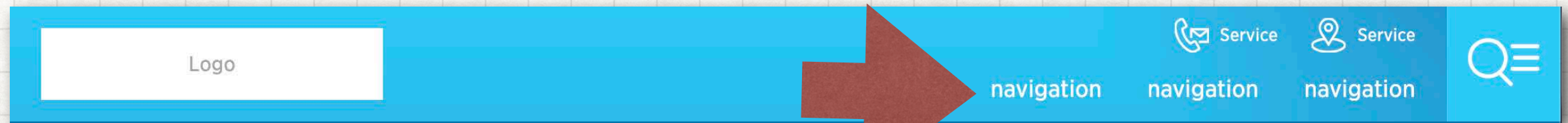
FROM A TO C



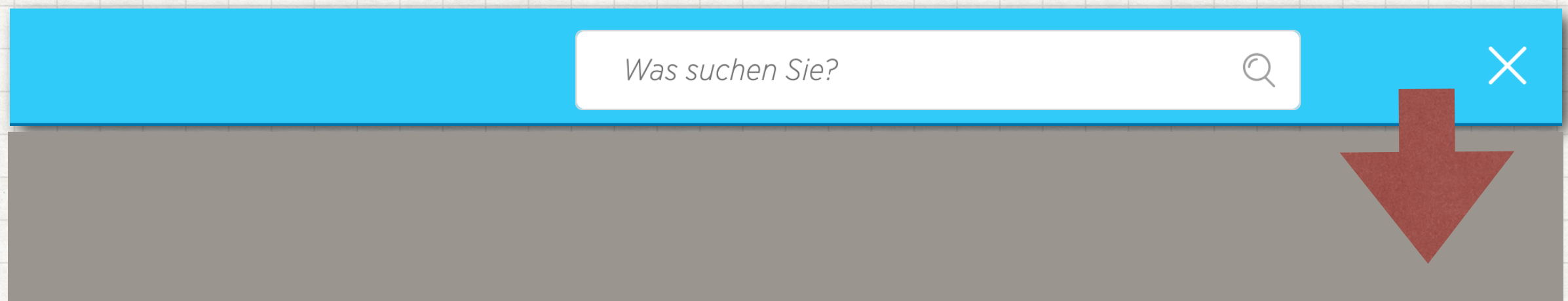
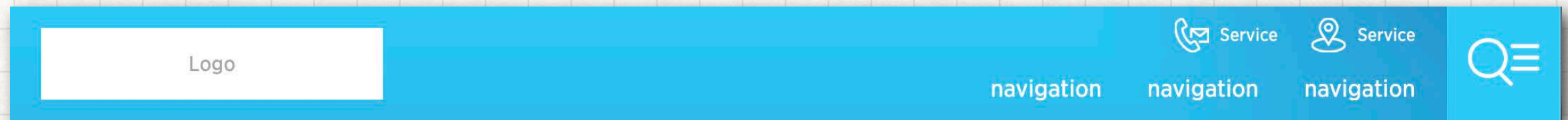
FROM A TO C



