

# READABILITY: LET'S BUILD GREAT AND INCLUSIVE EXPERIENCE

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**Damien Senger**

Product designer · accessibility advocate

[raccoon.studio](http://raccoon.studio) · [@iamhiwelo](https://twitter.com/iamhiwelo)



**Raccoon Studio**



**Castor EDC**





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yes, I love raccoons!



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and we're recruiting!



**Raccoon Studio**



**Castor EDC**





UTC+2 · 10h Amsterdam & Rotterdam, Netherlands



Good to know:

This talk slides are **available on Notist.**

<https://noti.st/hiwelo/SgPVxk>

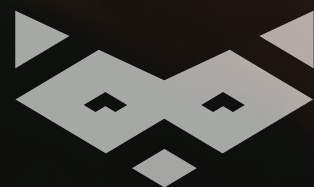


and if you like it, don't hesitate to invite me to your meetup or conference to talk about inclusive design, accessibility or queer representation in design





# READABILITY: LET'S BUILD GREAT AND INCLUSIVE EXPERIENCE





# Readability, why?





**Reading is not an easy thing.**



**Readability is not only useful  
for people with reading disabilities**

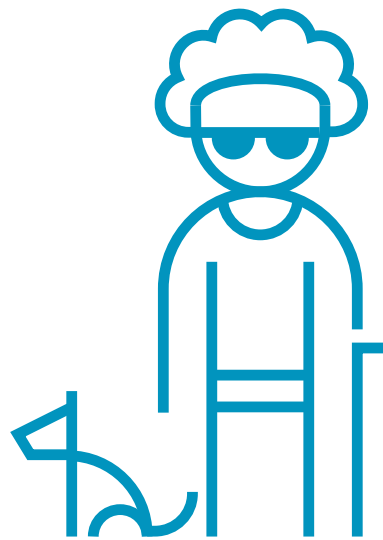


# Reading issues can be linked to...





# Vision impairments



Blindness



Eye infection  
Hay's fever



Visual  
distraction

Microsoft icons



# Cognitive “impairments”



Dyslexia  
Hyperlexia  
(Autism/ADHD)



