Elements of web design

Get into the nitty gritty with Lateral Nord

Lateral Nord

Jerry Jäppinen

Product design consultant

DC MN · elisa · visable · OLX · PB ProductBeat

jerryjappinen@lateralnord.com
+358 40 7188776
@jerryjappinen

First things first

What is the web?

The web is an open platform for everyone

Open platform

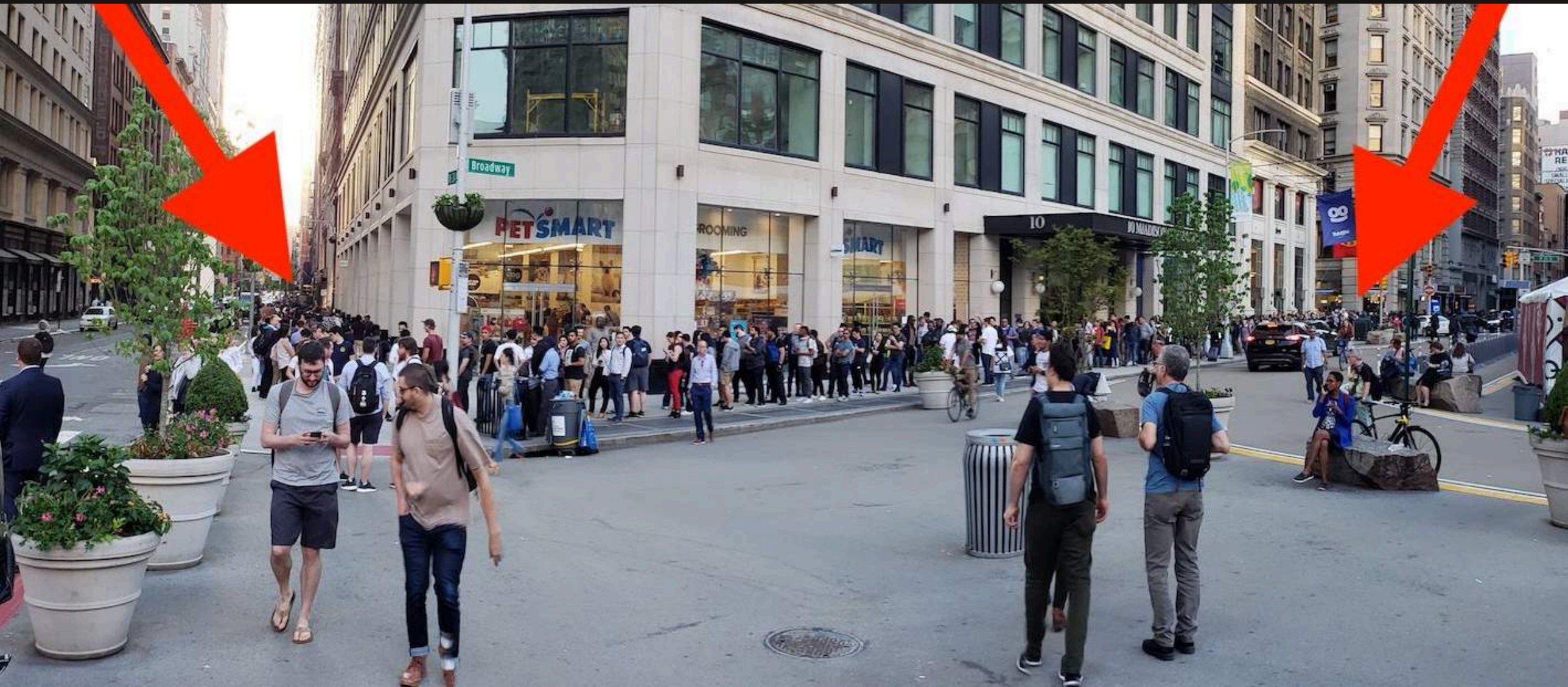
Everything on the web...

- **is open and public (source code and assets)**
- **can be manipulated by end-users**
- **can be manipulated by browsers**
- **can be manipulated by extensions**
- **can be linked and embedded on other services**

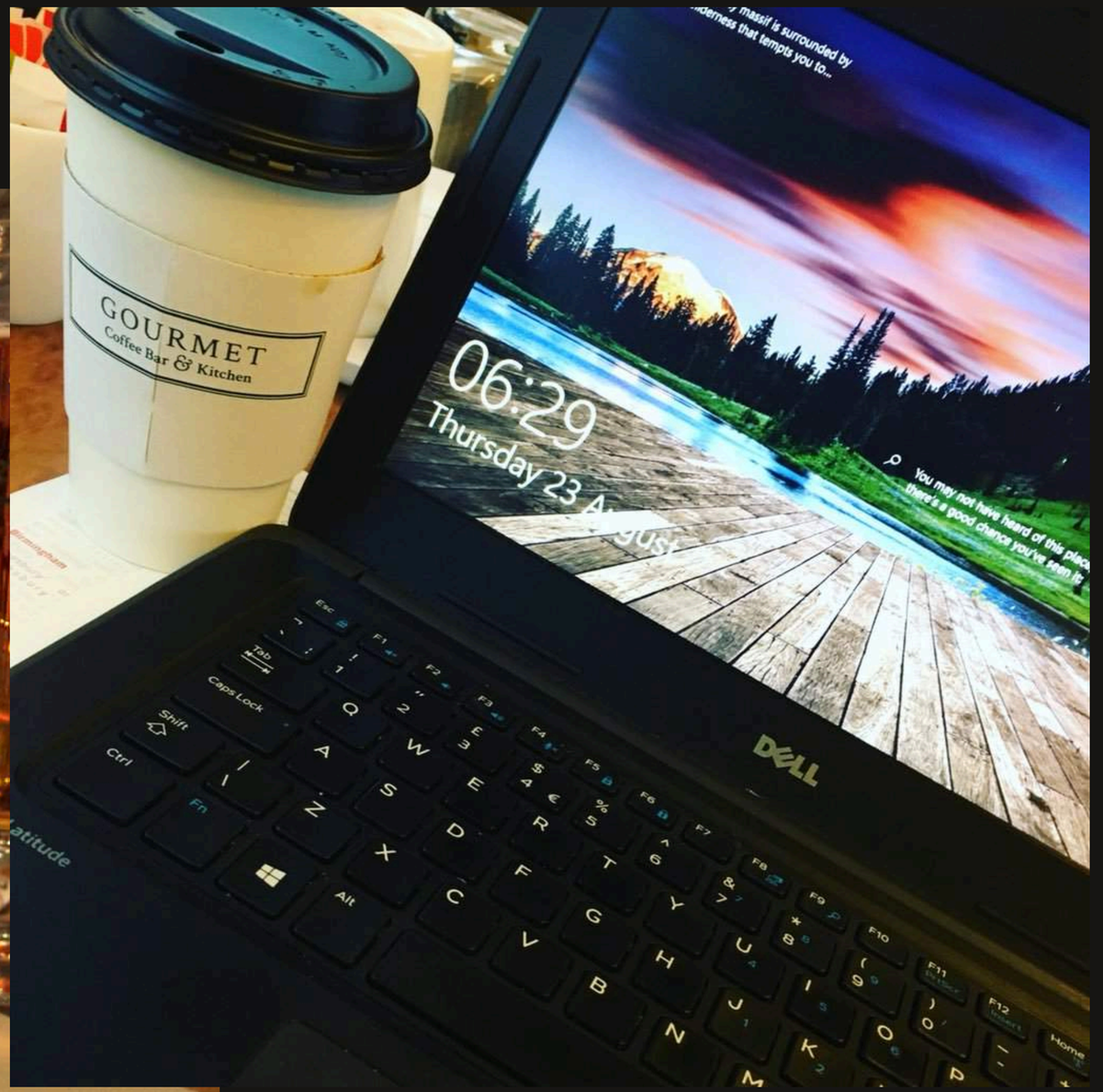
How designers see the user

How developers see the user

How users actually are



File Edit View History Bookmarks Develop Window Help
Top Sites
MacBook Pro


GOURMET
Coffee Bar & Kitchen
06:29
Thursday 23
DELL

1. Device interaction
2. Layout model
3. Visuals
4. Elements
5. Auditing
6. Technical terminology

1. Device interaction
2. Layout model
3. Visuals
4. Elements
5. Auditing
6. Technical terminology

Devices

- Phones
- Tablets
- Laptops
- Desktops
- Smart TVs
- Smart watches
- Screen readers
- Outdoor displays
- E-readers
- Printers
- Game consoles
- Smart fridges

Screens

- Matte vs glossy
- High vs low-DPI
- OLED vs LCD
- E-ink
- SDR vs HDR
- Viewing angles
- Color reproduction

10:27
Tuesday 16 Oct | 16°C
Photos
Keep notes
Calendar
Twitter
Messenger
Gmail
Instagram
Pocket
Pocket Ca...
Play Store
10:27
Tuesday 16 Oct | 16°C
Maps
Yahoo Fa...
NFL Gam...
NFL Fanta...
Messenger
Gmail
Facebook
Twitter
Sonos
WhatsApp

command
option

10:55 AM
10
55
10 / 02 / 2019
Call from
Owen Small
(206) 555-7737
Message

Browser chrome

- Pages are (typically) continuous and dynamically sized
- Elements within a page can scroll
- Horizontal vs. vertical
- Free scrolling vs. paginated vs. automatic

ThinVnc - HTML5 - Remote Desktop Client - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://192.168.1.4:8080/
Google
Facebook
Google
Google Reader
AddictiveTips
ThinVnc - HTML5 - Remote Desktop ...
CONTROL
CURSOR
PAUSE
REFRESH
SCALE
256 COLOR
DISCONNECT
Done

3:26

en.wikipedia.org

WIKIPEDIA
The Free Encyclopedia

Article Talk Read Edit View history

Prohodna

From Wikipedia, the free encyclopedia

Prohodna (Bulgarian: Проходна) is a karst cave in north central Bulgaria, located in the Iskar Gorge near the village of Karlukovo in Lukovit Municipality, Lovech Province. The cave is known for the two eye-like holes in its ceiling, known as *Oknata* (The windows).

The Big Entrance of Prohodna (Passage) cave with visitors for comparison of height

Prohodna is the best known attraction in the Karlukovo Gorge (part of the Geological Park Iskar-Panega), one of the largest karst regions in Bulgaria and a popular location for speleology.[1] Formed during the Quaternary, Prohodna is 262 metres (860 ft) long, which makes it the longest cave passage in Bulgaria. The cave has two entrances which lie opposite one another, known respectively as the Small Entrance and the Big Entrance. The former is 35 metres (115 ft) high and the latter reaches 42.5 or 45 metres (139 or 148 ft)[2] in height. The cave owes its name, which

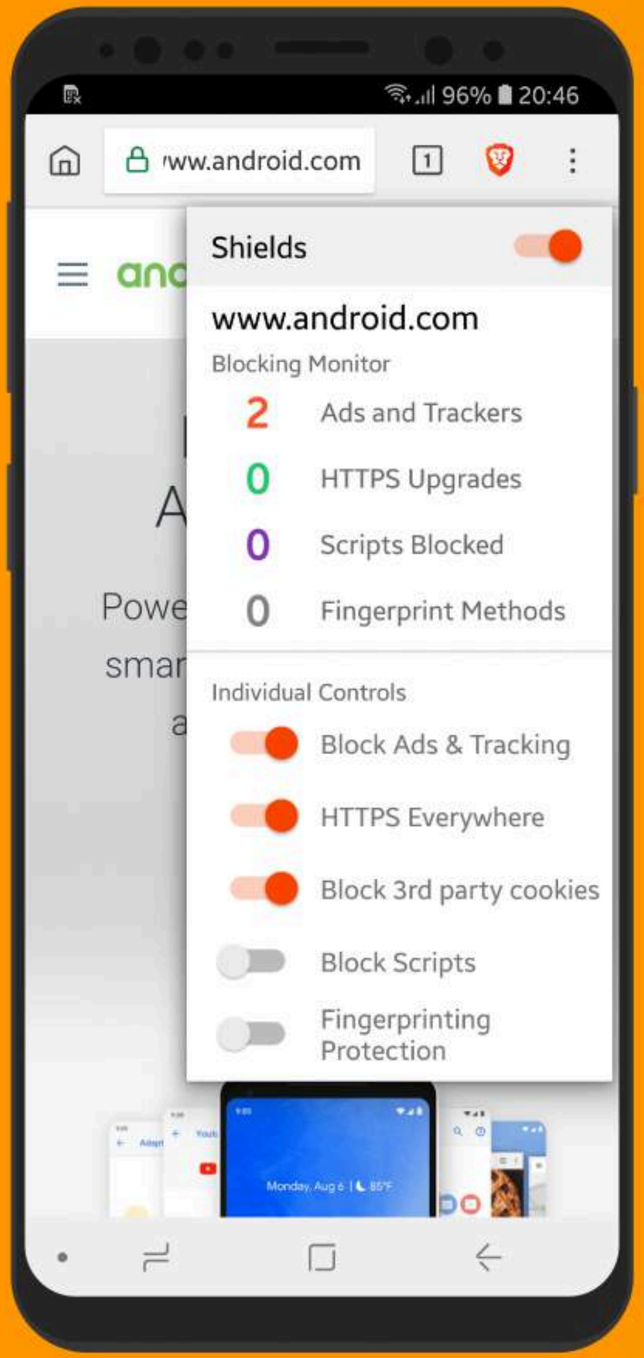
The Eyes of God formation in the Prohodna cave

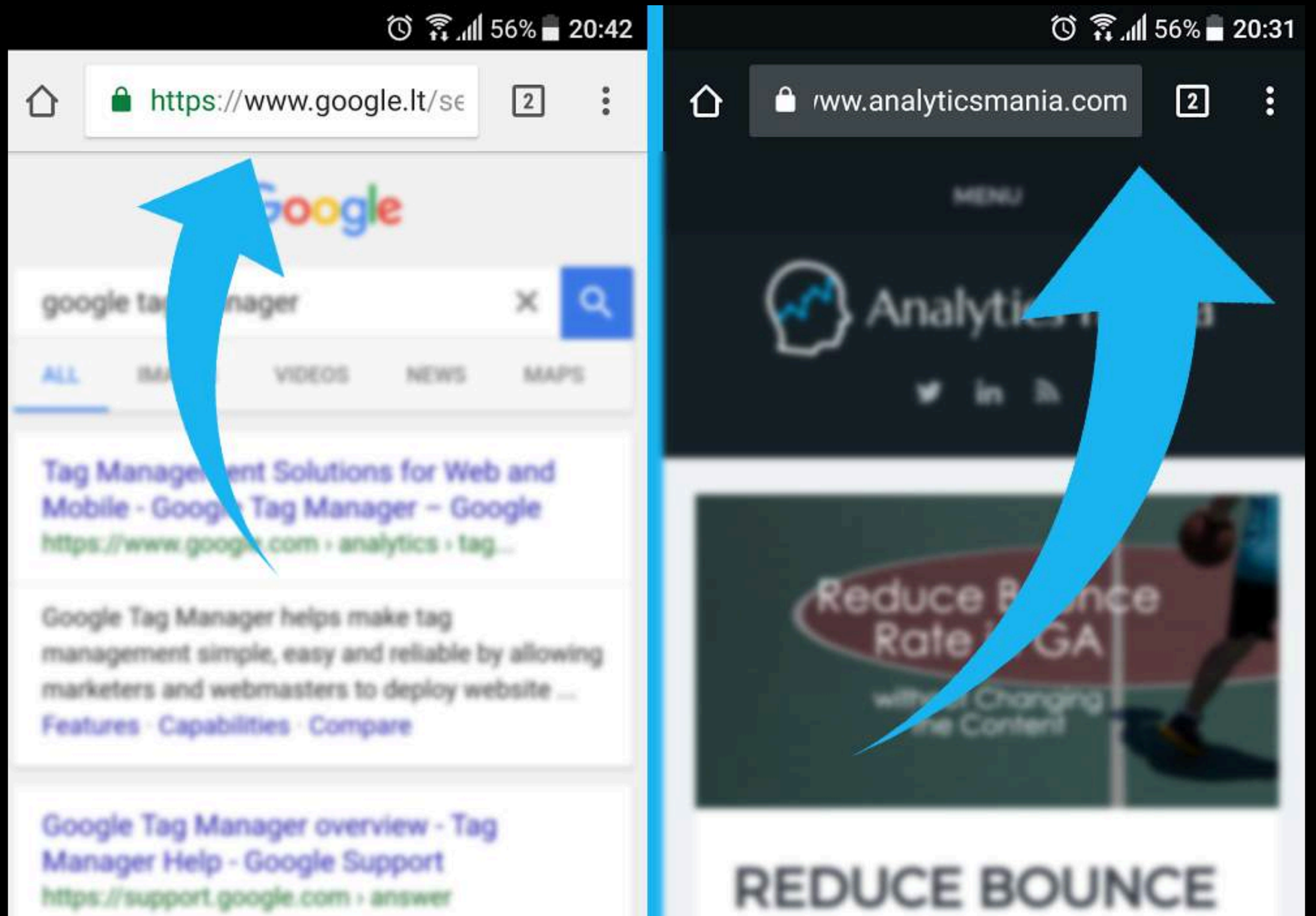
One of the cave's entrances

The Eyes of God formation in the

Request Desktop Site

Cancel


96% 20:46
www.android.com
Shields
www.android.com
Blocking Monitor
2 Ads and Trackers
0 HTTPS Upgrades
0 Scripts Blocked
0 Fingerprint Methods
Individual Controls
Block Ads & Tracking
HTTPS Everywhere
Block 3rd party cookies
Block Scripts
Fingerprinting Protection