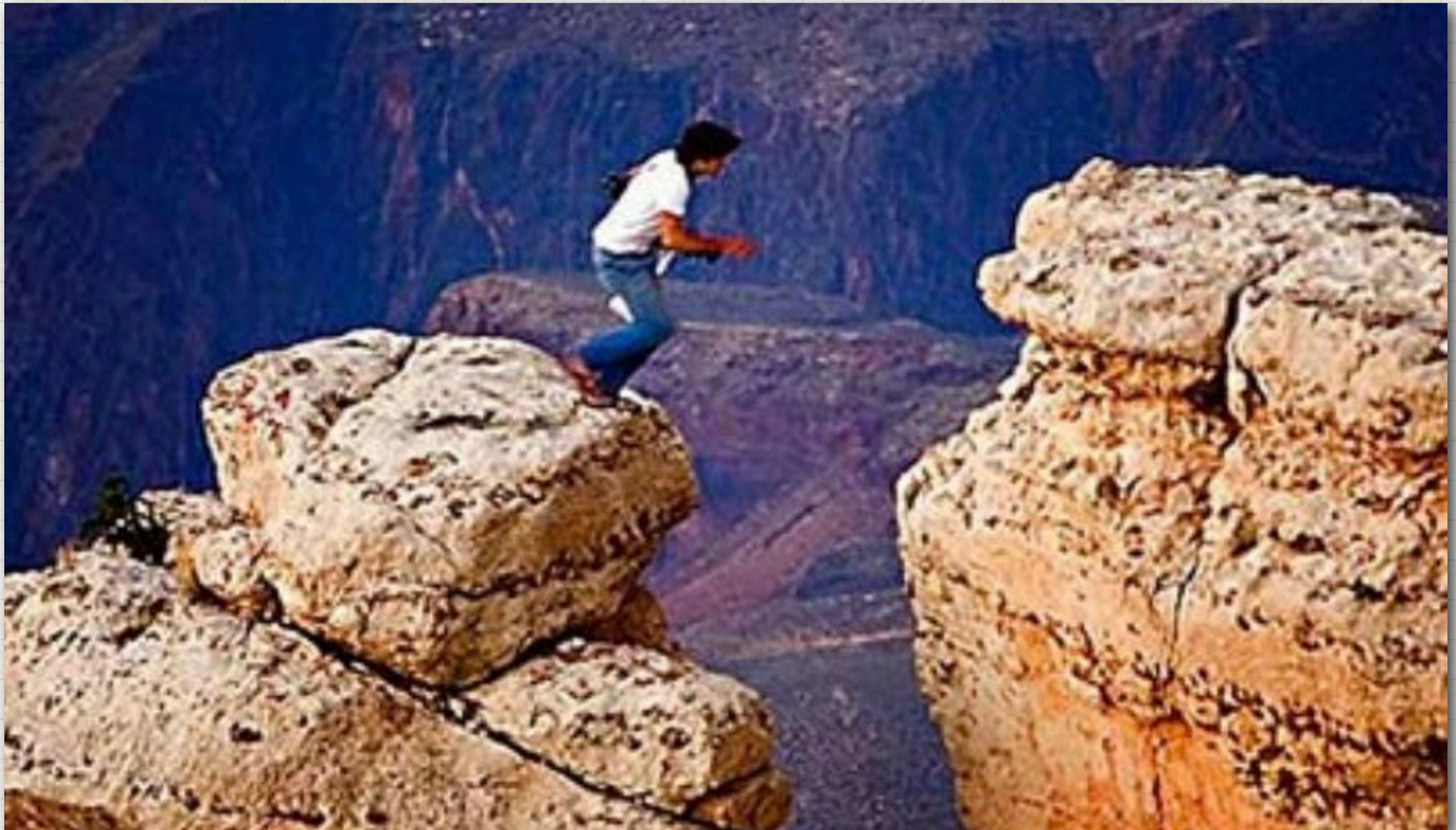
FROM A TO C



FROM A TO C



HOW TO GET THERE?



LET ME TELL YOU
MY
STORY



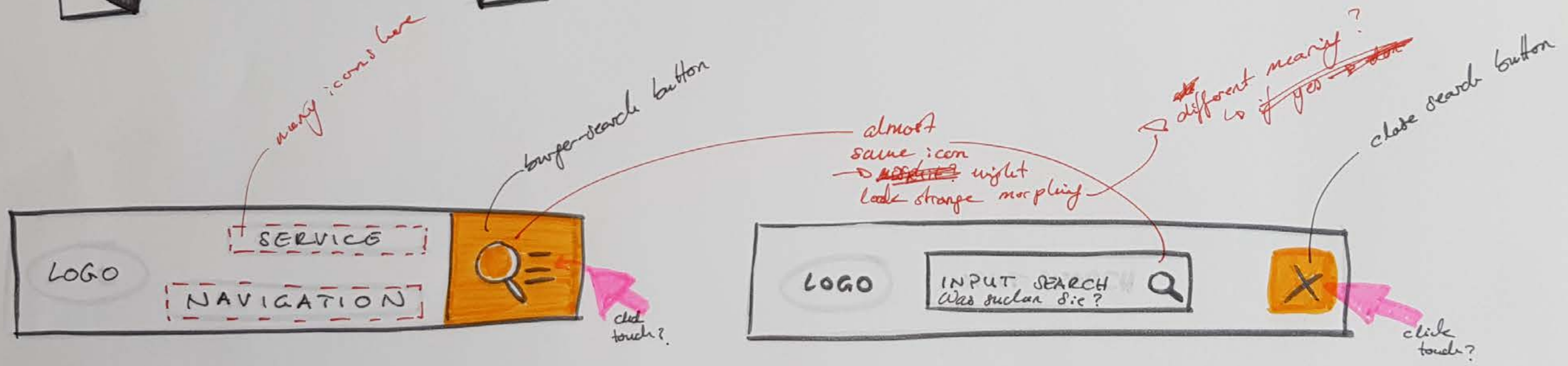
IT STARTS WITH A SECRET





- RESTRAINT** | PRETTY IMPORTANT HERE!
- NARRATIVE** → three items are moving away while two others get in → WHAT IS THE STORY?
 - SINGLE MOVEMENT** → be aware of many elements moving on=hover and stuff in header
 - ANIMATION WILL NOT SAVE YOU**
 - DETAILS ARE OPPORTUNITIES**

HEADER - SEARCH



- click burger search button
- service disappears
- navigation-items disappear
- close-search button appears
- input type search appears

FROM A TO C

Was suchen Sie?