Fluency

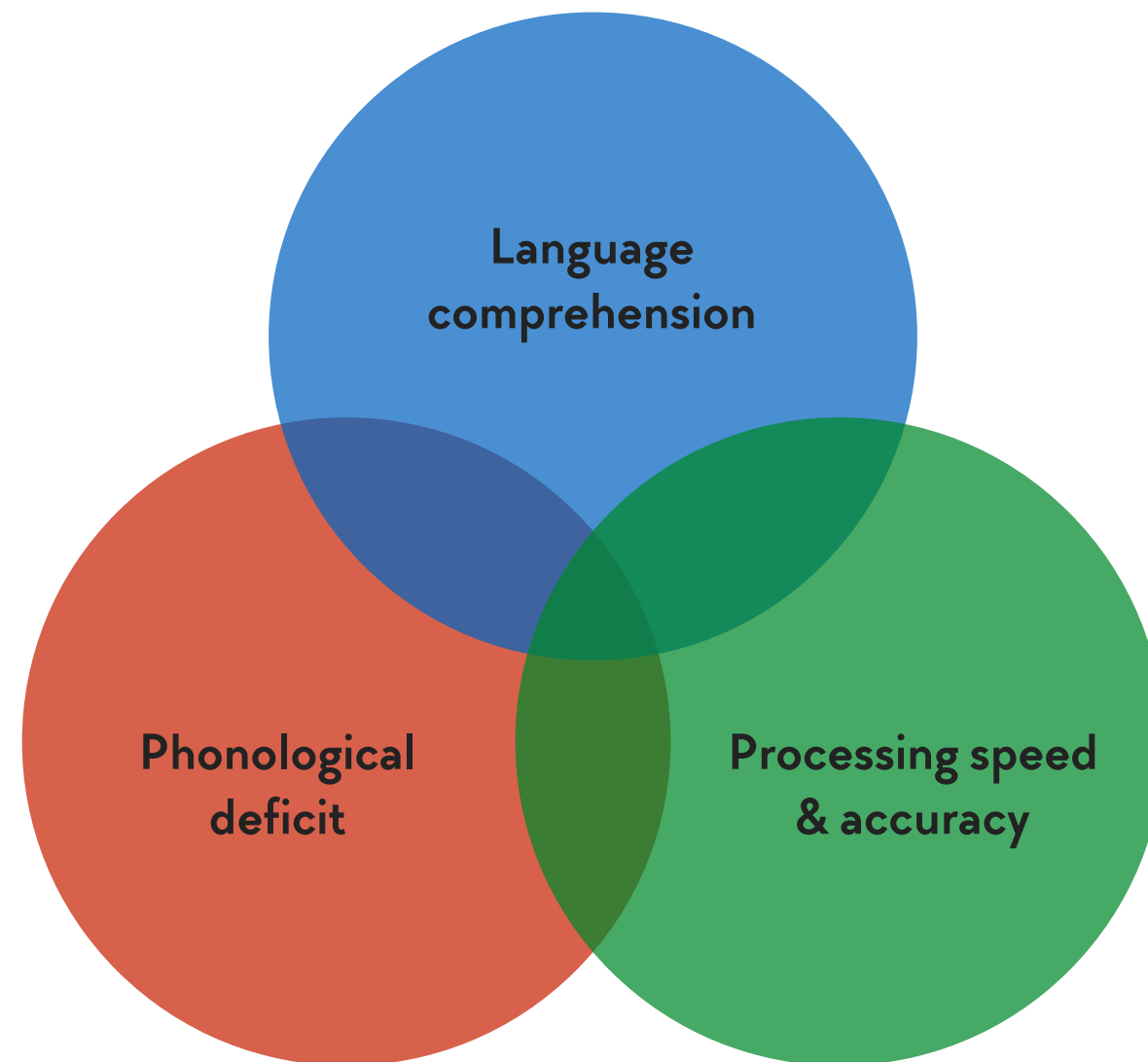


Stressful  
context

Microsoft icons



# Types of reading disabilities





Yes, there is **adult dyslexic people**.





# How do we read?



**The reading experience depends  
a lot of the context & environment**





**Reading is not linear,  
we are reading by *saccades*.**



And between each saccades,  
we have something called *fixation*.