56% 20:42
https://www.google.lt/se
2
Google
google ta nager
ALL
VIDEOS
NEWS
MAPS
Tag Manage ent Solutions for Web and Mobile - Goog Tag Manager – Google
https://www.goog com › analytics › tag...
Google Tag Manager helps make tag management simple, easy and reliable by allowing marketers and webmasters to deploy website ...
Features · Capabilities · Compare
Google Tag Manager overview - Tag Manager Help - Google Support
https://support.google.com › answer
56% 20:31
ww.analyticsmania.com
2
MENU
Reduce B nce Rate GA
REDUCE BOUNCE

Safari File Edit View History Bookmarks Develop Window Help
Sun Jan 27 22:52
kevinchen.co
macOS Beta
2 TB, 1.66 TB free
macOS Mojave
1.94 TB, 1.63 TB free

Using the `prefers-color-scheme` CSS media query

The release notes mention a new CSS media query for Dark Mode without saying how to use it. We can try to use a unit test from the WebKit repo as sample code instead.

In revision r237156, a test named prefers-color-scheme.html looks promising. It shows that the new `prefer-color-scheme` media query can either be `light` or `dark`.

Let's assume our CSS already looks good in light mode. We can use the media query to add overrides for some rules in Dark Mode:

```
/* The CSS rules we had before. */
body {
    line-spacing: 1.2em;
    color: black;
    background: white;
}
@media (prefers-color-scheme: dark) {
    /* Overrides for Dark Mode. */
    body {
        color: white;
        background: black;
    }
}
```

We can even put CSS variables in the media query. Unfortunately, it's a pretty cutting edge feature: as of October 2018, only 91 percent of US web traffic supports it.[1] That's not enough for something as fundamental as setting the colors on a website.

Why don't we use the media query for light mode too? Most browsers don't know about `prefers-color-scheme` yet. If we had enclosed the light mode

Input devices

- Cursor
- Touch
- Touch pad
- Scroll wheels
- Keyboard
- Game pads

Each have their own best practices and design considerations (hit area size, hover feedback, common errors etc.)

Operating systems

- Dark vs light theme
- Native input elements
- Security controls and limitations
- Platform conventions
- Design and style

Interaction

- Pointer movement
- Clicks
- Scrolls
- Touches
- Drags
- Key presses

Viewport size

- Screen and window sizes vary *between devices*
- Viewport size on *one device* varies
- User can change viewport size in *one session*
- Mobile first?

Galaxy S9, Note 8, S8 360x740

Firefox Browser

Get the latest Firefox browser.

And start getting the respect you deserve with our family of privacy-first products.

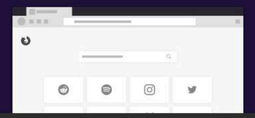
Download Now

Firefox Privacy Notice

Advanced install options & other platforms

Download in another language

Fix a problem



Galaxy S9 Plus, S8 Plus 412x846

Firefox Browser

Get the latest Firefox browser.

And start getting the respect you deserve with our family of privacy-first products.

Download Now

Firefox Privacy Notice

Advanced install options & other platforms

Download in another language

Fix a problem

Medium Screen 1024x800

Firefox Browser

Get the latest Firefox browser.

And start getting the respect you deserve with our family of privacy-first products.

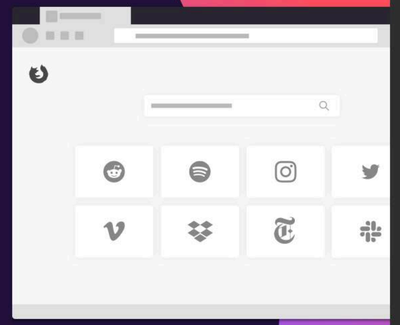
Download Now

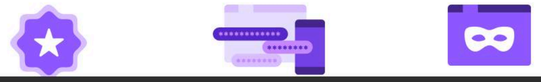
Firefox Privacy Notice

Advanced install options & other platforms

Download in another language

Fix a problem





Large Screen 1280x800

Firefox Browser

Get the latest Firefox browser.

And start getting the respect you deserve with our family of privacy-first products.

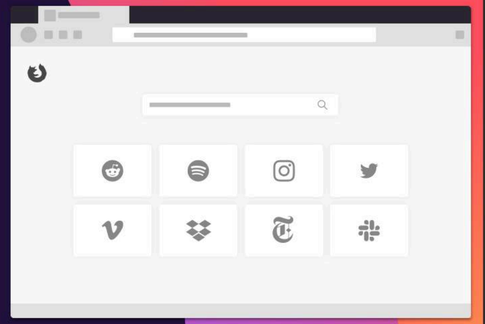
Download Now

Firefox Privacy Notice

Advanced install options & other platforms

Download in another language

Fix a problem



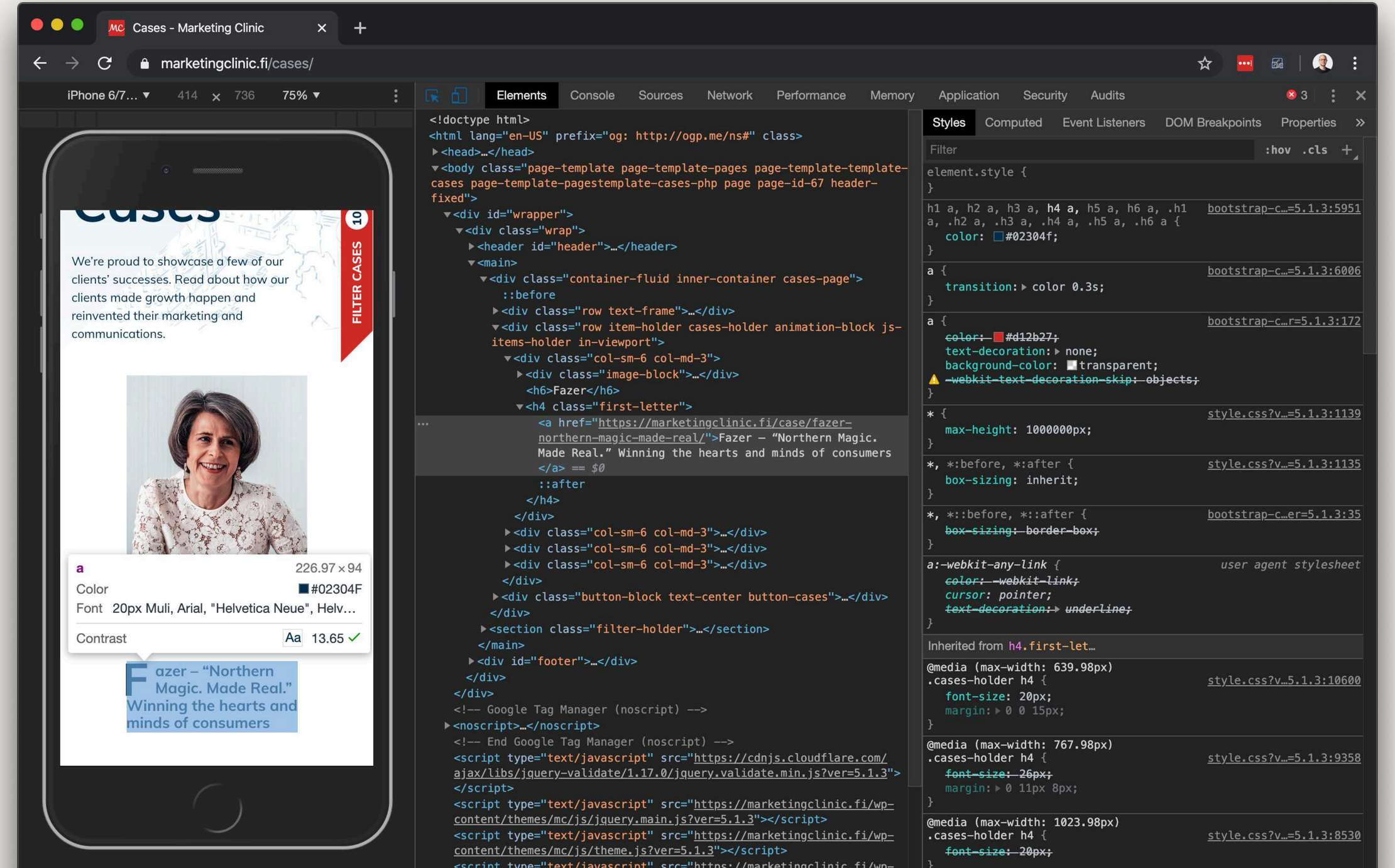
Scrolling

- Pages are continuous and dynamically sized
- Elements within a page can scroll
- Horizontal vs. vertical
- Free scrolling vs. paginated vs. automatic

1. Device interaction
2. Layout model
3. Visuals
4. Elements
5. Auditing
6. Technical terminology

Quick foreword

Native vs. non-native rendering


Cases - Marketing Clinic
marketingclinic.fi/cases/
iPhone 6/7… 414 × 736 75%
Elements Console Sources Network Performance Memory Application Security Audits
Styles Computed Event Listeners DOM Breakpoints Properties
Filter :hov .cls
We're proud to showcase a few of our clients' successes. Read about how our clients made growth happen and reinvented their marketing and communications.
FILTER CASES 10
a 226.97 × 94
Color #02304F
Font 20px Muli, Arial, "Helvetica Neue", Helv…
Contrast Aa 13.65
Fazer – "Northern Magic. Made Real." Winning the hearts and minds of consumers
<!doctype html>
<html lang="en-US" prefix="og: http://ogp.me/ns#" class>
<head>…</head>
<body class="page-template page-template-pages page-template-template-cases page-template-pagestemplate-cases-php page page-id-67 header-fixed">

<header id="header">…</header>
<main>

::before
…

…
<h6>Fazer</h6>
<h4 class="first-letter">
Fazer – "Northern Magic. Made Real." Winning the hearts and minds of consumers == $0
::after
</h4>

…
…
…

…

<section class="filter-holder">…</section>
</main>
…

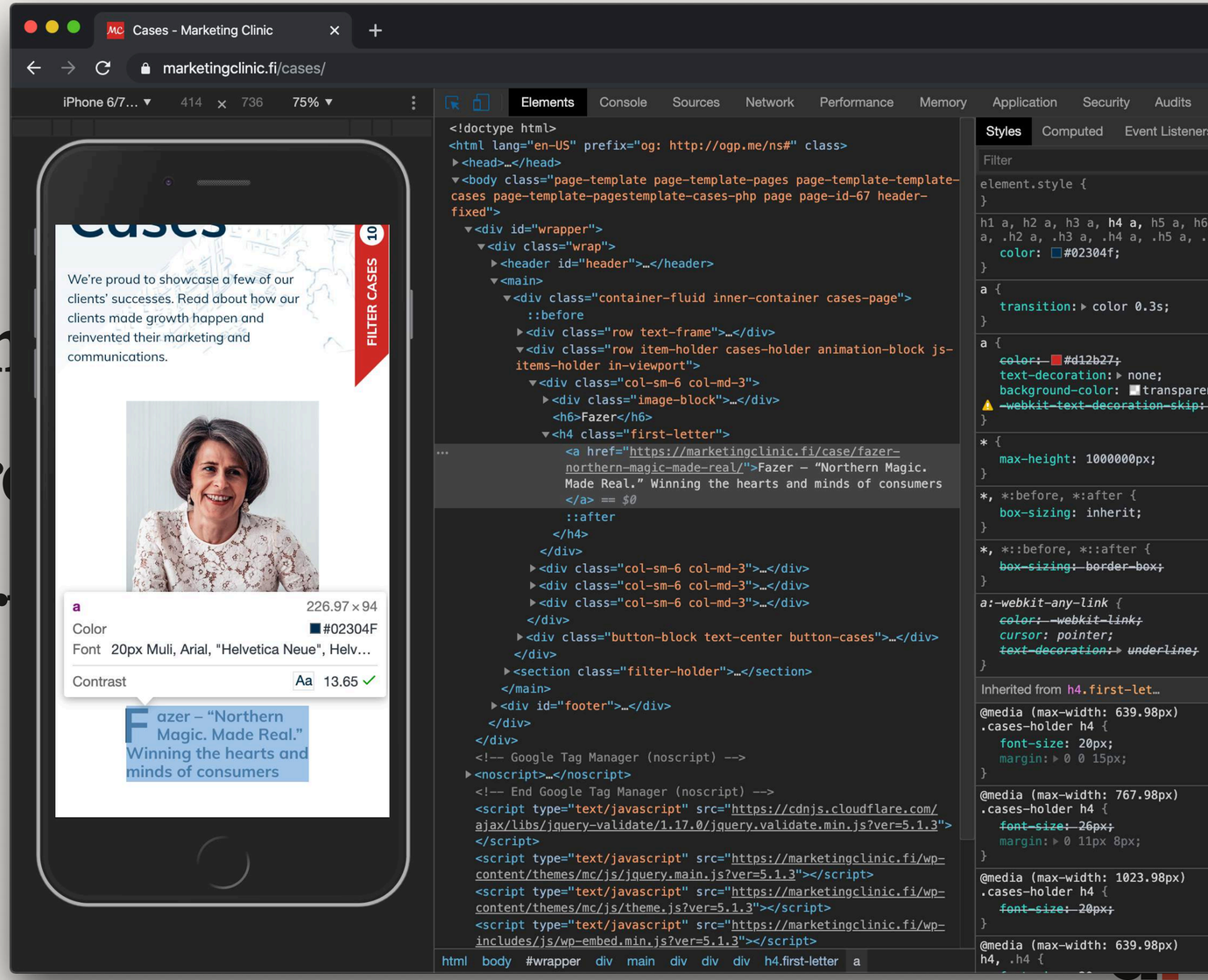
<!-- Google Tag Manager (noscript) -->
<noscript>…</noscript>
<!-- End Google Tag Manager (noscript) -->
<script type="text/javascript" src="https://cdnjs.cloudflare.com/ajax/libs/jquery-validate/1.17.0/jquery.validate.min.js?ver=5.1.3"></script>
<script type="text/javascript" src="https://marketingclinic.fi/wp-content/themes/mc/js/jquery.main.js?ver=5.1.3"></script>
<script type="text/javascript" src="https://marketingclinic.fi/wp-content/themes/mc/js/theme.js?ver=5.1.3"></script>
element.style {
}
h1 a, h2 a, h3 a, h4 a, h5 a, h6 a, .h1 a, .h2 a, .h3 a, .h4 a, .h5 a, .h6 a { bootstrap-c…=5.1.3:5951
color: #02304f;
}
a { bootstrap-c…=5.1.3:6006
transition: color 0.3s;
}
a { bootstrap-c…r=5.1.3:172
color: #d12b27;
text-decoration: none;
background-color: transparent;
-webkit-text-decoration-skip: objects;
}
* { style.css?v…=5.1.3:1139
max-height: 1000000px;
}
*, *:before, *:after { style.css?v…=5.1.3:1135
box-sizing: inherit;
}
*, *::before, *::after { bootstrap-c…er=5.1.3:35
box-sizing: border-box;
}
a:-webkit-any-link { user agent stylesheet
color: -webkit-link;
cursor: pointer;
text-decoration: underline;
}
Inherited from h4.first-let…
@media (max-width: 639.98px)
.cases-holder h4 { style.css?v…5.1.3:10600
font-size: 20px;
margin: 0 0 15px;
}
@media (max-width: 767.98px)
.cases-holder h4 { style.css?v…=5.1.3:9358
font-size: 26px;
margin: 0 11px 8px;
}
@media (max-width: 1023.98px)
.cases-holder h4 { style.css?v…=5.1.3:8530
font-size: 20px;