PROTOTYPING

QuickTime PlayerAblageBearbeitenDarstellungFensterHilfe

A Pen by Kerstin ×start ⇒ die Bayer ×tell asecret - Go ×Google Übersetz ×cute pig - Googl ×happy - Google- ×YouTube Minions ×Grand Canyon to ×

https://codepen.io/kerpui/pen/PgKzdm

AppsAndere Lesezeichen

UntitledA PEN BY Kerstin Puigmarti Concha

HTML

CSS (SCSS)

JS

1<div id="header" class="header">

2<div class="header-inner">

3Logo

4<div id="navCont">

5<ul class="sn service">

6service

7service

8service

9

10<ul class="sn navigation">

11navigation

12navigation

13navigation

14navigation

15navigation

1.header {

2height: 120px;

3border-bottom: 1px solid #C109A9;

4}

5.header-inner {

6width: 80%;

7margin:0 auto;

8position: relative;

9}

10.searchburger {

11background-color:#C069E0;

12width:80px;

13height:79px;

14position:absolute;

15right:0;

1let trigger = document.getElementById('trigger');

2let header = document.getElementById('header');

3let icClose = document.getElementById('icClose');

4let ç = document.getElementById('icBurger');

5let myinput = document.getElementById('input');

6let myfakeinput = document.getElementById('fakeInput');

7let miniClose = document.getElementById('miniClose');

8let circle = document.getElementById('mycircle');

9let circleLine = document.getElementById('circleLine');

10let magnifying = document.getElementById('svgMagnifying');

11let navCont = document.getElementById('navCont');

12

13


14TweenMax.set(myinput, {autoAlpha: 0})

15TweenMax.set(myfakeinput, {x: "100%"});