**During a fixation, everything  
except the focus is blurry.**





**And every few fixations,  
we need a small break**

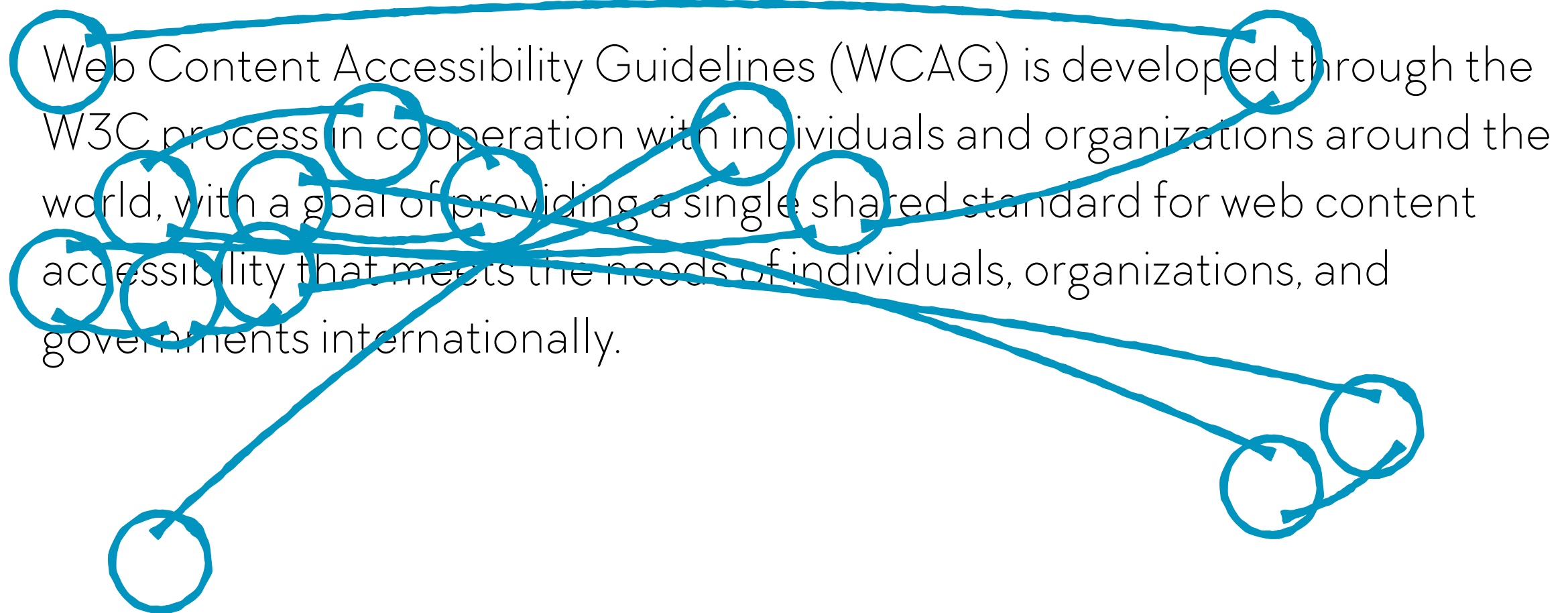


**Saccades, fixations, breaks...**  
**nothing linear (at all)**





Web Content Accessibility Guidelines (WCAG) is developed through the W3C process in cooperation with individuals and organizations around the world, with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

The text is overlaid with several hand-drawn blue circles and arrows. Some circles are placed around individual words or phrases, while others are larger and encompass multiple words. Arrows of varying lengths and directions connect these circles, creating a network of relationships across the text. The scribbles are most concentrated around the words 'developed', 'W3C', 'process', 'cooperation', 'individuals', 'organizations', 'world', 'goal', 'providing', 'single', 'shared', 'standard', 'web', 'content', 'accessibility', 'meets', 'needs', 'individuals', 'organizations', 'and', 'governments', and 'internationally'.

**A lot of us mainly use shapes  
to identify words when reading.**



**Translation:**  
**We are not reading in a  
word-by-word manner.**





**Yuo cna porbalby raed tihs esaliy  
desptie teh msispeillgns.**



**You can probably read this easily  
despite the misspellings.**



**This shape is possible by  
the letters' *identifying features***





**These identifying features able us  
to read more easily.**



**Readability**

**READABILITY**



problem

porbelm

pbleorm



PRINT



CITE



Since it opened in 2006, the **9/11 Tribute Center** in Lower Manhattan has become a place where visitors can learn about the impact of the September 11 attacks. The center is a family of family members who lost loved ones, first responders, rescue and recovery workers, longtime Lower Manhattan residents and other trained volunteers tell their stories in the hopes of providing a greater understanding of the impact of 9/11, as well as the ongoing recovery and resilience of New York City. We asked five of those volunteers to share some of their thoughts, including how 9/11 changed them, what they want people to remember and what advice they would give future generations.

- **Joan Mastropaolo** lives in Jersey City, New Jersey. She was a 1st grade teacher at the time of 9/11, and her husband (who was a firefighter) was killed on 9/11. She has since moved to the World Trade Center site and now works for the 9/11 Tribute Center.
- **John Crawford** was a firefighter with the Fire Department of New York (FDNY). He was killed when the twin towers collapsed on 9/11. Crawford also worked on the construction of the new World Trade Center plaza.
- **Dave Hood**, who is an attorney for the Port Authority of New York & New Jersey, was on the 68th floor of the South tower when the plane hit it on 9/11.
- **Paul Ianelli**, a detective with the Brooklyn South Narcotics Division of the New York Police Department (NYPD), took a ferry to Lower Manhattan from Bay Ridge, Brooklyn, with his fellow officers to get to the World Trade Center on 9/11. He then spent months working on the recovery effort.
- **Joe Powers** was the Director of Readiness Analysis for the Navy Headquarters at the Pentagon. On 9/11, he walked seven miles to get home to his wife and children in the suburb of Washington, D.C. where they lived.

*Looking back at the past 10 years, what has stayed the same for New Yorkers*

*the 9/11 attacks and what has changed*



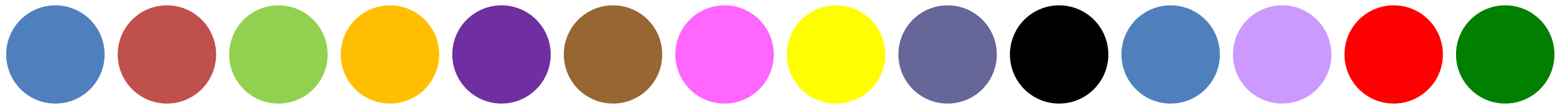
Saccades & fixations,  
experimentation by Nielsen Norman Group