Native rendering

A browser renders graph

Every object can have pr

Different objects suppor



Every pixel is predefined

No run-time manipulation with user interaction

Native

Browser has data on individual elements, composing the final rendering

Design can be manipulated and tied to user interaction

It's a bit similar to bitmap vs. vector

Think of all the possibilities of this native rendering machine

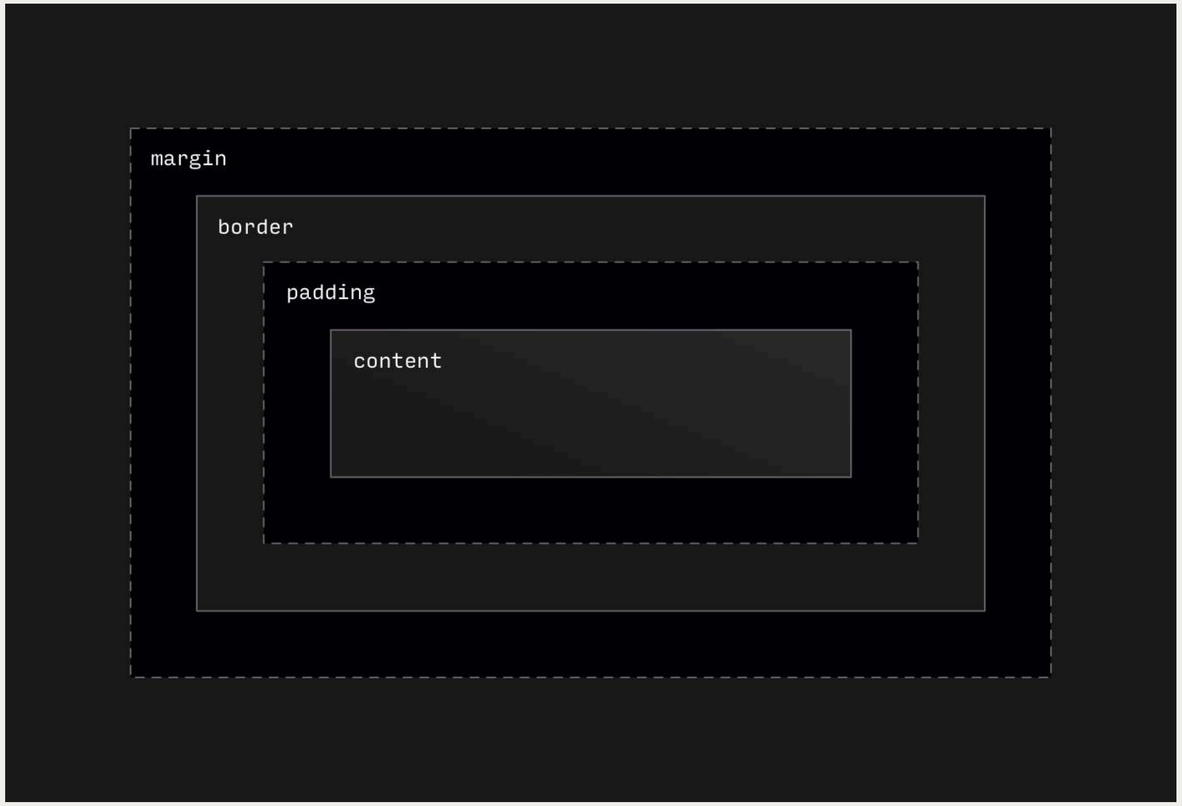
What design tools do you use?

Try to forget about them!

Let's go through the building blocks

1. Device interaction
2. Layout model
3. Visuals
4. Elements
5. Auditing
6. Technical terminology

The box model

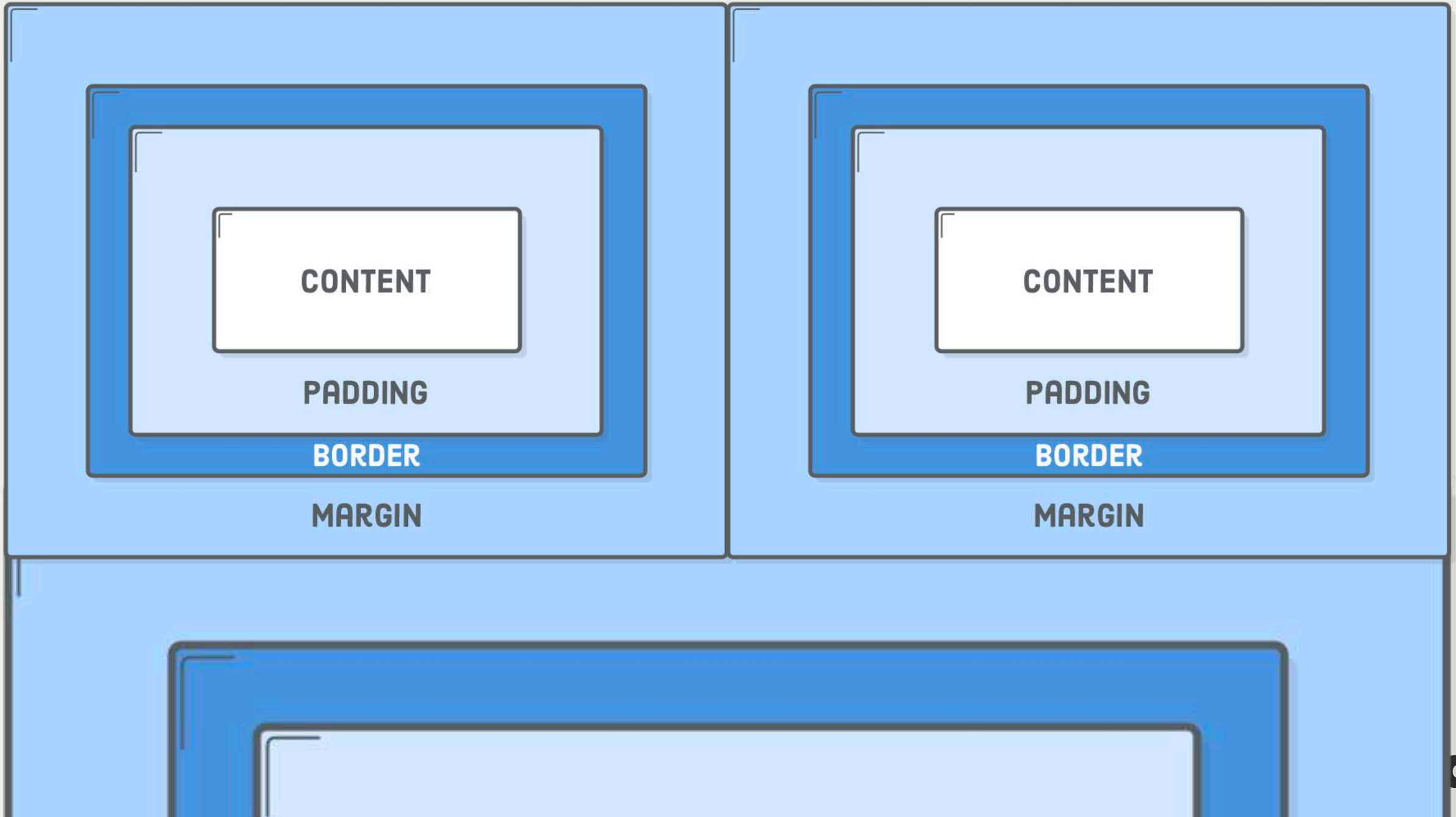


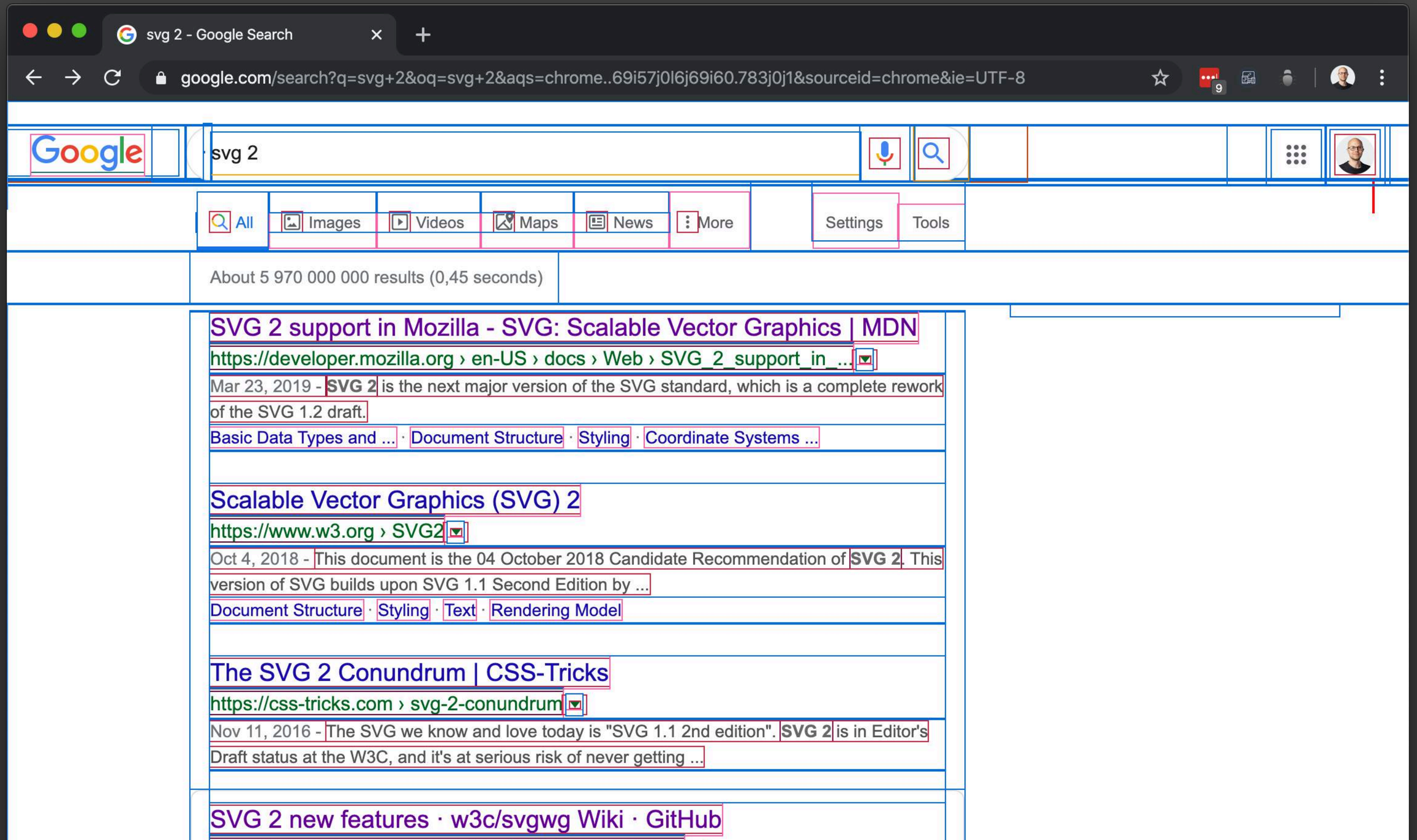
This is a box

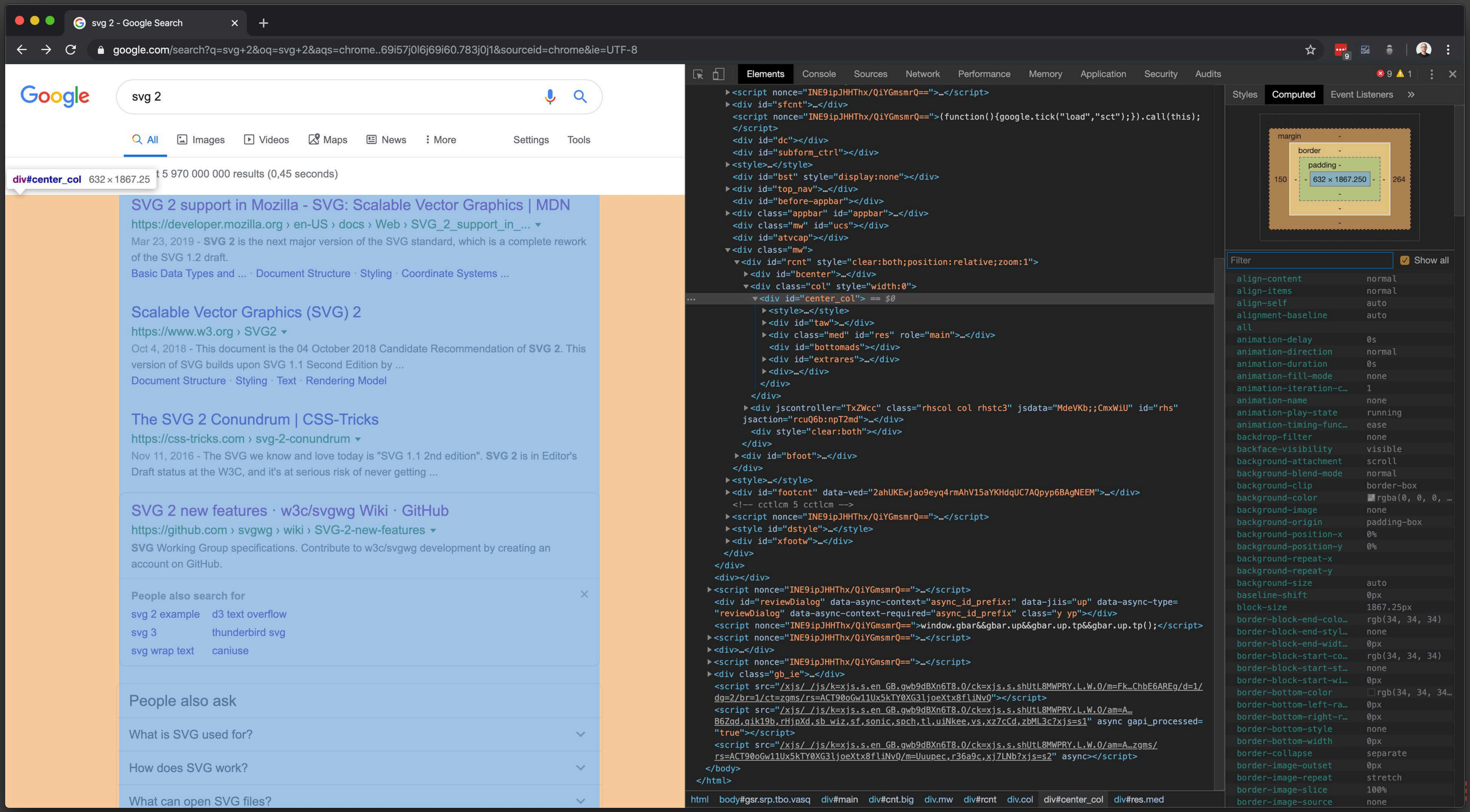
It has properties

Properties take up space

framer.com/blog/posts/box-model


CONTENT
PADDING
BORDER
MARGIN
CONTENT
PADDING
BORDER
MARGIN


svg 2 - Google Search
google.com/search?q=svg+2&oq=svg+2&aqs=chrome..69i57j0l6j69i60.783j0j1&sourceid=chrome&ie=UTF-8
Google
svg 2
All
Images
Videos
Maps
News
More
Settings
Tools
About 5 970 000 000 results (0,45 seconds)
SVG 2 support in Mozilla - SVG: Scalable Vector Graphics | MDN
https://developer.mozilla.org › en-US › docs › Web › SVG_2_support_in_...
Mar 23, 2019 - SVG 2 is the next major version of the SVG standard, which is a complete rework of the SVG 1.2 draft.
Basic Data Types and ... · Document Structure · Styling · Coordinate Systems ...
Scalable Vector Graphics (SVG) 2
https://www.w3.org › SVG2
Oct 4, 2018 - This document is the 04 October 2018 Candidate Recommendation of SVG 2. This version of SVG builds upon SVG 1.1 Second Edition by ...
Document Structure · Styling · Text · Rendering Model
The SVG 2 Conundrum | CSS-Tricks
https://css-tricks.com › svg-2-conundrum
Nov 11, 2016 - The SVG we know and love today is "SVG 1.1 2nd edition". SVG 2 is in Editor's Draft status at the W3C, and it's at serious risk of never getting ...
SVG 2 new features · w3c/svgwg Wiki · GitHub