Logo

service service service

navigation navigation navigation navigation navigation



ConsoleAssetsComments%

Last saved less than a minute ago

DeleteCollectionsEmbedExportShare

THEN I COULD NOT RESIST ANYMORE



ANALYZING EVERYTHING

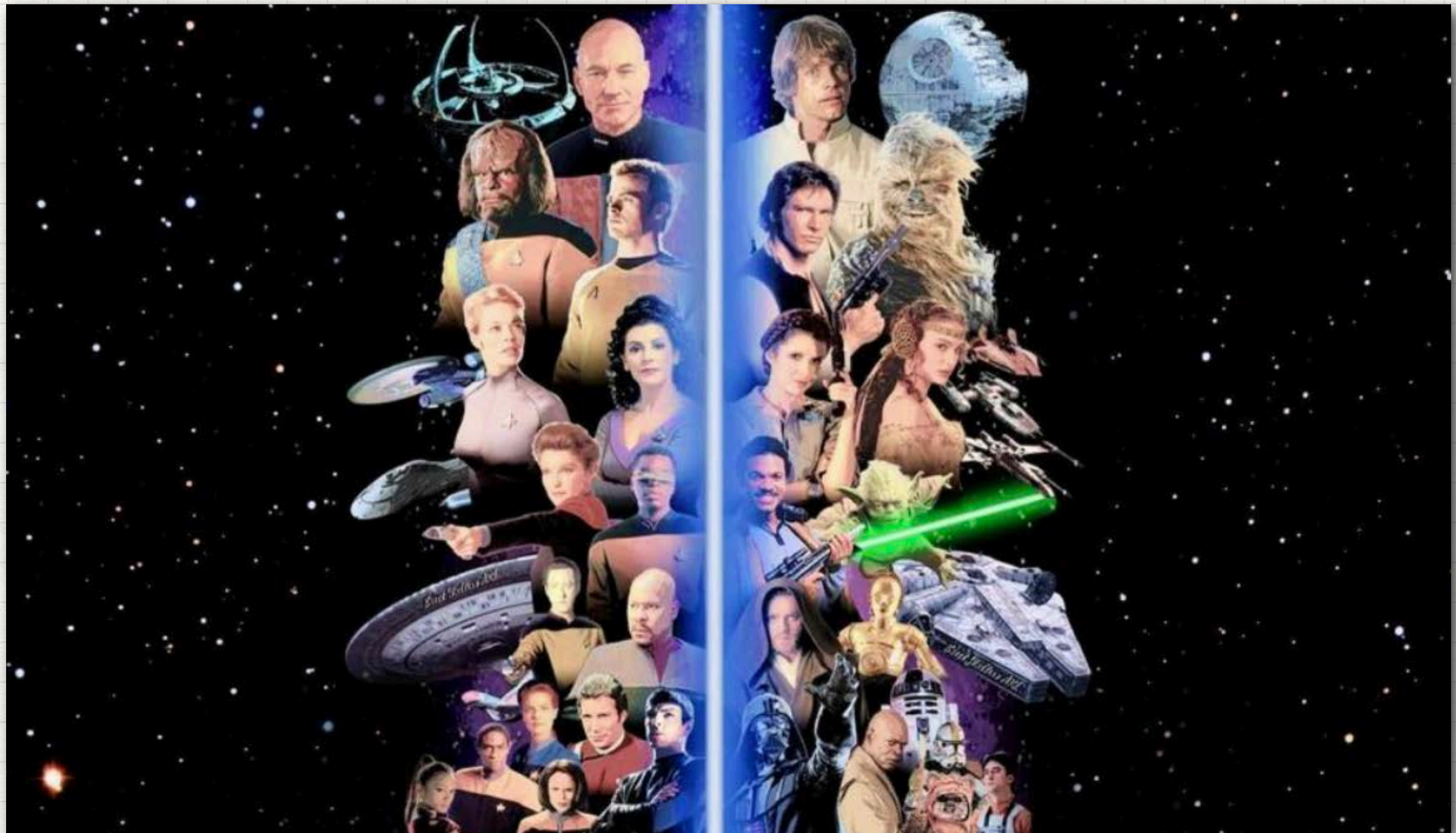
<div></div> <div>LAYER</div>	<div>?</div> <div>→ GOOGLE MAPS</div>	TRANSFORM SUB-NAV
<div></div> <div>RICH TEXT ELEMENTS DEFAULT STYLING</div>		
<div></div> <div>SERVICE LINK</div>	<div>H</div> <div>→ LINK ICON, BACKGROUND-COLOR B</div>	
<div></div> <div>SLIDER TRUST</div>	<div>M</div> <div>H</div> <div>→ SLIDE HOVER LINK B</div>	
<div></div> <div>STAGE CONSULTANT</div>	<div>H</div> <div>→ LINKS B, ICONS</div>	
<div></div> <div>STAGE PRODUCT ROTATION CALCULATOR</div>	<div>M</div> <div>T</div> <div>H</div>	<div>MOVE SLIDES TRANSFORM</div> <div>TIMER HOVER B BUTTON</div> <div>HOVER SLIDE TRANS</div> <div>IMAGE TRANSFORM/MO</div> <div>GUIDE? FORM LABEL</div> <div>ERROR</div>
<div></div> <div>STAGE PRODUCT ROTATION LIST</div>	<div>M</div> <div>T</div> <div>H</div>	
<div></div> <div>STAGE PRODUCT ROTATION TEXT</div>	<div>M</div> <div>T</div> <div>H</div>	
<div></div> <div>STAGE PRODUCT STATIC LIST</div>	<div>H</div> <div>HOVER BUTTON B</div>	
<div></div> <div>STAGE PRODUCT STATIC TEXT</div>	<div>H</div> <div>BUTTON B</div>	

WRITING DOWN PRINCIPLES

- RESTRAINT
- NARRATIVE
- SINGLE MOVEMENT
- ANIMATION WILL NOT SAVE YOU
- DETAILS ARE OPPORTUNITIES

• MANY THINGS HAPPENING
SIMULTANEOUSLY - SH

GOING INTERDISCIPLINARY



ASKING THE REAL QUESTIONS

positioned
at center

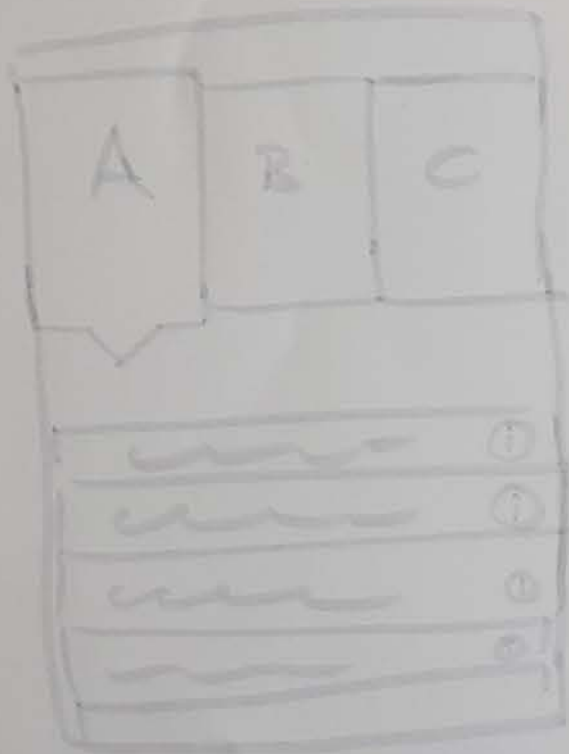
WHICH ONE IS THE
HERO?
WHERE TO PUT THE MAIN
ATTENTION TO?