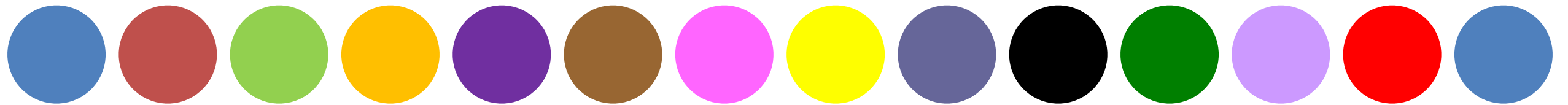
**The shape of a word or a form is  
one of the first thing we analyse**



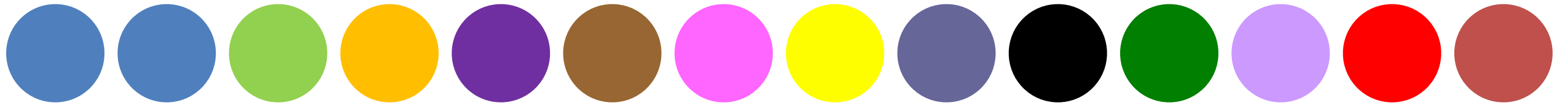
**Two spots are with the same color.  
Which ones?**



# Let's try again.



**Proximity could also help us,  
but this is an other topic #gestalt**





# Readability

## 101.





↑  Baggage hall |  Exit

 Gates **BDEFGH**

 Gates **C21-26**

 Transfer **T2-9**

 Gate **C5**



credits: Mijksenaar



# The 4C of readability






↓  **M0-M1-M2-M3** ↓  **Portes**  
**Gates**  
**Puertas** **01** to **39**

↓ **Sortida**  
**Way out**  
**Salida**    

↓  **Informació Trànsits**  
**Transits Information**  
**Información Tránsitos**


↓  **Recollida d'equipatges**  
**Baggage claim**  
**Recogida equipajes**





↓  **M0-M1-M2-M3** ↓  **Portes**  
**Gates**  
**Puertas** **01** to **39**

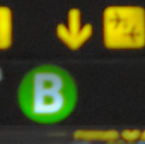

↓ **Sortida**  
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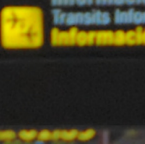
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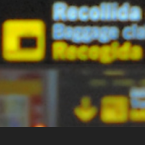
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Continuity: repetition of the information until the endpoint





Conspicuity: being eye-catching and understandable





Consistency: keeping the same wording along the way





**Arrivals**  
Aankomst **4**

**Departures**  
Vertrek **3**



**Check-in 28-32**



**Clarity: the message needs to be clearly understandable**



Thanks Paul Mijksenaar 👍



# Readability & web content.



**First, Open Dyslexia  
is **not** a solution.**





**Always include the most important points in the first two paragraphs.**



# Use a **heading** hierarchy

(so users can navigate quickly where the content they are looking for is)



**Start headings with the words  
carrying most information**



**Group small related content  
with a strong visual system**



**Bold** important content



**Avoid the use of too generic  
content, be specific for links**





# Be **semantic**, and visual.

(i.e. a list must be displayed as a list)