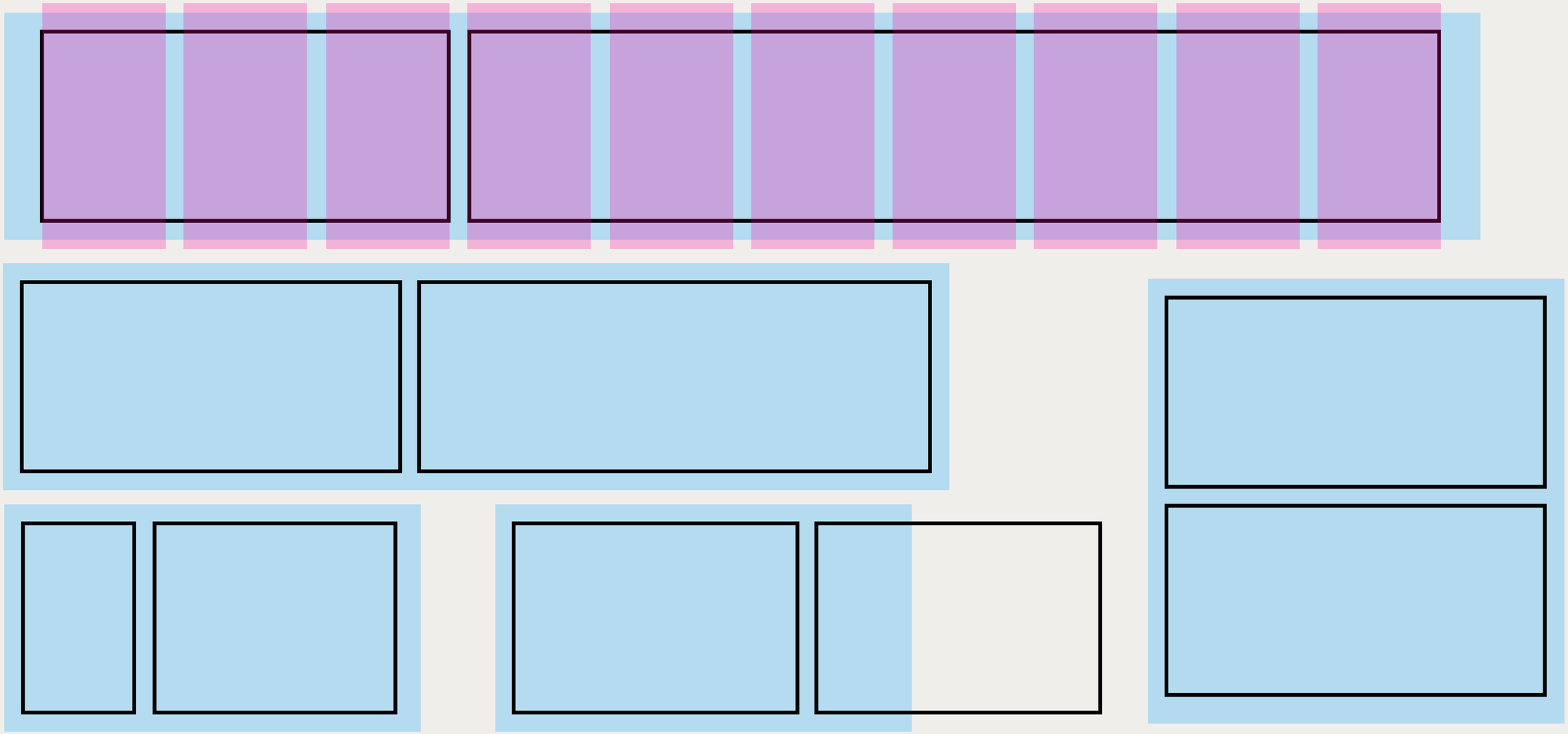

svg 2 - Google Search
google.com/search?q=svg+2&oq=svg+2&aqs=chrome..69i57j0l6j69i60.783j0j1&sourceid=chrome&ie=UTF-8
Google
svg 2
All
Images
Videos
Maps
News
More
Settings
Tools
div#center_col 632 × 1867.25
5 970 000 000 results (0,45 seconds)
SVG 2 support in Mozilla - SVG: Scalable Vector Graphics | MDN
https://developer.mozilla.org › en-US › docs › Web › SVG_2_support_in_...
Mar 23, 2019 - SVG 2 is the next major version of the SVG standard, which is a complete rework of the SVG 1.2 draft.
Basic Data Types and ... · Document Structure · Styling · Coordinate Systems ...
Scalable Vector Graphics (SVG) 2
https://www.w3.org › SVG2
Oct 4, 2018 - This document is the 04 October 2018 Candidate Recommendation of SVG 2. This version of SVG builds upon SVG 1.1 Second Edition by ...
Document Structure · Styling · Text · Rendering Model
The SVG 2 Conundrum | CSS-Tricks
https://css-tricks.com › svg-2-conundrum
Nov 11, 2016 - The SVG we know and love today is "SVG 1.1 2nd edition". SVG 2 is in Editor's Draft status at the W3C, and it's at serious risk of never getting ...
SVG 2 new features · w3c/svgwg Wiki · GitHub
https://github.com › svgwg › wiki › SVG-2-new-features
SVG Working Group specifications. Contribute to w3c/svgwg development by creating an account on GitHub.
People also search for
svg 2 example
d3 text overflow
svg 3
thunderbird svg
svg wrap text
caniuse
People also ask
What is SVG used for?
How does SVG work?
What can open SVG files?
Elements
Console
Sources
Network
Performance
Memory
Application
Security
Audits
Styles
Computed
Event Listeners
margin
border
padding
150
632 × 1867.250
264
Filter
Show all
align-content normal
align-items normal
align-self auto
alignment-baseline auto
all
animation-delay 0s
animation-direction normal
animation-duration 0s
animation-fill-mode none
animation-iteration-c… 1
animation-name none
animation-play-state running
animation-timing-func… ease
backdrop-filter none
backface-visibility visible
background-attachment scroll
background-blend-mode normal
background-clip border-box
background-color rgba(0, 0, 0, …
background-image none
background-origin padding-box
background-position-x 0%
background-position-y 0%
background-repeat-x
background-repeat-y
background-size auto
baseline-shift 0px
block-size 1867.25px
border-block-end-colo… rgb(34, 34, 34)
border-block-end-styl… none
border-block-end-widt… 0px
border-block-start-co… rgb(34, 34, 34)
border-block-start-st… none
border-block-start-wi… 0px
border-bottom-color rgb(34, 34, 34…
border-bottom-left-ra… 0px
border-bottom-right-r… 0px
border-bottom-style none
border-bottom-width 0px
border-collapse separate
border-image-outset 0px
border-image-repeat stretch
border-image-slice 100%
border-image-source none
html
body#gsr.srp.tbo.vasq
div#main
div#cnt.big
div.mw
div#rcnt
div.col
div#center_col
div#res.med

Layout model

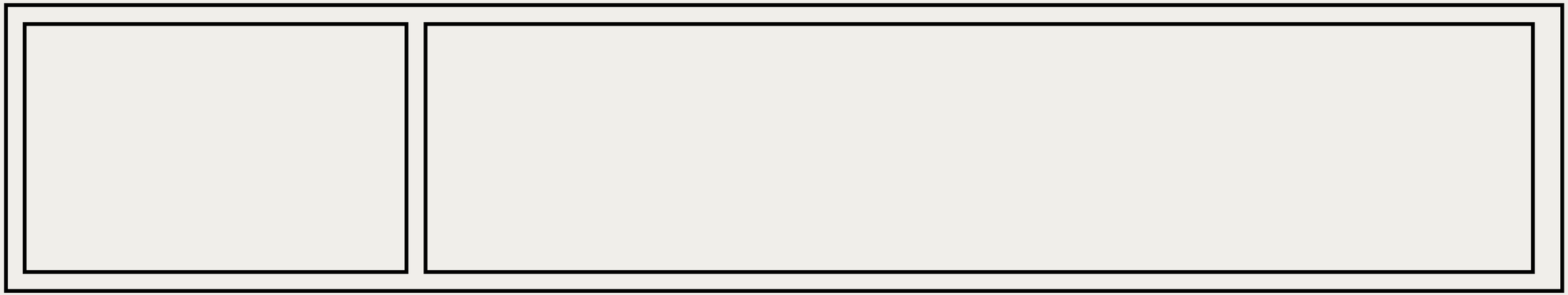
- Inline
- Block
- Flex
- Grid
- Absolute
- Fixed
- Canvas *
- SVG *

- Usually elements don't "float"
- Columns and grids mean something different from print
- Baseline grids don't exist
- Everything is nested boxes
  - ...except inline elements
  - * Canvas/SVG

Layout with columns?



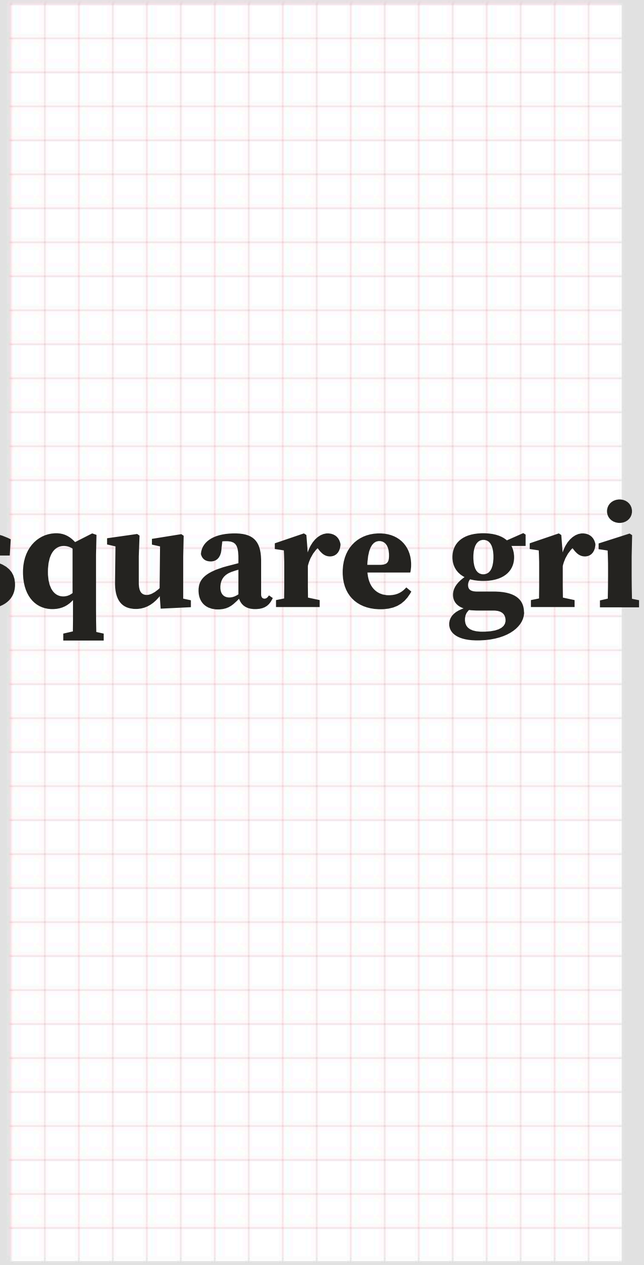
Layout with columns?



- Traditional (e.g. 12-column) layout grids don't work well in web
- ~~No native column grids, only hacks~~
- Web layouts are dynamic and responsive
- Design tool for web: https://webflow.com/

Frame 5

Frame 4



Consider square grids for design

1. Device interaction
2. Layout model
3. **Visuals**
4. Elements
5. Auditing
6. Technical terminology

Element properties

- Dimensions
- Position
- Background color
- Background image
- Font family
- Border
- Transformation
- Layout
- Overflow and scrolling
- Opacity
- Text indentation
- Shadows
- Border radius
- ...

https://www.quackit.com/css/properties/

Colors

- Hex
- RGB(A)
- HSL(A)
- Keywords
- Run-time variable support
- Gradients

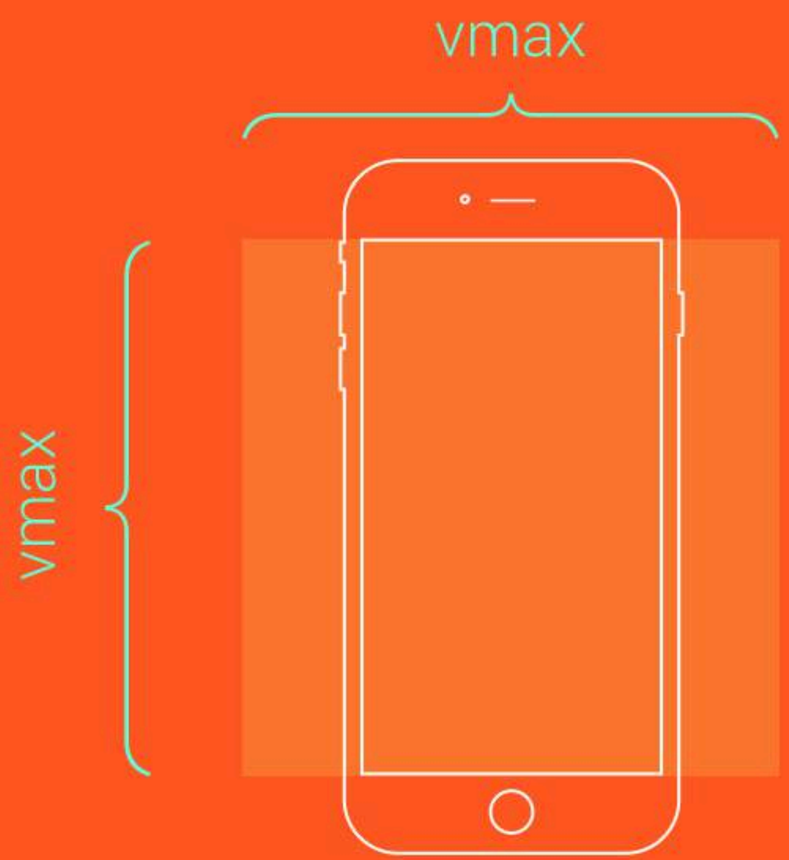
Units

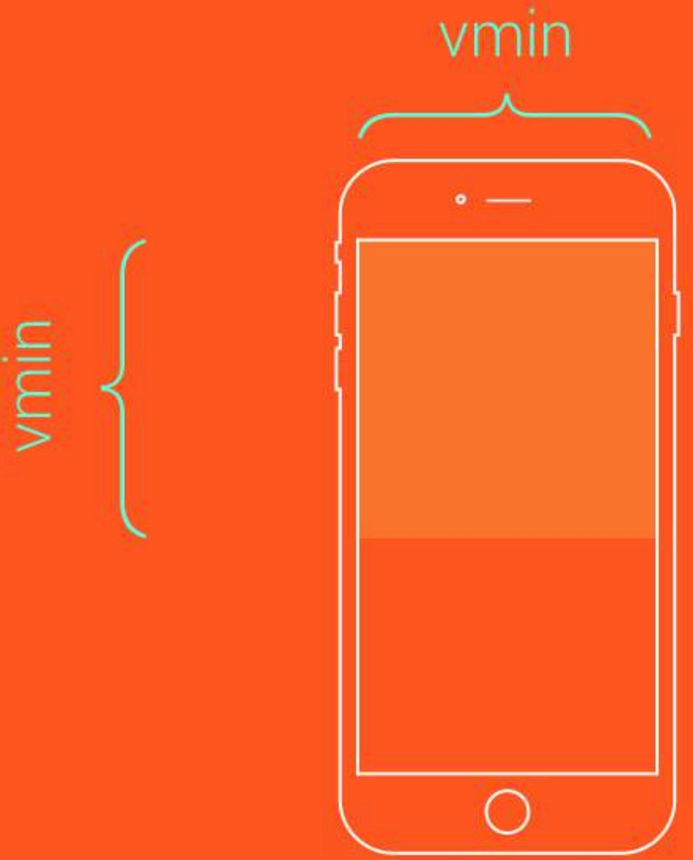
- px
- vh
- vw
- vmin
- vmax
- pt
- pc
- cm
- mm
- in
- %
- em
- rem
- ex
- ch

https://webdesign.tutsplus.com/articles/7-css-units-you-might-not-know-about--cms-22573

Font sizing

- Points or pixels are fixed units
- em and rem are context-sensitive and can be scaled
- vw and vh are dependent on viewport size


vmax
vmax


vmin
vmin

Type

DESIGN IN MOTION FESTIVAL
menu
DEMO
https://demofestival.com/
80 Screens – 24 Hours
Amsterdam Central Station
7th of November 2019

Typography

- Text flow can't be totally manually controlled
- Ahead of mobile platforms
- Some great typographic controls, better than you think
  - Super/subscript
  - Text directions
  - See ruby annotations

Font sizing

- You can use any unit to define font sizes
- Why is a piece of text the size it is?
- Is it relative to...
  - screen size?
  - parent element's font size?
  - our place in the universe?