CONTENT FIRST
CALL TO ACTION

not to mess
with desktop!

- RESTRAINT
- NARRATIVE
- SINGLE MOVEMENT
- ANIMATION WILL NOT SAVE YOU
- DETAILS ARE OPPORTUNITIES

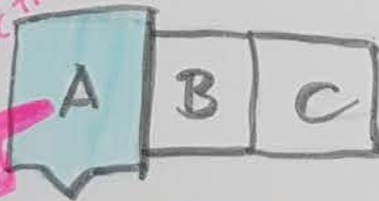
IMPORTANT: MANY THINGS HAPPENING HERE.
KEEP IT SIMPLE. - SHORT DISTANCE ANIMATION REQUIRED TO
FOCUS ATTENTION ON CONTENT CHANGE



SELECTING AN OTHER TARIFF
MEANS A DIFFERENT AMOUNT
OF BENEFITS (+) DIFFERENT
VALUES OF BENEFITS!

MAKE THIS
NOTICABLE!

CLICK
SELECT (TAB)

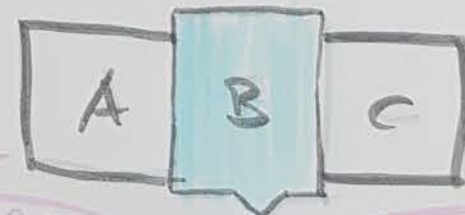


✓ TEXT ONE A
✓ TEXT TWO A
✗ TEXT THREE A

FADE-
OUT
FAST

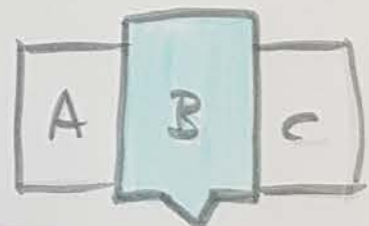
MOVE DOWN 5PX?

FADE FAST



✓ TEXT ONE B
✗ TEXT TWO B
✗ TEXT THREE B

FADE FAST



✓ TEXT ONE C
✗ TEXT TWO C
✗ TEXT THREE C

FADE-IN FAST

MOVE FROM TOP 5PX

TARIFF

MOBILE

VISIBILITY OF SYSTEM STATUS

the system should always keep
the user informed about what
is going on, through appropriate
feedback within reasonable time

RECOGNITION RATHER THAN RECALL

Minimize the user's memory
load by making objects, actions
and options visible

PROJECT BENEFITS OF AN ANIMATION CONCEPT

PROJECT BENEFITS

- more structure => every animation has a meaning

PROJECT BENEFITS

- more structure => every animation has a meaning
- usability test => are there hidden doublettes?

PROJECT BENEFITS

- more structure => every animation has a meaning
- usability test => are there hidden doublettes?
- more "organic" feeling => components behave naturally

PROJECT BENEFITS

- more structure => every animation has a meaning
- usability test => are there hidden doublettes?
- more "organic" feeling => components behave naturally
- user centered

PROJECT BENEFITS

- more structure => every animation has a meaning
- usability test => are there hidden doublettes?
- more "organic" feeling => components behave naturally
- user centered
- more interdisciplinary exchange

DEVELOPER PITFALLS

WITH GREAT POWER

A close-up, comic-style illustration of Spider-Man's face and right hand. He has a serious, intense expression with white eyes and a black mask. His right hand is raised, palm facing forward, with fingers slightly spread. The background is a solid dark brown color.

**COMES GREAT
RESPONSIBILITY**

PERFORMANCE PERFORMANCE
PERFORMANCE PERFORMANCE
PERFORMANCE PERFORMANCE

CRITICAL RENDERING PATH

← → ↺ https://codepen.io/kerpui/pen/gEwpMa?editors=1100

Apps

Andere Lesezeichen

Basic CSS Animation Knowledge Summary
A PEN BY Kerstin Puigmarti Concha

♥ Save Fork Settings Change View

HTML


1 <h1>Basic CSS Animation Knowledge
Summary</h1>
2 <article class="no-flex">
3 <section>
4 <h2>Critical Rendering Path</h2>

CSS (SCSS)

1 body {
2 font-family:helvetica, arial, sans-serif;
3 font-size: 16px;
4 line-height: 20px;

Basic CSS Animation Knowledge Summary

Critical Rendering Path



Check out [Smooth as Butter: Achieving 60 FPS Animations with CSS3](#) by José Rosário.