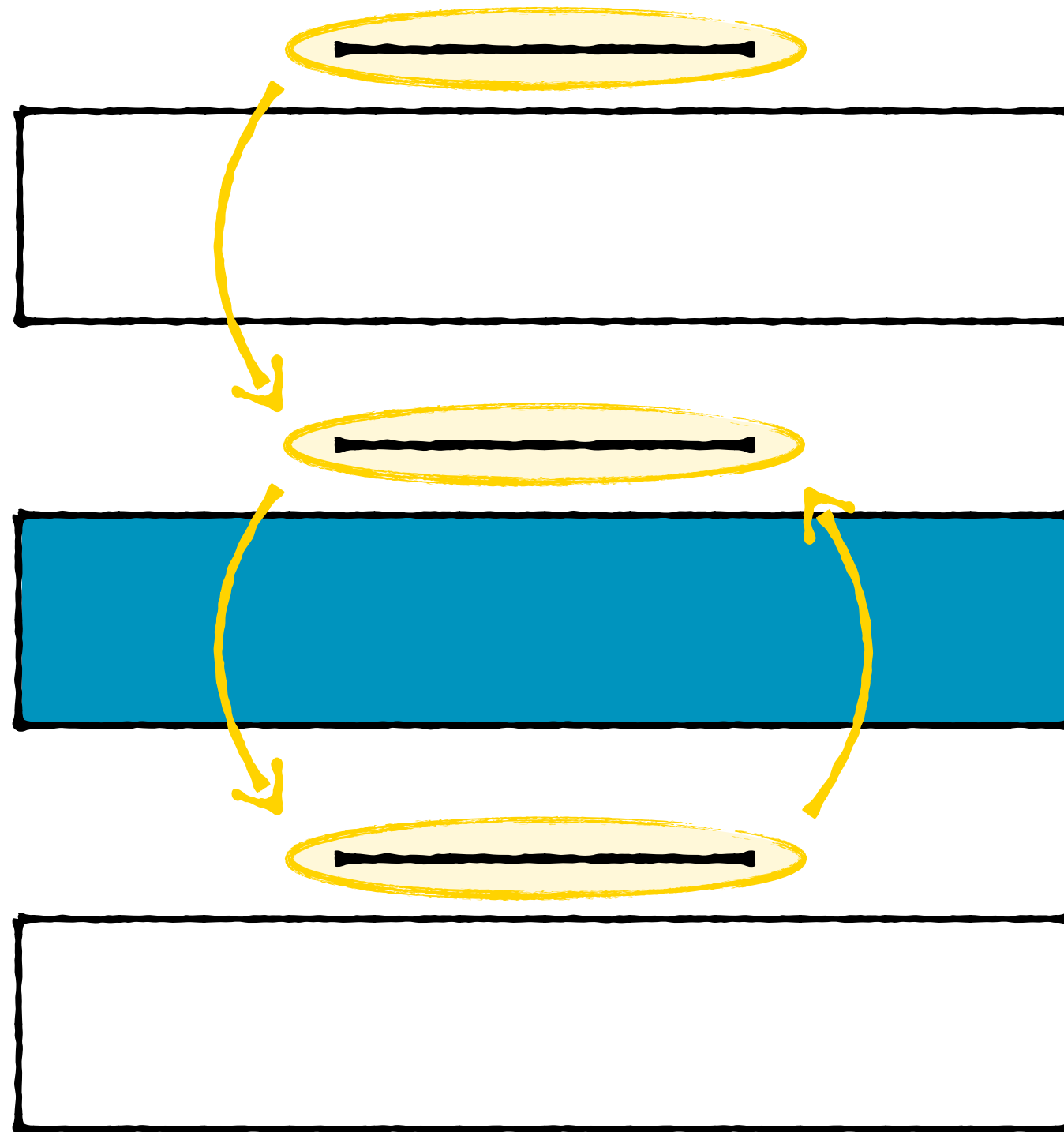


**Keeping consistent layout  
motivates our users to read more  
when looking for an information.**



# Users can be easily bored without good visual hierarchy.





**F-pattern, Z-pattern,  
or layer-cake-pattern?**

**Just use a **logical** pattern.**



# Propose **distraction-free** experiences







Mandataire Auto Neuve et Voiture d'Occasion avec Trouve Ton Auto

ANNONCES

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ANNUAIRE DES PROS

SERVIC

Quel type de véhicule vous recherchez ?

OCCASIONS

NEUFS



Taper votre recherche marque ou modèle

KM



ANNÉE



PRIX



RECHERCHER

3884

ANNONCES DISPONIBLES

🔍 Recherchez vite la votre !

Mandataire Auto ou Occasion partout en France

Trouve Ton Auto est un site de **petites annonces automobile** gratuit, qui a pour but de faciliter votre recherche de **mandataire** auto neuve et d'occasion.

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You know... this kind of really useful distractions