Variable fonts

- New!
- Completely dynamic font properties
- Can be smoothly adjusted run-time
  - → animation
  - → interaction
- https://v-fonts.com/

Moving image

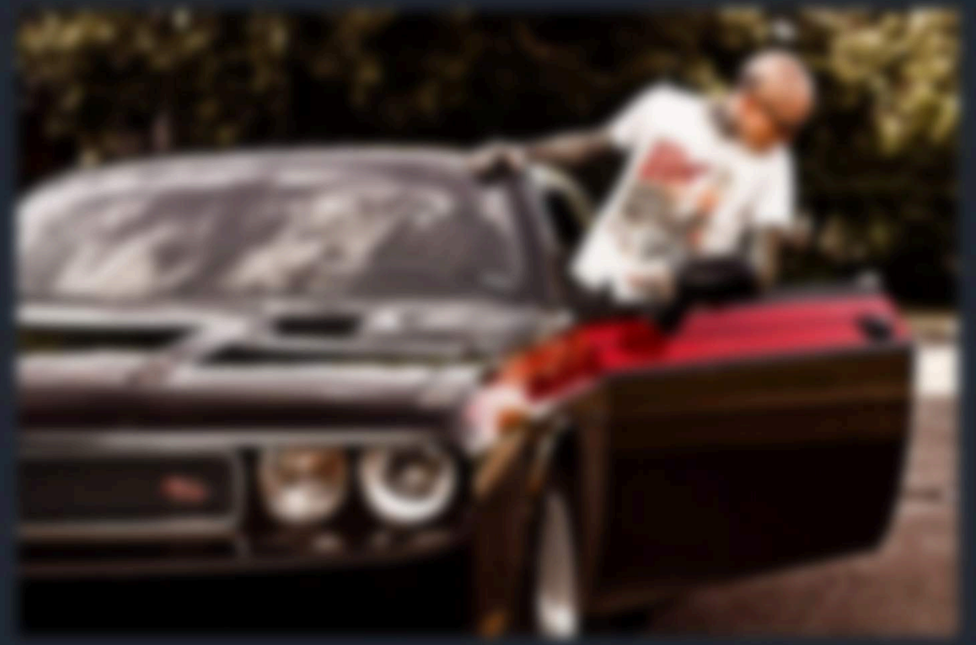
- Native animations
- Native transitions
- Native & streaming video

- JavaScript-powered anything
- WebGL
- https://easings.net/en

https://codepen.io/jjperezaguinaga/full/yuBdq

Bitmaps

- Multiple bitmap formats supported
- Can be adjusted with filters (blur, greyscale...)
- Can be cropped and resized in client
- Servers can most things clients can't (reduce file size, apply more filters...)
- Can be analyzed with code
  - Find dominant colors, faces etc.



SVG

- "Native" vector format
- SVG is XML is HTML
- Supports text
- Supports CSS and JavaScript and animations
- Many libraries build on top of SVG
- Flexible, highly optimised

Filters

Rendering of elements can be changed with filters

- **Blur**
- **Hue**
- **Saturation**
- **Color inversion**
- **Contrast**
- **Brightness**

Canvas

A frame within a page that
drawing and rendering

Elements can be manipula

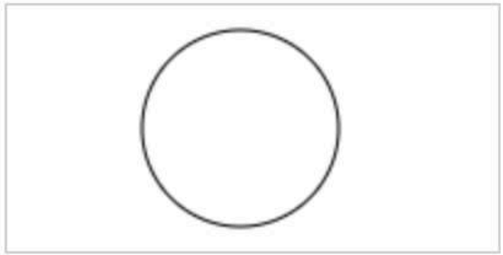
Supports 2D and real 3D

Example

```
var c = document.getElementById("myCanvas");
var ctx = c.getContext("2d");
ctx.moveTo(0, 0);
ctx.lineTo(200, 100);
ctx.stroke();
```

Try it Yourself »

Draw a Circle



3D

Web elements are 2D

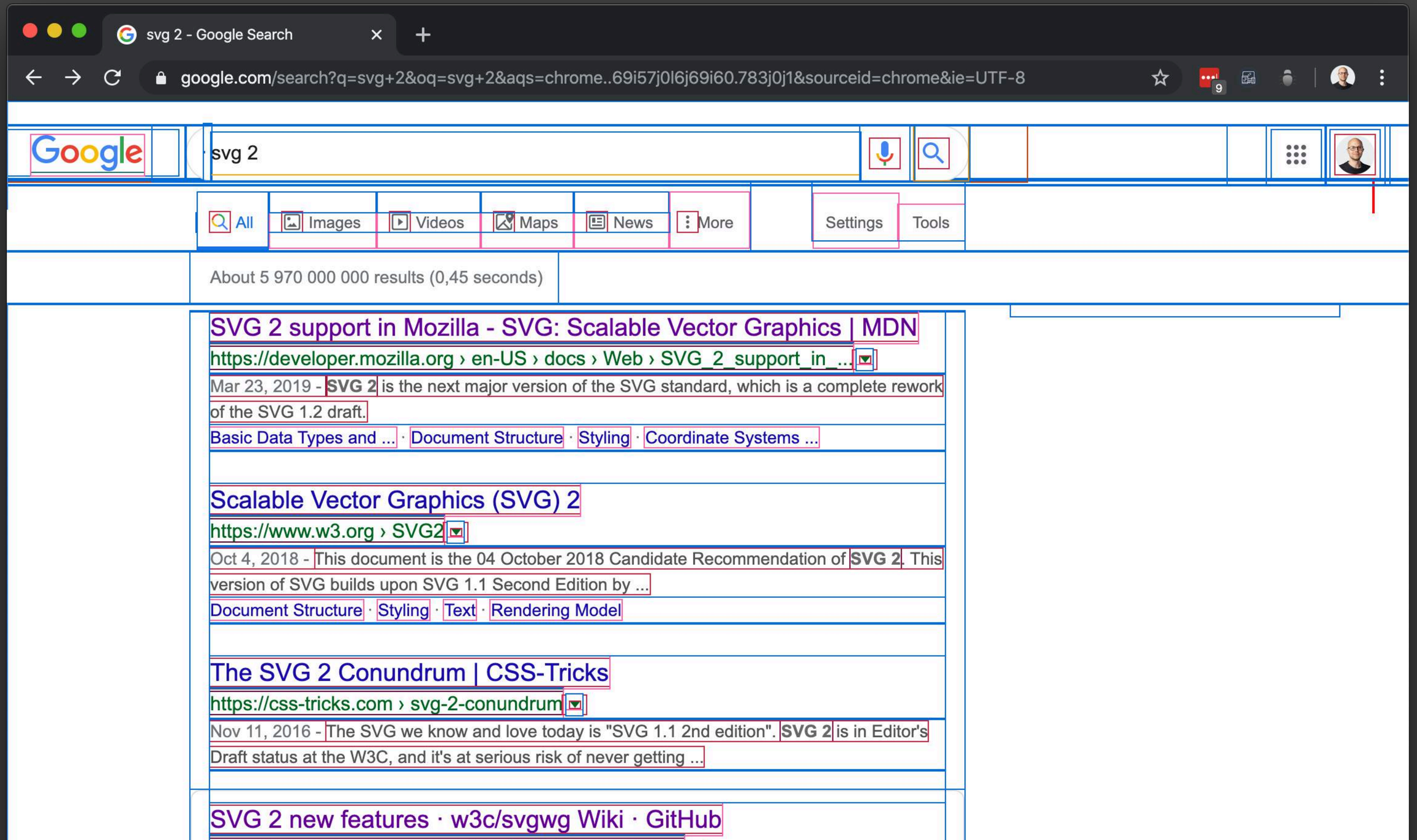
With stacking order (z-index)

With transformations

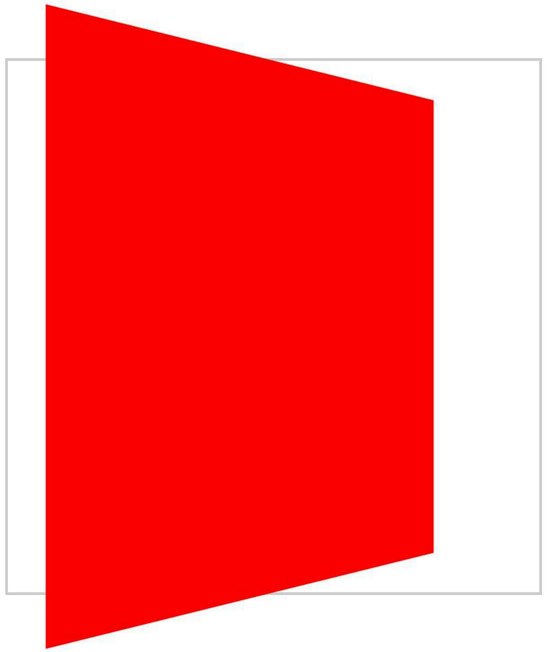
With perspective

Better 3D support can be achieved with

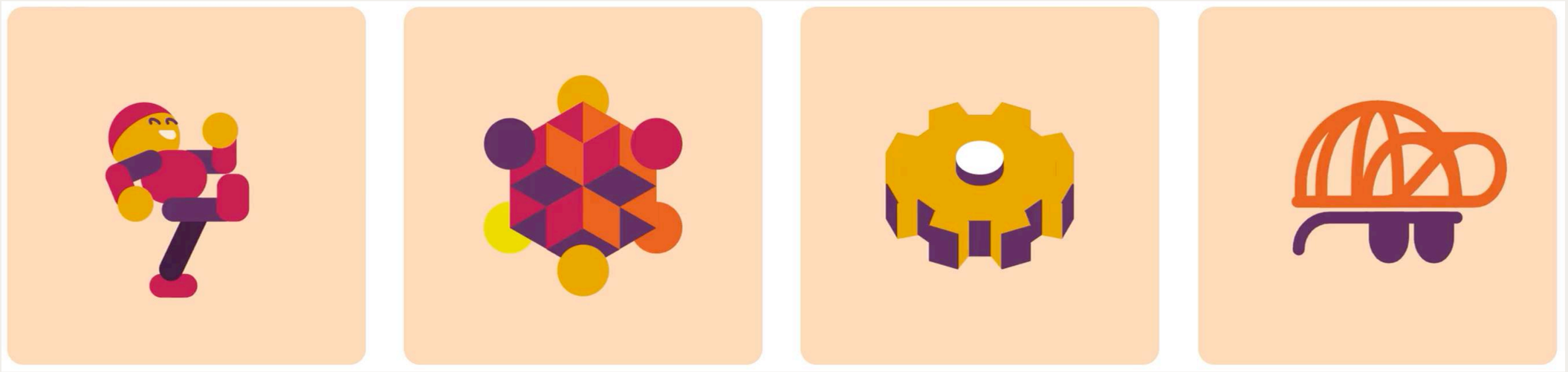
- JavaScript libraries
- SVG
- WebGL and shaders


svg 2 - Google Search
google.com/search?q=svg+2&oq=svg+2&aqs=chrome..69i57j0l6j69i60.783j0j1&sourceid=chrome&ie=UTF-8
Google
svg 2
All
Images
Videos
Maps
News
More
Settings
Tools
About 5 970 000 000 results (0,45 seconds)
SVG 2 support in Mozilla - SVG: Scalable Vector Graphics | MDN
https://developer.mozilla.org › en-US › docs › Web › SVG_2_support_in_...
Mar 23, 2019 - SVG 2 is the next major version of the SVG standard, which is a complete rework of the SVG 1.2 draft.
Basic Data Types and ... · Document Structure · Styling · Coordinate Systems ...
Scalable Vector Graphics (SVG) 2
https://www.w3.org › SVG2
Oct 4, 2018 - This document is the 04 October 2018 Candidate Recommendation of SVG 2. This version of SVG builds upon SVG 1.1 Second Edition by ...
Document Structure · Styling · Text · Rendering Model
The SVG 2 Conundrum | CSS-Tricks
https://css-tricks.com › svg-2-conundrum
Nov 11, 2016 - The SVG we know and love today is "SVG 1.1 2nd edition". SVG 2 is in Editor's Draft status at the W3C, and it's at serious risk of never getting ...
SVG 2 new features · w3c/svgwg Wiki · GitHub

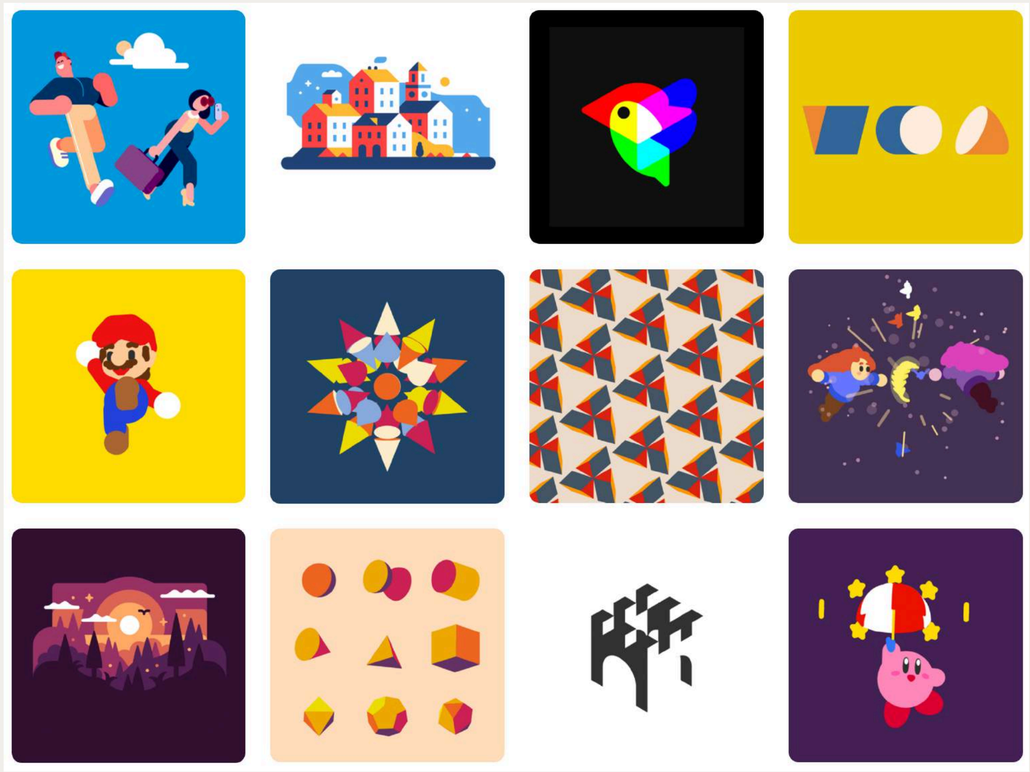
```css
.panel--red {
  /* perspective function in transform property */
  transform: perspective(400px) rotateY(45deg);
}
```