Properties to describe CSS Transitions

As described at [JAVASCRIPT.INFO](#)

► transition-property

Performant Properties to animate

Animating an Element by the following properties doesn't affect the Browsers Layout or Paint process. It uses the Browsers Composite process which has a lower impact on performance.

Console Assets Comments % Last saved about 1 month ago Delete Collections Embed Export Share

PROPERTIES TO ANIMATE

The screenshot shows a CodePen editor interface for a project titled "Basic Animation" by Kerstin Puigmarti Concha. The editor has two main panels: HTML and CSS (SCSS).

HTML Panel:

```
1 <div class="row">
2   <div class="sq square_x"><span>X</span></div>
3   <div class="sq square_y"><span>Y</span></div>
4 </div>
5 <div class="row">
6   <div class="sq square_z"><span>Z</span></div>
7   <div class="sq square_r"><span>rotate</span></div>
8 </div>
9 <div class="row">
10  <div class="sq square_s"><span>scale</span></div>
11  <div class="sq square_o"><span>opacity</span></div>

```

CSS Panel:

```
129 .c {
130   margin-bottom: 10px;
131   margin-top: 10px;
132 }
133 body {
134   padding-top: 20px;
135   font-family: helvetica, arial, sans-serif;
136 }
137
138 .square_mine {

```

Preview Area:

The preview area displays six colored squares arranged in two columns. The left column contains three squares: a teal square labeled "X", a dark teal square labeled "Z", and a blue square labeled "scale". The right column contains three squares: an orange square labeled "Y", a pink square labeled "rotate", and a green square labeled "opacity".

Footer:

The footer shows the status "Last saved less than a minute ago" and buttons for "Delete", "Collections", "Embed", "Export", and "Share".