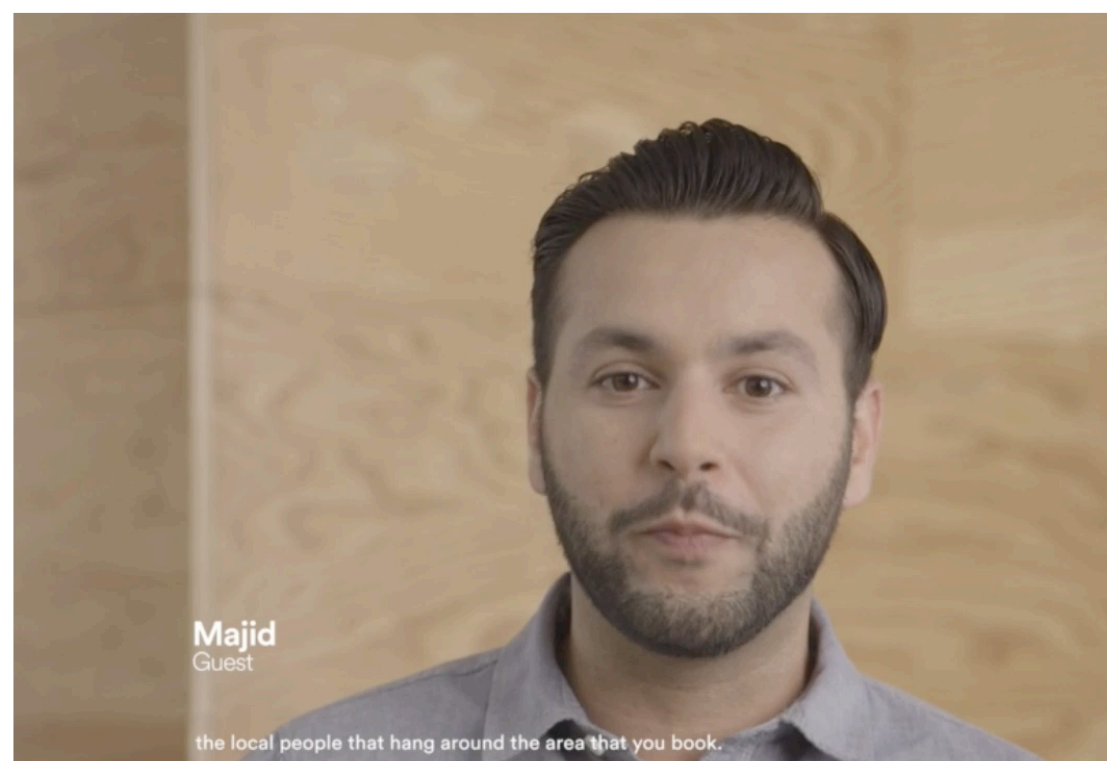


[Become a Host](#)[Trips](#)[Messages](#)[Help](#)

**Live there.** Book unique homes and experience a city like a local.

Where Berlin, Germany	When 12/05/2017 → 14/05/2017 ×	Guests 3 guests ▾	<a href="#">Search</a>
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Getting started



**Hey buddy! You looks friendly but... no thank you!**



# Rather a challenge than routine.

If you want to jointly overcome all before us,  
we are on the best path to cooperation.

WHAT IS OUR CLIENT LIKE

And please... let your users the time **they** need to read.

# The last, but not the least...





# Remove unneeded content.



How to **experiment**  
with your projects?





### One Morning, When Gregor Samsa Woke

From troubled dreams, he found himself transformed in his bed into a horrible vermin. He lay on his armour-like back, and if he lifted his head a little he could see his brown belly, slightly domed and divided by arches into stiff sections. The bedding was hardly able to cover it and seemed ready to slide off any moment.

His many legs, pitifully thin compared with the size of the rest of him, waved about helplessly as he looked. “What’s happened to me?” he thought. It wasn’t a dream. His room, a proper human room although a little too small, lay peacefully between its four familiar walls.

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# Let's take a generic text

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# Start by adding more hierarchy

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**And remember, we always need more whitespace!**



[back to product page](#)

Success! You are  
subscribed for alert emails.



Fairphone 2  
[back to product page](#)

## Fairphone 2

When will the Fairphone 2 be back in stock?

Our thanks for your interest in Fairphone.  
The Fairphone 2 will hopefully be back in stock on our  
website in March 2018. We'll share updates via this page,  
and the alert email list. Also good to check options to buy a  
Fairphone 2 now via our reseller partners.

Why is the Fairphone 2 temporarily out of stock on  
this website?