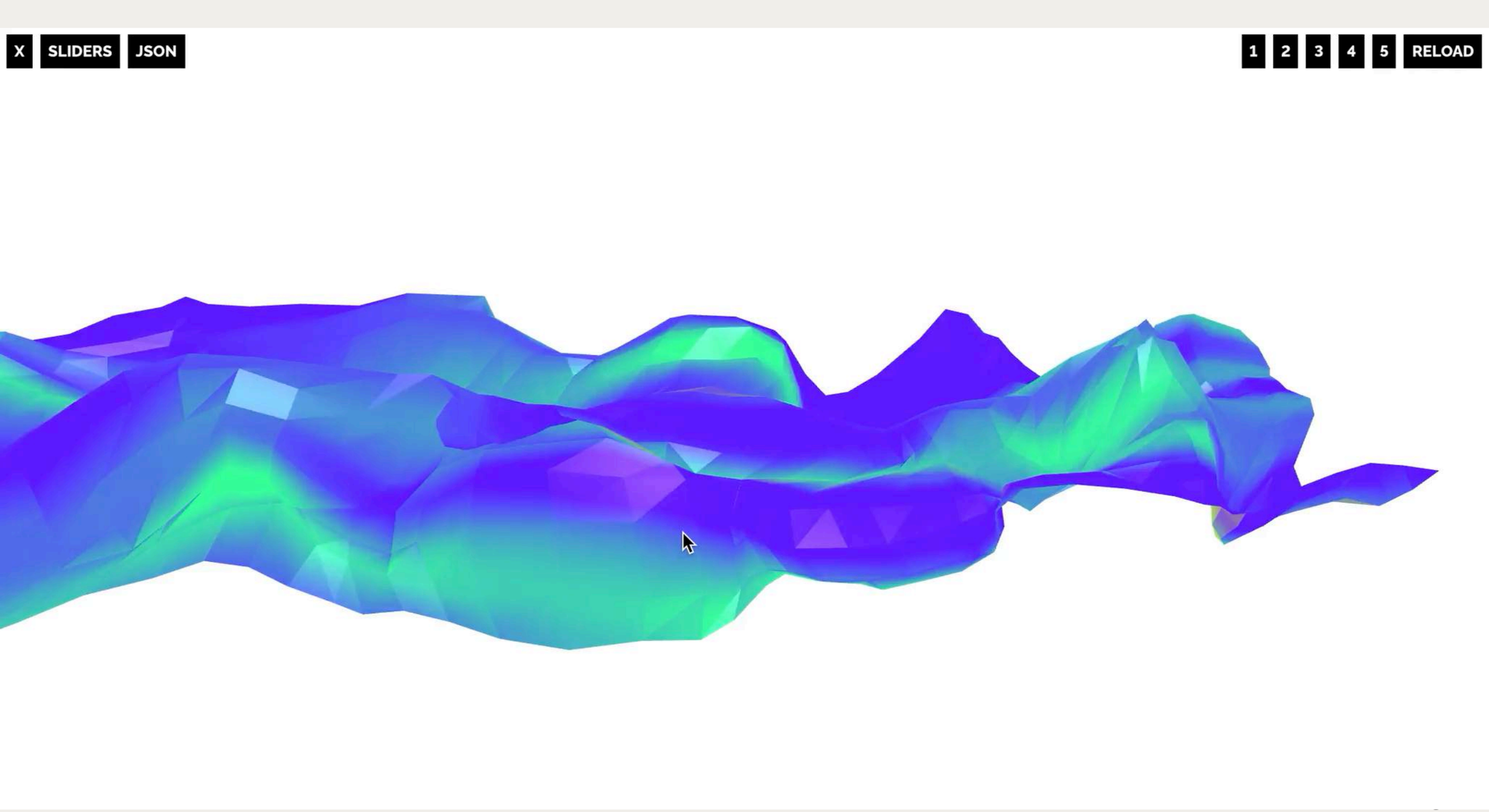


https://blog.logrocket.com/the-noobs-guide-to-3d-transforms-with-css-7370aafd9edf/



https://zzz.dog/



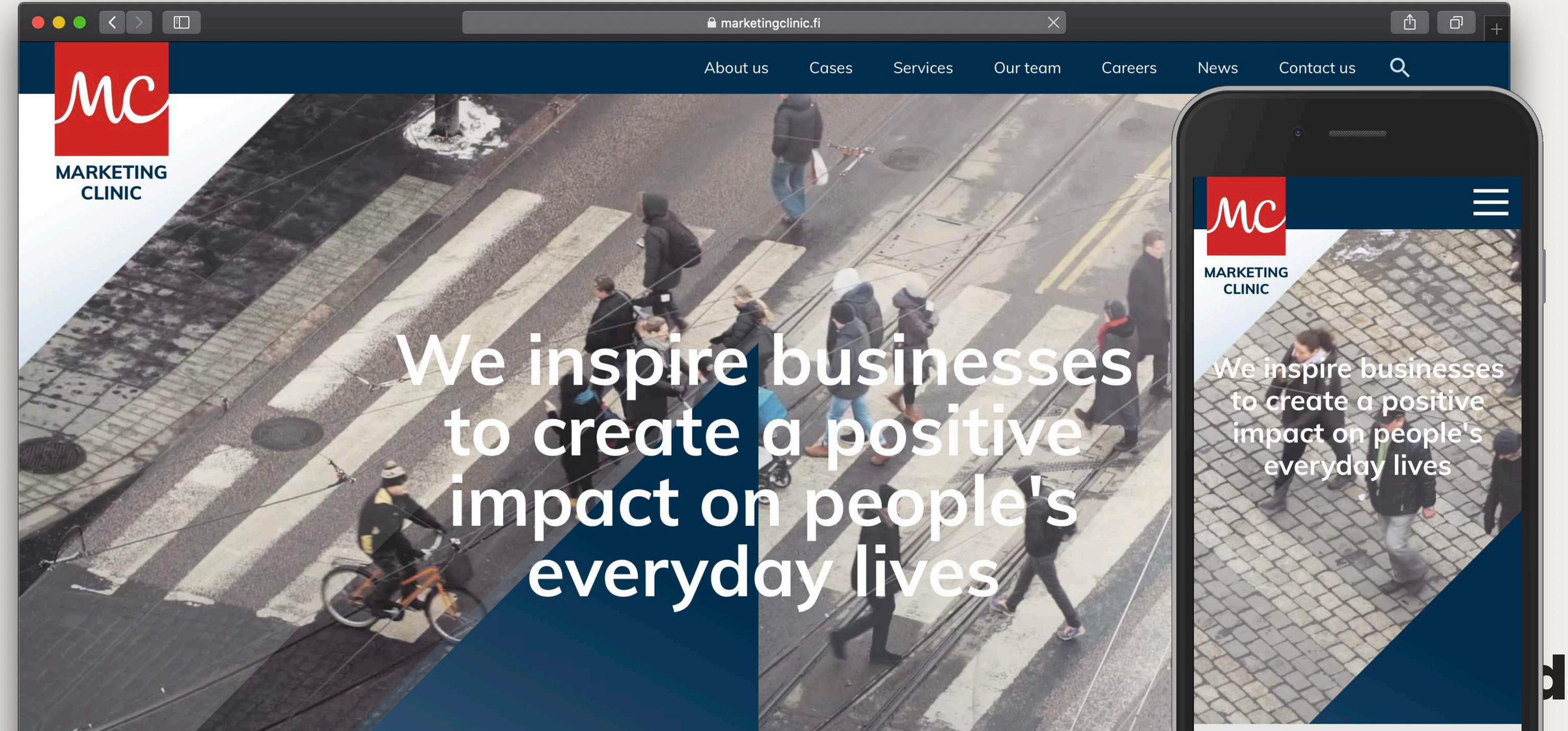

X
SLIDERS
JSON
1
2
3
4
5
RELOAD

1. Device interaction
2. Layout model
3. Visuals
4. **Elements**
5. Auditing
6. Technical terminology

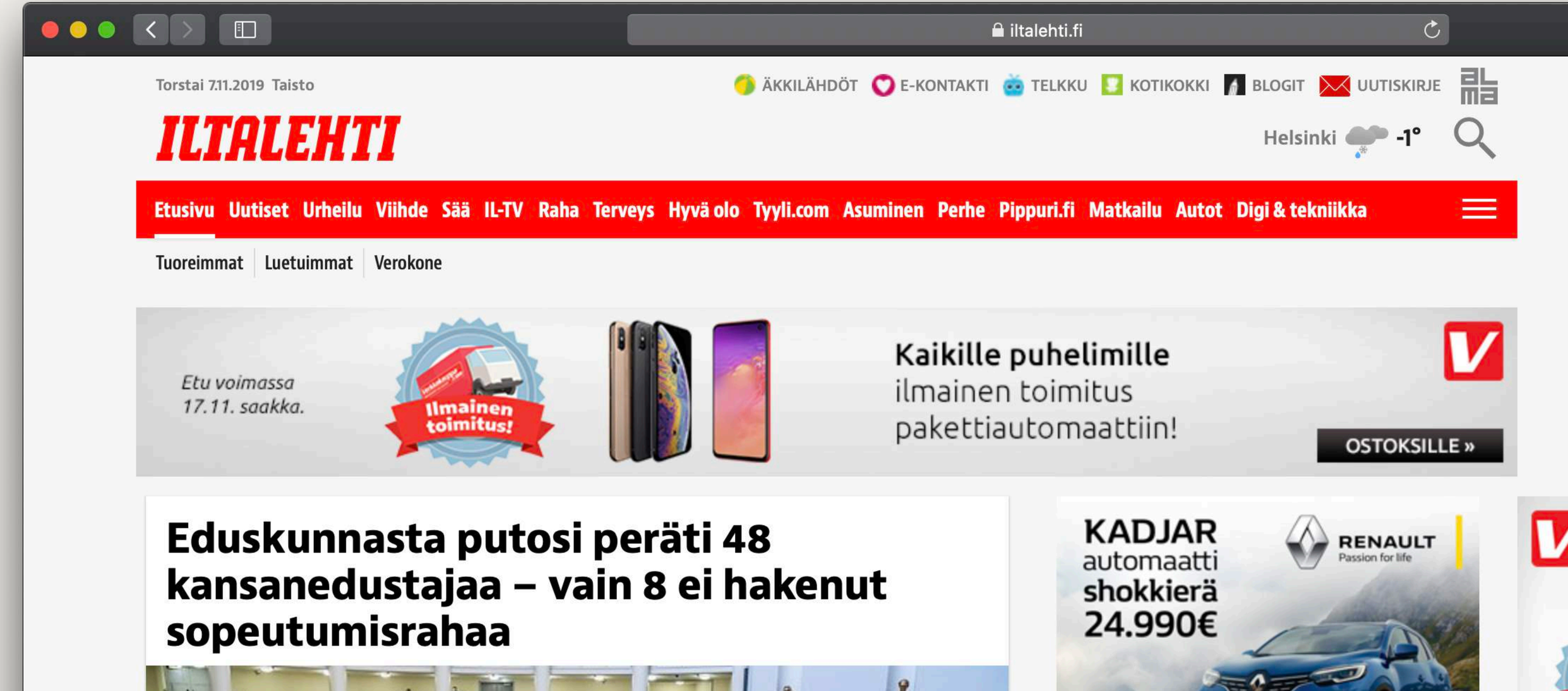
Context matters

- Web sites
- Emails
- Banners
- Rich app components
- Screen readers
- RSS and web readers

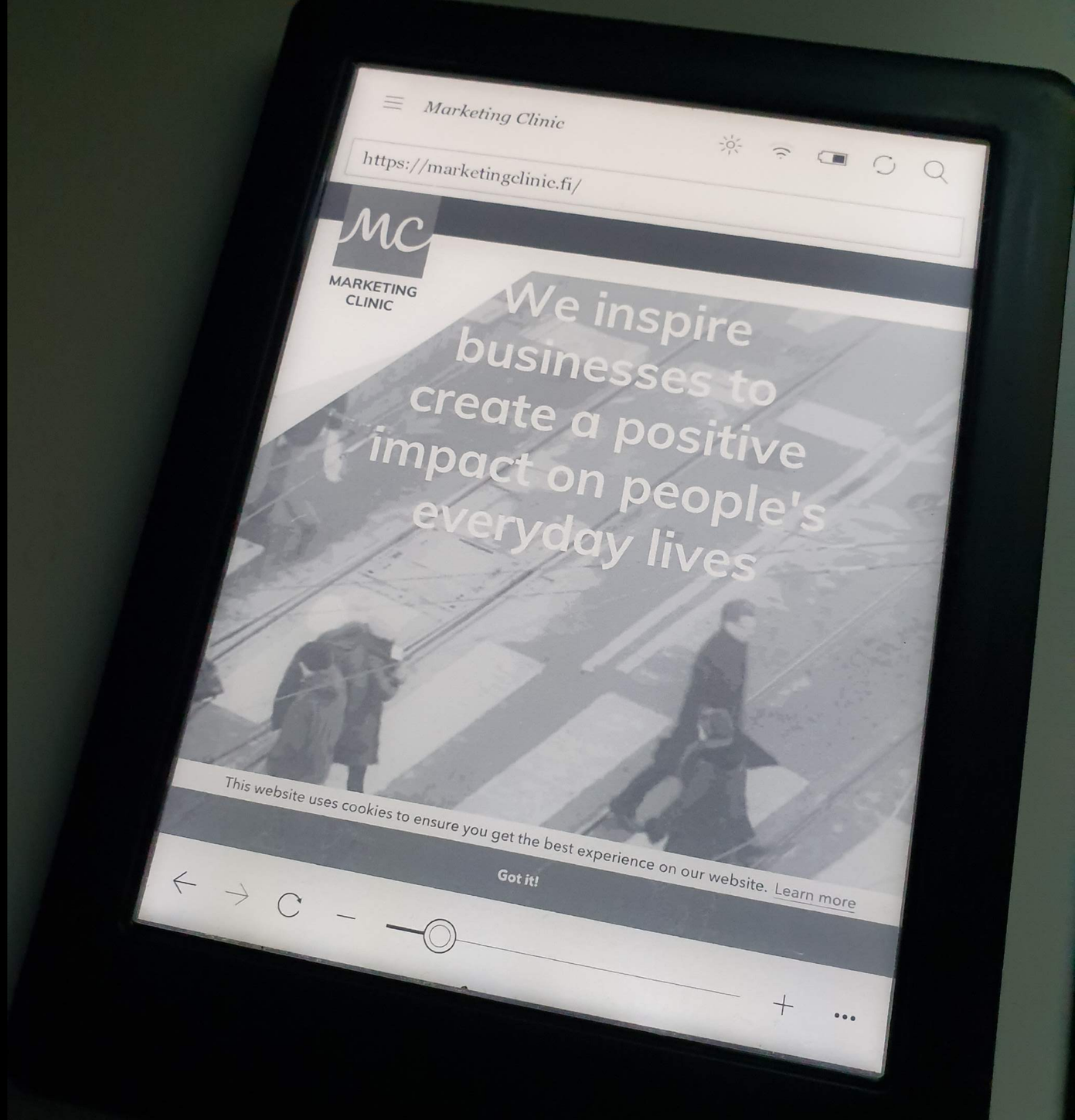
Web site


marketingclinic.fi
About us
Cases
Services
Our team
Careers
News
Contact us
MARKETING
CLINIC
We inspire businesses to create a positive impact on people's everyday lives
MARKETING
CLINIC
We inspire businesses to create a positive impact on people's everyday lives