BASIC ANIMATION

{CSS}



ADVANCED ANIMATION

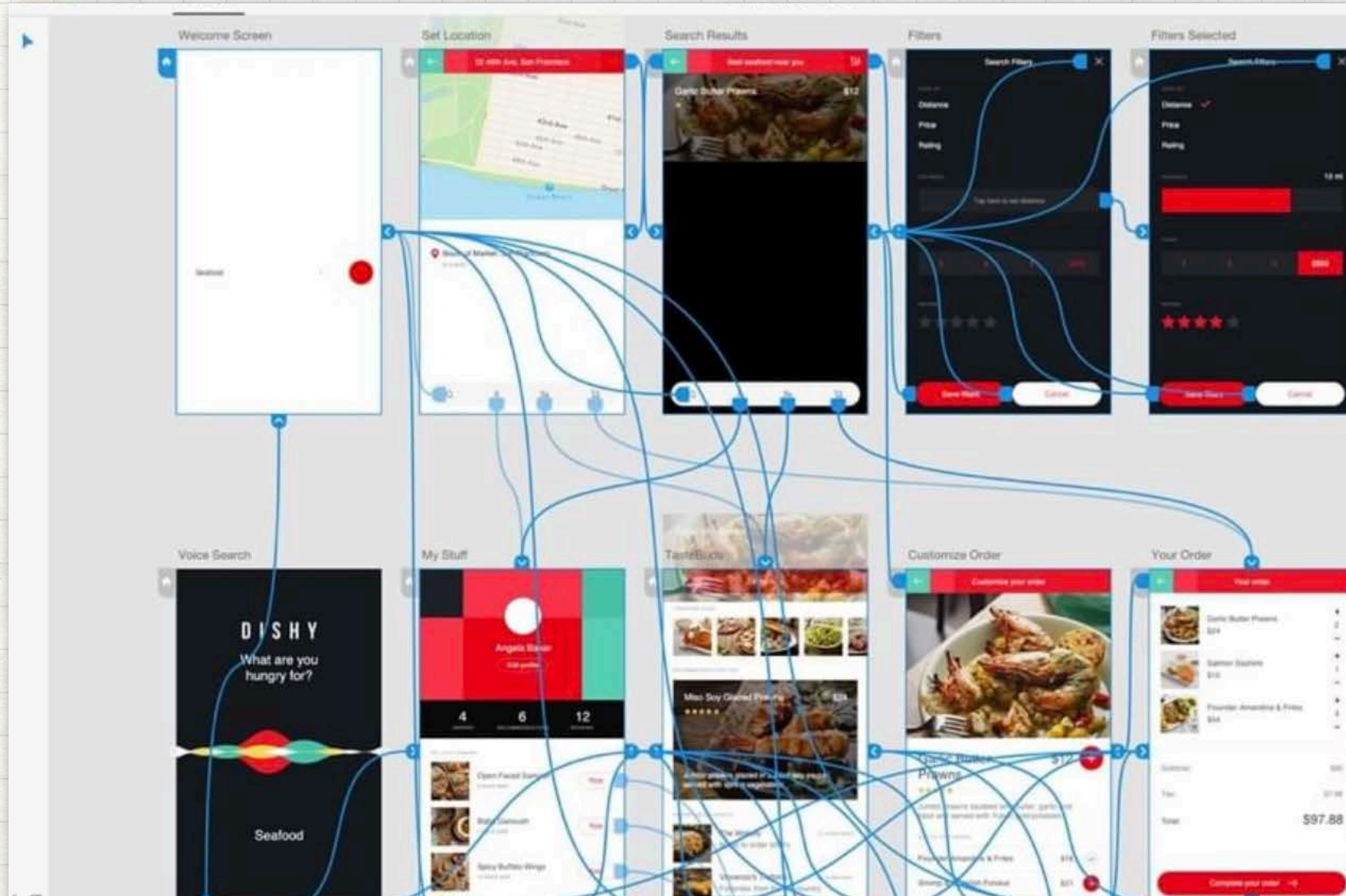


GSAP

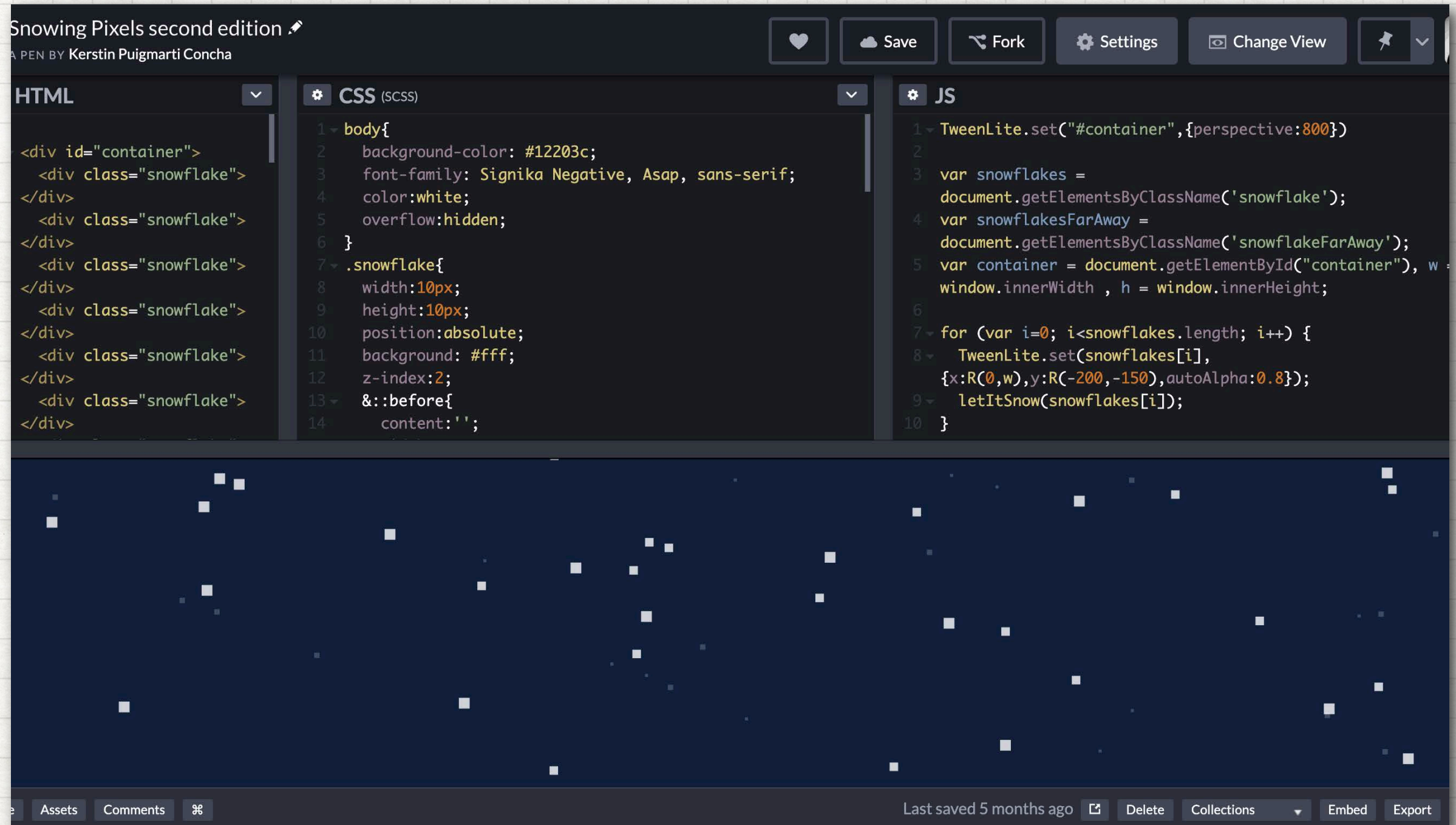
GreenSock Animation Platform

DEVELOPER SUPPORT