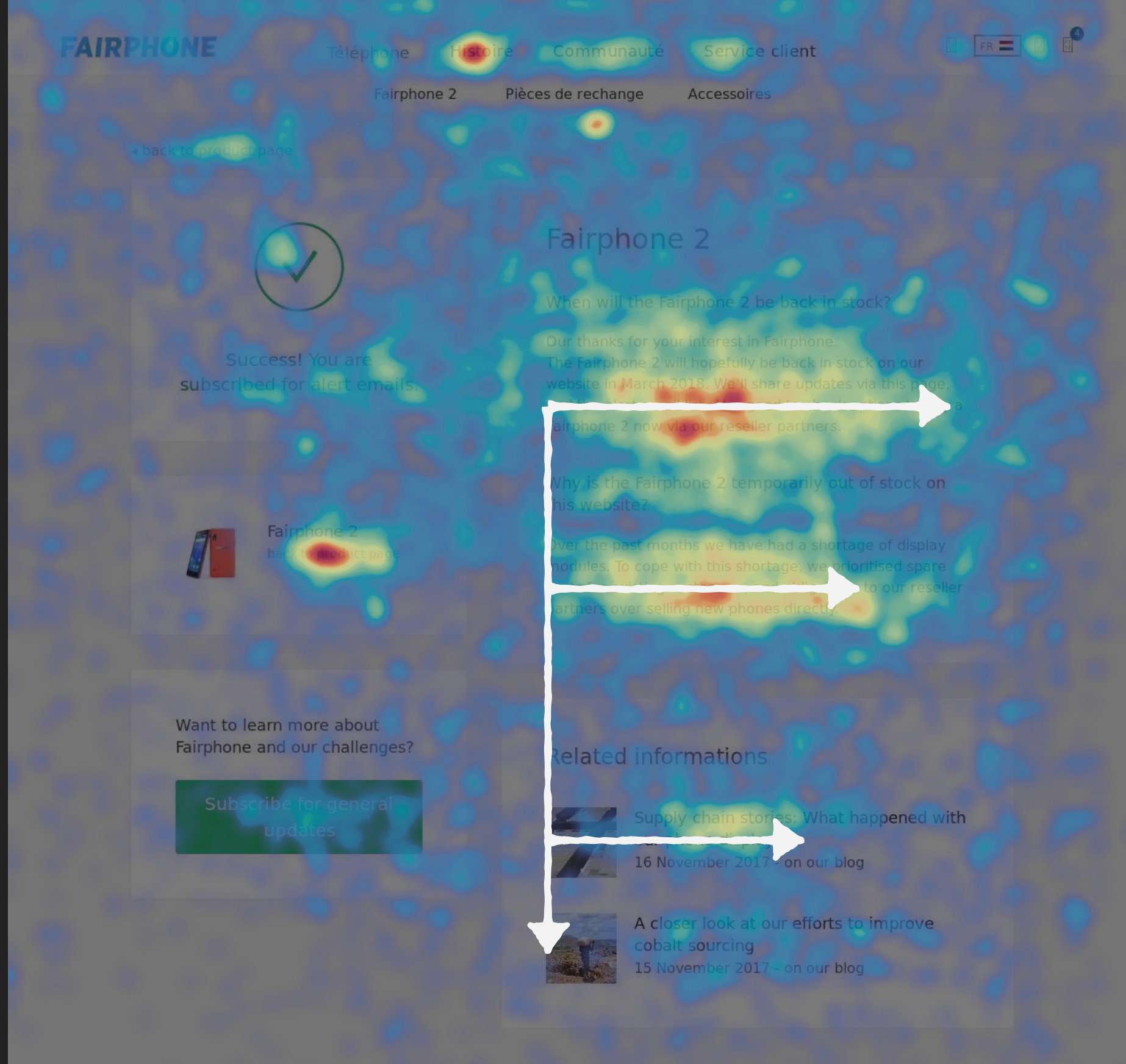
Over the past months we have had a shortage of display  
modules. To cope with this shortage, we prioritised spare  
parts for existing customers, and obligations to our reseller  
partners over selling new phones directly.

Want to learn more about



# Less accurate than eye tracking but use moves heatmaps





The famous F-pattern

Fairphone 2

Spare Parts

Accessories

[◀ back to product page](#)

Fairphone 2

[back to product page](#)

## Fairphone 2

Why is the Fairphone 2 temporarily out of stock on Fairphone.com?

At the moment, **some Fairphone 2 components are delayed** in arriving at the factory. To cope with this shortage, we are prioritising spare parts for existing customers and obligations to our reseller partners, over selling new phones directly.

When will the Fairphone 2 be back in stock on this website?

A small number of Fairphone 2s are back in stock this month, and we are offering them to customers who have been on the waitlist the longest. For everyone else, **more Fairphone 2s will be available sometime in the coming months.**

How can I buy a Fairphone 2 right now?



You can learn what is catchy and how to optimise a page

Some **good**  
examples.