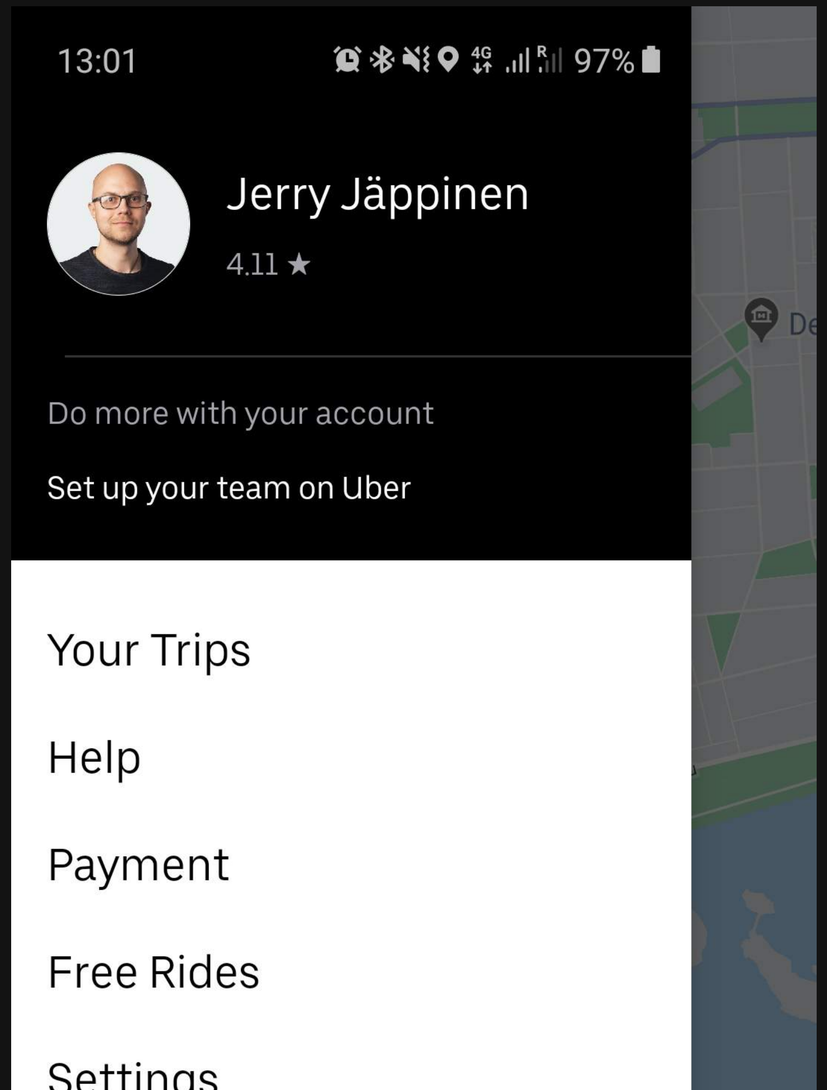
Banners and embeds

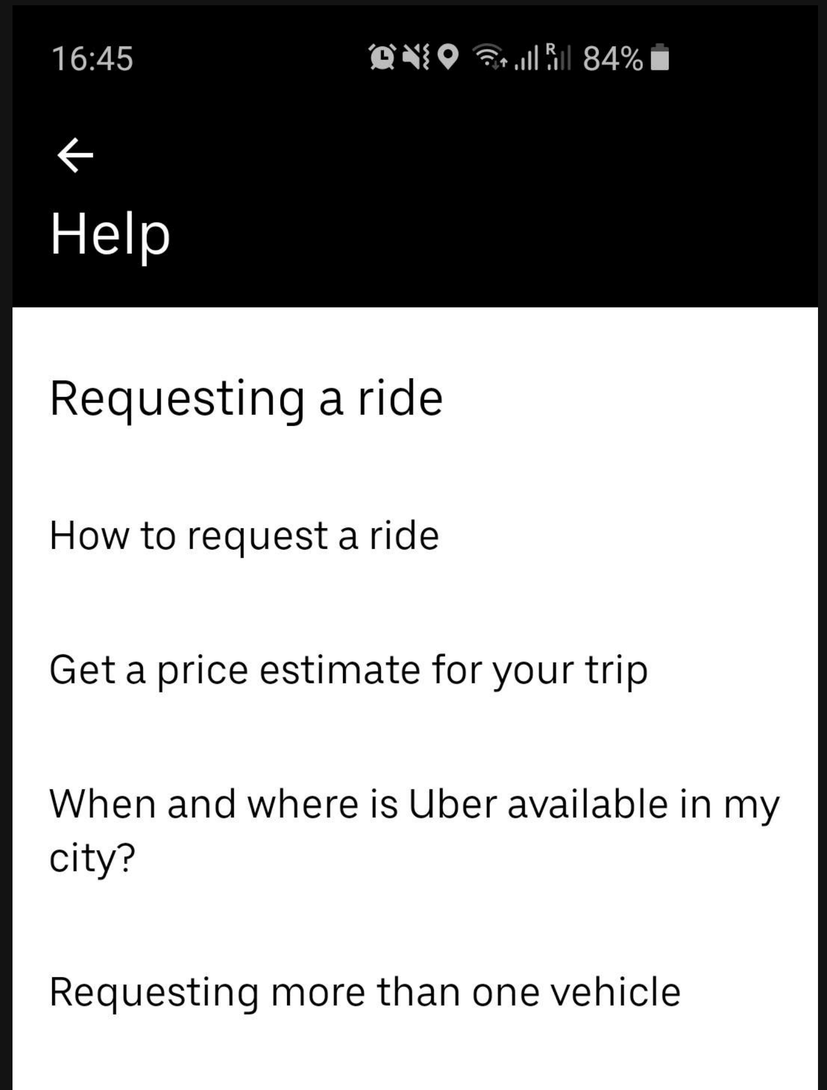


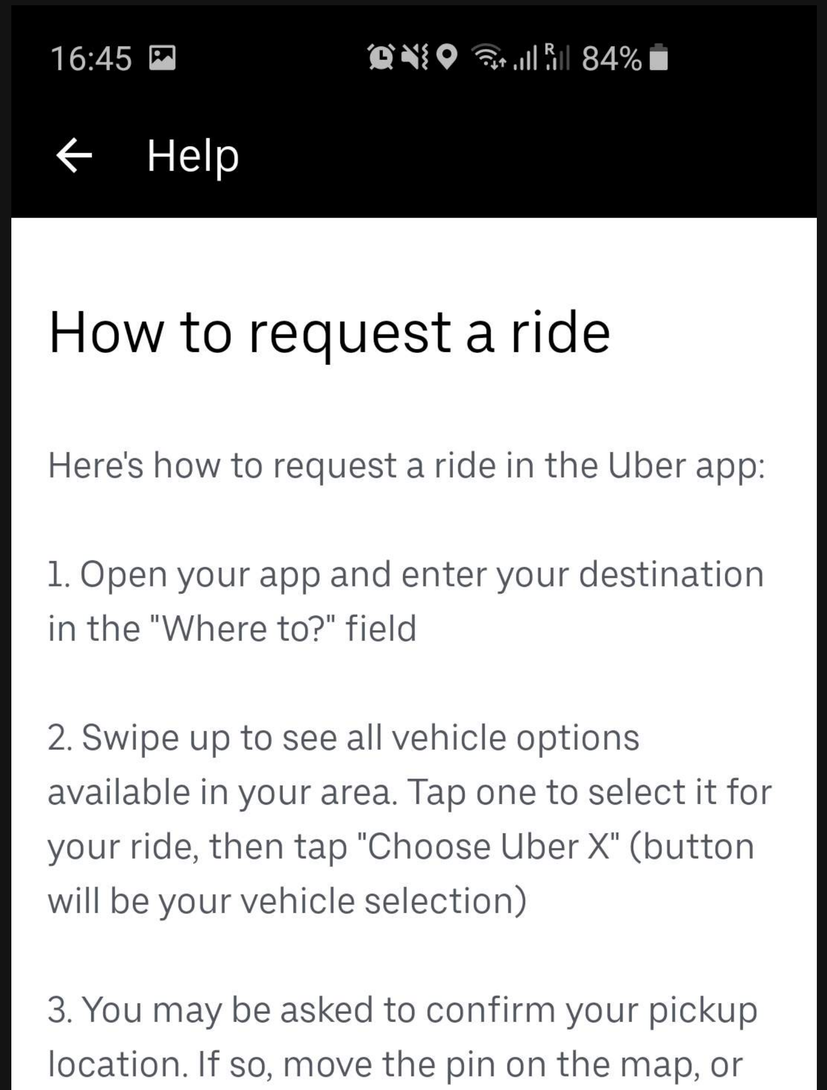
E-readers


Marketing Clinic
https://marketingclinic.fi/
MC
MARKETING CLINIC
We inspire businesses to create a positive impact on people's everyday lives
This website uses cookies to ensure you get the best experience on our website. Learn more
Got it!

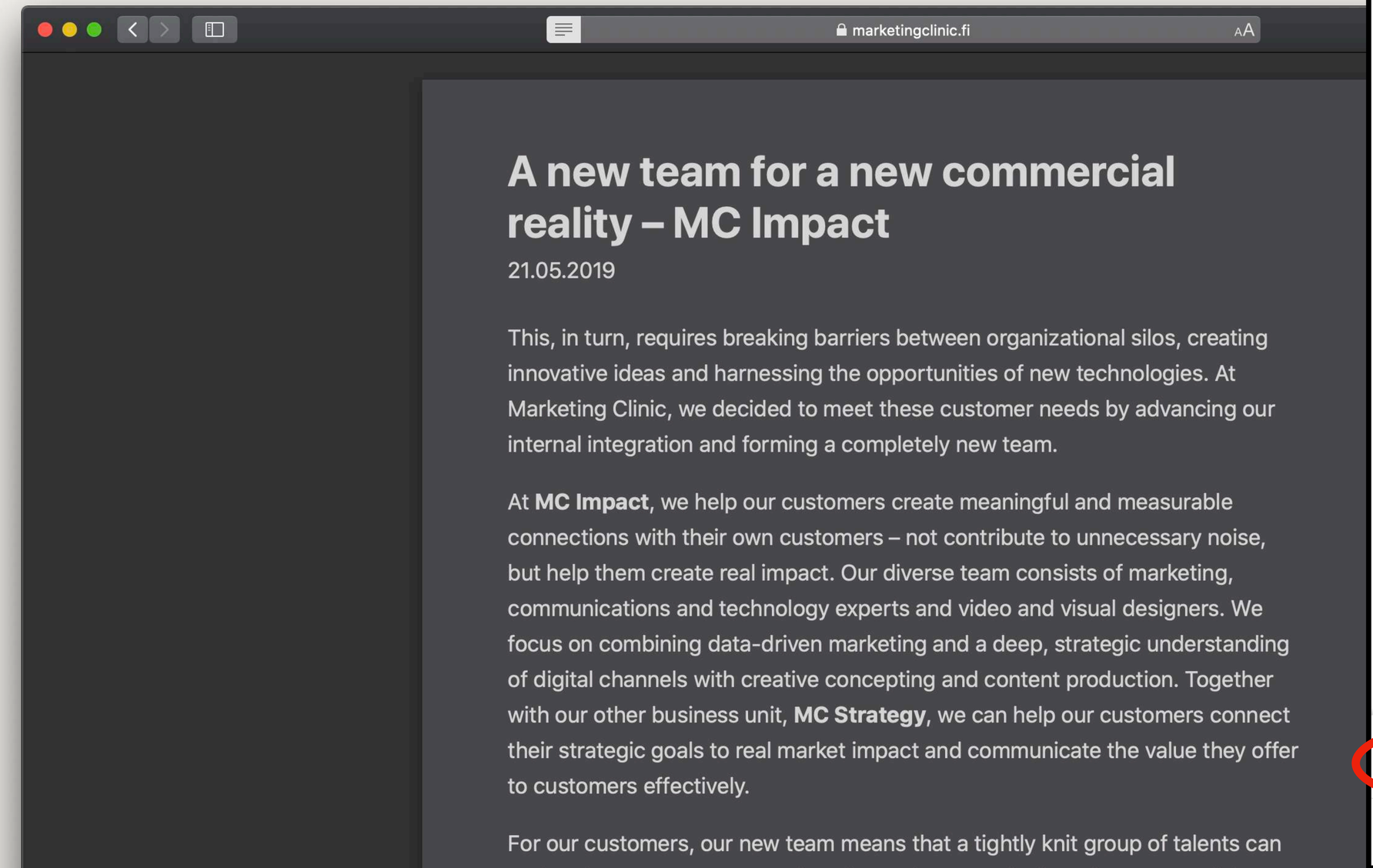
Rich app components







Read mode


marketingclinic.fi
AA
A new team for a new commercial reality – MC Impact
21.05.2019
This, in turn, requires breaking barriers between organizational silos, creating innovative ideas and harnessing the opportunities of new technologies. At Marketing Clinic, we decided to meet these customer needs by advancing our internal integration and forming a completely new team.
At MC Impact, we help our customers create meaningful and measurable connections with their own customers – not contribute to unnecessary noise, but help them create real impact. Our diverse team consists of marketing, communications and technology experts and video and visual designers. We focus on combining data-driven marketing and a deep, strategic understanding of digital channels with creative concepting and content production. Together with our other business unit, MC Strategy, we can help our customers connect their strategic goals to real market impact and communicate the value they offer to customers effectively.
For our customers, our new team means that a tightly knit group of talents can

13:23
28%
punainenristi.fi/nuoret/kotim
Verkkokauppa
Kontti-tavaratalot
Nuorten turvatalot
Ensiapukoulutus.fi
Etsi
Yhteystiedot
OMA
Palaute
Piirrä ja osastot
REDNET
Suomi
Svenska
English
Punainen Risti
Lahjoita
Opi ensiapua
Tule mukaan
Hae tukea ja apua
Tutustu Punaiseen Ristiin
Ajankohtaista
Avaa kartta
Nuorille
Kotimaan toiminta
Kansainvälinen nuorisotoiminta
Olet tässä: Etusivu › Nuorille › Nuorten kotimaan toiminta
Nuorten kotimaan toiminta
Kuvaaja: Johannes Wiehn
Lahjoita
Tulosta
Lähetä
Auttamisesta tulee hyvä mieli. Nuori voi osallistua Punaisen Ristin kotimaan toimintaan Reddie Kids - kerholaisena tai kerhon ohjaajana, nuorisoryhmissä tai nuorten leireillä. Vapaaehtoisena voi toimia säännöllisesti tai hetken kerrallaan monissa muissakin Punaisen Ristin toimintamuodoissa.
Reddie Kids -kerhot
Reddie Kids on Suomen Punaisen Ristin varhaisnuorten kerho joka on suunnattu 7-12-vuotiaille. Kerhotoiminnan tarkoituksena on tarjota nuorille hauska ja turvallinen ympäristö jossa voi tutustua Punaisen Ristin arvomaailmaan sekä esimerkiksi ensiaputaitoihin leikkien ja pelien avulla. Kerhoissa käsiteltäviä teemoja ohjaa yleensä valmiiksi suunniteltu vuosikello.
Reddie Kids -kerhon teemoja ovat käytännöllisten perus ensiaputaitojen ja turvallisuuden lisäksi muun muassa ystävyys, pakolaisuus, suvaitsevaisuus sekä vieraiden kulttuureiden ymmärtäminen ja arvostaminen. Kerho tarjoaa varhaisnuorelle loistavan mahdollisuuden tutustua Punaiseen Ristin toimintaan ja periaatteisiin.
Show simplified view

Loading times

- A web page is a collection of files
- Each file must be delivered from server to browser
- Sometimes loading some or all assets fail
- Consider loading times in design decisions
- Design solutions can hide loading times or make them more tolerable
- Loading times impact conversion €€€

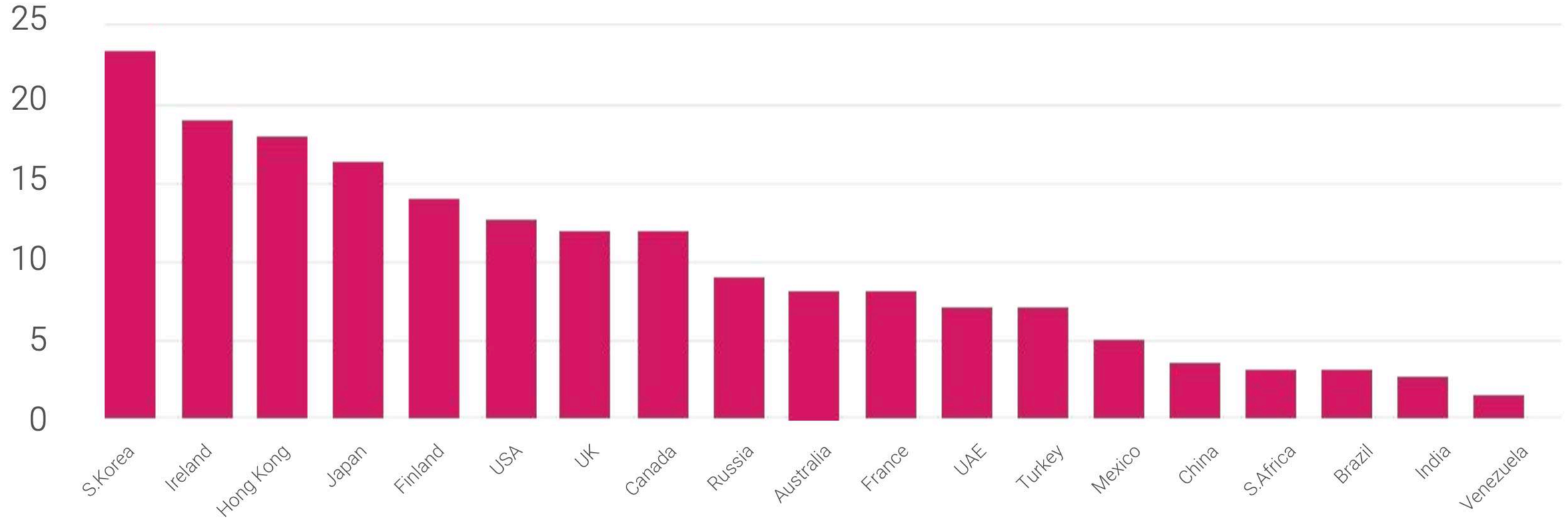
Offline

- Network conditions are never stable
- Assets can be cached or explicitly stored for offline use
- Does the design rely on constant connectivity?
- What use cases work without a connection?
- Is initial loading fast enough for an unstable connection?