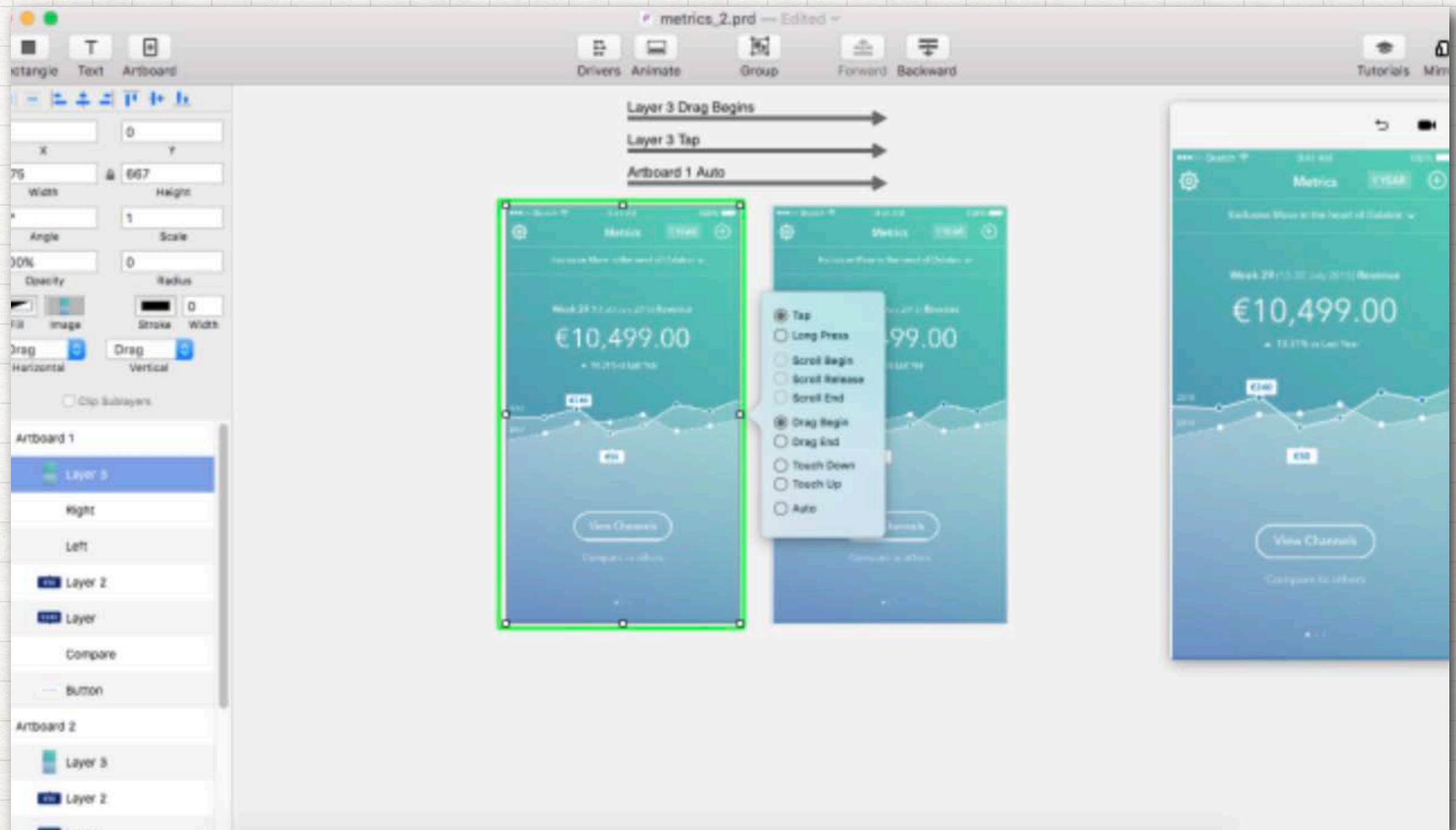
ADOBE XD



CODEPEN



PRINCIPLE



GO
FOR IT!



EMBRACE YOUR PROJECT



KERSTIN PUIGMARTI CONCHA | DEVELOPER @ SUM.CUMO | @BEZIERDEV