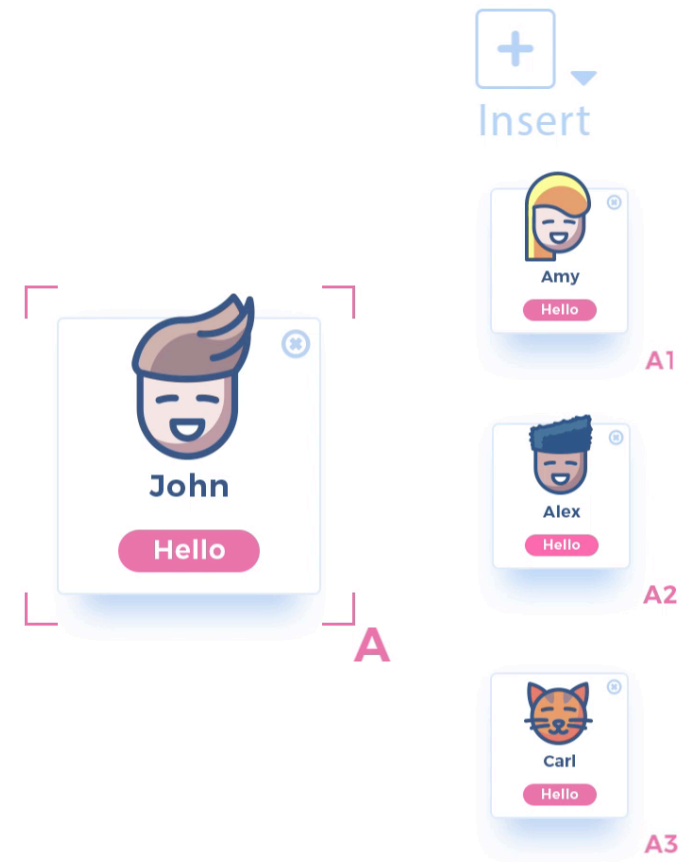
## DESIGN COMPONENTS

# Symbols are becoming a design standard

In April 2016, Sketch re-introduced Symbols to save designers more time.

- Sketch files saw 7.6x growth of Symbols usage
- Even Adobe Xd and Affinity Designer have introduced Symbols to keep up the pace

[Learn more](#)



Illustrated by [Benjamin Bely](#)



Except the contrast (😅), this is readable and *distraction-limited*.



OUR ENCHANTING

# Smashing Articles

All Smashing Magazine's articles, sorted chronologically. Over 11 years, we've published 2137 articles, written by 229 hard-working authors. Still counting.

[Dhimil Gosalia](#) wrote

## Building A Pub/Sub Service In-House Using Node.js And Redis

JUNE 12, 2018 — As the size of data for each message in our system differs from a few bytes to up to 100MB, we needed a scalable solution that could support a multitude of scenarios. In this article, Dhimil Gosalia explains why you should consider building an in-house Pub/Sub service, too.

 11 min read [Leave a comment](#)[Read More...](#)

# Smashing Mag is not afraid using bold and big font-sizes



À LA UNE

≡ ARTICLE



A good grid and a good hierarchy is everything.



# The Human Side of Technology

Welcome to Offscreen, a [print magazine](#) and a [weekly newsletter](#) with a thoughtful, human-centred take on technology and the web. Discover purpose-driven people, products, and ideas that shape the future. [More about us.](#)

Just released:  
Offscreen Issue 19

Magazine

Fresh Thinking on Tech, in Print

Published three times per year in beautiful print, Offscreen Magazine is a thoughtful deep-dive into the entrepreneurial spirit and future

19

Offscreen

Jocelyn K. Gleib  
Angus Hervey  
Ashleigh Axios  
Bryce Roberts



Readability and content grouping with in clear way



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Built-in detachable fanny pack (waist bag), rain hood, and a lifetime warranty make HURU a smart and reliable companion for the city and travel.

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- |                                     |                        |         |
|-------------------------------------|------------------------|---------|
| <input checked="" type="checkbox"/> | HURU Backpack          | + \$249 |
| <input type="checkbox"/>            | Fanny pack (waist bag) | + \$49  |
| <input type="checkbox"/>            | Chest Buckle           | + \$24  |

## \$249

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A website full of animations and really readable

**Merci beaucoup ! 🇫🇷**

**Thank you! 🇬🇧**

**Tack! 🇸🇪**

**Bedankt! 🇳🇱**



@iamhiwelo



# Damien Senger

Product designer & accessibility advocate raccoon lover  
[raccoon.studio](http://raccoon.studio) • [noti.st/hiwelo](https://noti.st/hiwelo)



@iamhiwelo