Localisation

- Can't directly control date and time formatting
- Not all fonts support all languages
- OS language
- Text direction varies with language
- Input devices are different across countries
- User expectations and capabilities

Technology · Speed, data plans & coverage



Internet speed by country (mps)

Source

Text · Language

For english readers Japanese websites appear to be more busy

Asian typography does seem denser than Latin scripts. There is no spacing between words.

Logographic characters convey more meaning - almost each character is a word

Layout style represent billboard culture with its tendency to place a maximum amount of content within a minimum space

Urban density in Asian cities is high. It finds its reflection in UI design

Text · Length in different languages

English	Press home to open	**18**
Greek	Πατήστε το σπίτι για να ανοίξει	**31**
Arabic	يضغط لفتح	**9**
Turkish	Açmak için ana düğmeye basın	**28**
Chinese	按下按钮	**4**

Sitemaps and navigation

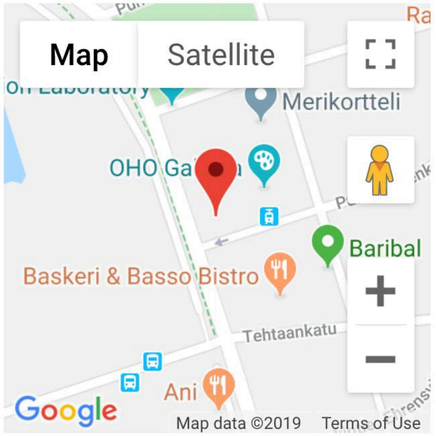
- Usability
  - Overall scope of the site
  - Navigation interactions
  - Current location within site
- Sitemap for search engines and other external services
- Structured data
- Layout structure within a page

Embedded documents

Finland

Marketing Clinic Finland Oy
Pursimiehenkatu 31 B 303
00150 Helsinki
FINLAND

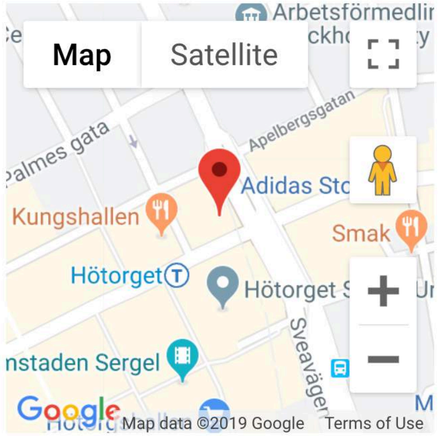
See our people »



Sweden

Marketing Clinic Sweden AB
Sveavägen 17, 13th floor
111 57 STOCKHOLM
SWEDEN

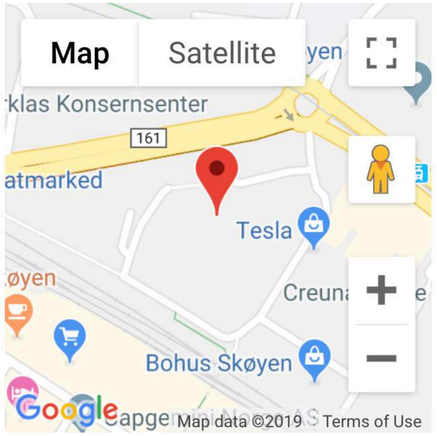
See our people »



Norway

Marketing Clinic Norway As
Drammensveien 161
0277 Oslo
NORWAY

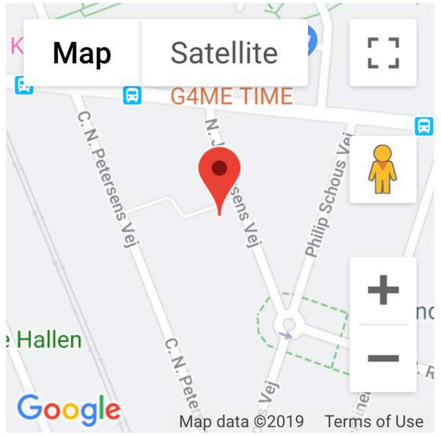
See our people »



Denmark

Marketing Clinic Denmark A/S
N. Jespersens Vej 13
DK-2000 Fredriksberg
DENMARK

See our people »



Embedded documents

- A web page is called a document
- A document can link to other documents
- A document can embed another document

- Mobile apps with web views
- HTML banners
- Streaming video players
- Contact forms
- Maps
- Social plugins

Rich components

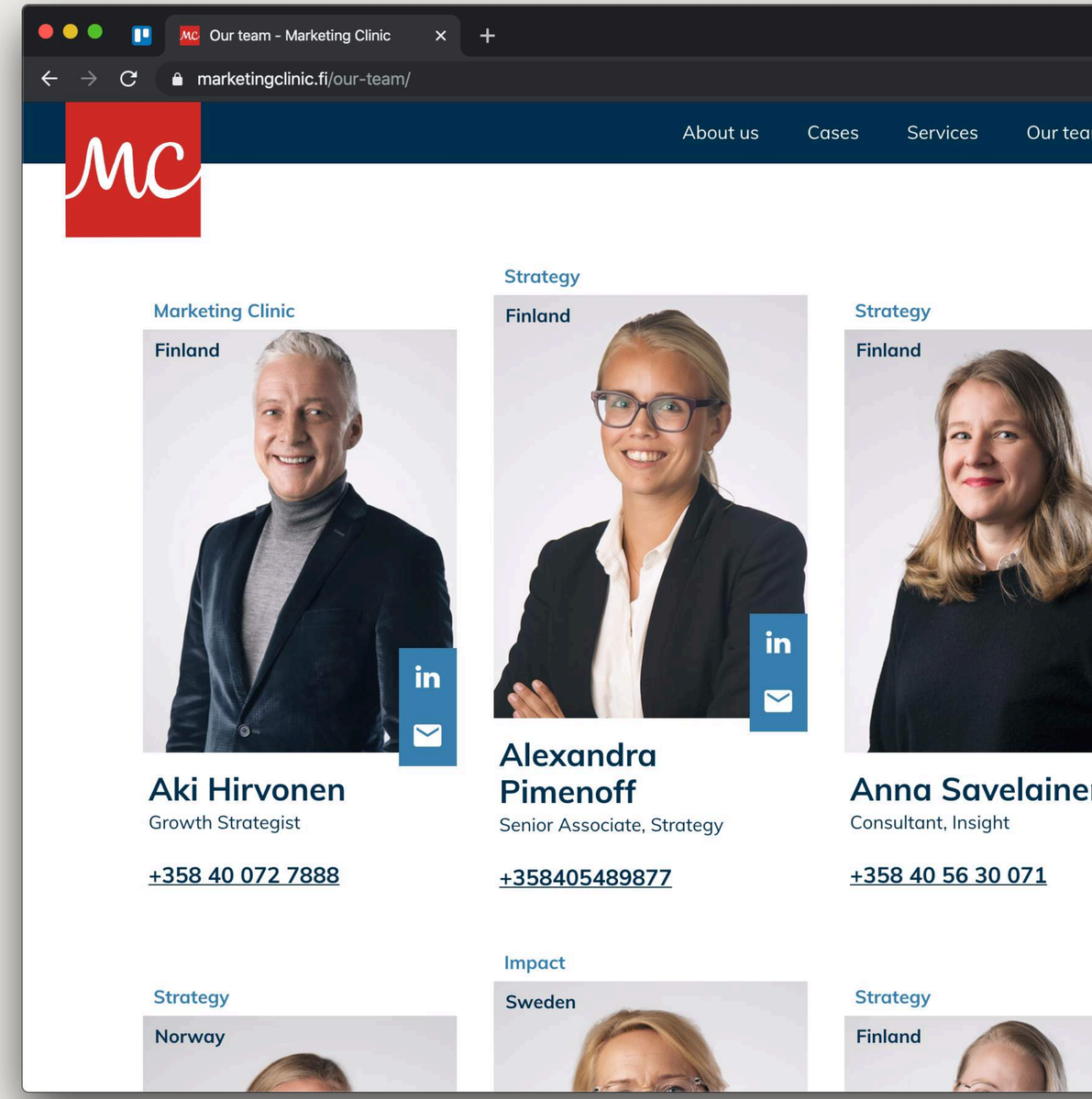
- Web is almost on par with mobile apps
  - Barring specialised use cases (machine learning, camera, connectivity)
- Web experiences are not static
- A web page is not just a "canvas for painting"
  - Live components with life cycle, behavior, interaction
- Traditionally relied on native form elements
- Now completely custom-build components are commonplace

Dynamic content

- Most web services are maintained for a long time
- CMSs manage updates and translations
- Designers usually work with draft content
- Content will be changed and added after release
- Designers set the rules and framing for dynamic content
- Structured content vs. layout management

Structured content
People are managed in CMS. How they are presented is up to design.

Publishing system
"*Pages* are managed in CMS. What modules or components are available, is up to design."



Audio

- Supported quite well on the web
- Rarely used by convention
- Useful for specific use cases and explicit need
- Users might have audio channel reserved or disabled

https://ganharp.ctpt.co/

Progressive enhancement

- Nothing works exactly the same everywhere
- High backwards compatibility
- Fallbacks for fancier features
- Progressive enhancement vs. graceful degradation

- Network quality (e.g. long loading times)
- Device performance (e.g. slow effects)
- Browser features and bugs (e.g. lazy loading)
- OS features (e.g. video autoplay)

Progressive enhancement

- What can I do right now?
  - https://caniuse.com/
- What can I expect in the near future?
  - https://webkit.org/status/#?status=under%20consideration,in%20development,supported%20in%20preview
  - E.g. real vertical grid control: https://drafts.csswg.org/css-rhythm/

Connected services

- Example
  - Web site shared on a social network
  - Web site saved to home screen
- Web is connected: web site is not just a web site
- Users and platforms have freedom
  - They determine how your web site is used
- Browsers and other services scrape web sites continuously

Meta info

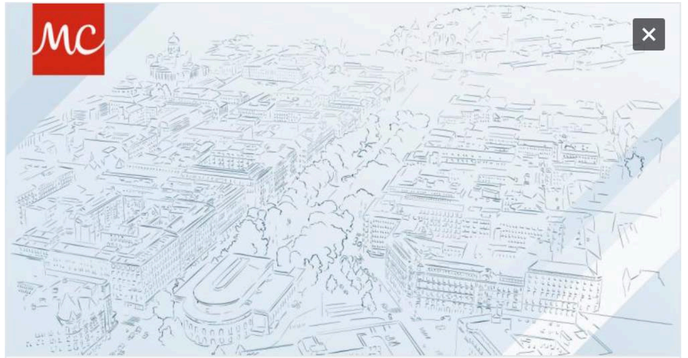
- Web sites use meta tags and manifest files
- Structure of content (web app, site, AMP, article…)
- Machine-readable content (event dates, blog authors…)
- How content should be presented (mobile status bar, dark mode…)

Create a post

Jerry Jäppinen

Anyone

marketingclinic.fi



Home

marketingclinic.fi

Add hashtag Help the right people see your post

Post

```
{
  "name": "ProductBeat",
  "short_name": "ProductBeat",
  "start_url": "./",
  "display": "standalone",
  "orientation": "portrait",
  "lang": "en-US",
  "background_color": "#ffffff",
  "theme_color": "#ffffff",
  "prefer_related_applications": false,
  "icons": [
    {
      "src": "./img/icons/android-chrome-192x192.png",
      "sizes": "192x192",
      "type": "image/png"
    },
    {
      "src": "./img/icons/android-chrome-512x512.png",
      "sizes": "512x512",
      "type": "image/png"
    }
  ]
}
```

Accessibility

- Web is an open, universal platform
- Most of us have two eyes and 10 fingers
- Most people.
- Some rely on aids to use digital services
- Some have impairments
- Some are not familiar with the target platform or conventions
- Some services are experienced in less traditional environments

This site uses cookies: Find out more. Okay, thanks

hasan & partners

our work about us contact news

We are
28 years old
Always curious
Never satisfied
100% independent

Sinebrychoff

Red Classics

@hasanpartners on Instagram: "Thank you. Good night!" #grandone #lastnight

Campaign

Instagram

This site uses cookies: Find out more. Okay, thanks

hasan & partners

our work about us contact news

We are
28 years old
Always curious
Never satisfied
100% independent

Sinebrychoff

Red Classics

@hasanpartners on Instagram: "Thank you. Good night!" #grandone #lastnight

Campaign

Instagram

URLs

- URLs need to be user friendly
- They should be canonical
- They shouldn't be too long
- They can encode information that's important

Persistence

How can user's experience persist when they visit a web service multiple times?

- **URLs**
- **Cookies**
- **LocalStorage**
- **Server-side storage**

1. Device interaction
2. Layout model
3. Visuals
4. Elements
5. Auditing
6. Technical terminology

Auditing

- Always audit your work!
- For the user, end result matters - not the design on paper
- Be ready to make changes when it doesn't work in practice

Tools

- Content analysis: https://www.similarweb.com/
- Google's Lighthouse: https://developers.google.com/speed/pagespeed/insights/
- Pingdom's speed test: https://tools.pingdom.com/
- Mobile test: https://search.google.com/test/mobile-friendly
- https://www.thinkwithgoogle.com/feature/testmysite
- https://gtmetrix.com/
- https://app.neilpatel.com/en/seo_analyzer/
- https://yellowlab.tools

URL

https://marketingclinic.fi/

Test from

North America - USA - San Francisco

START TEST

The internet is fragile. Be the first to know when your site is in danger.

START YOUR FREE 14-DAY TRIAL

Your Results:

DOWNLOAD HAR

SHARE RESULT

Performance grade

D 65

Page size

11.5 MB

Load time

10.59 s

Requests

108

Improve page performance

GRADE	SUGGESTION
F 0	Make fewer HTTP requests
F 0	Use cookie-free domains
F 0	Add Expires headers
F 10	Reduce DNS lookups
F 23	Compress components with gzip
F 40	Avoid URL redirects
A 100	Avoid empty src or href

Response codes

RESPONSE CODE	RESPONSES
200 OK	98
204 No Content	1
206 Partial Content	1
301 Moved Permanently	2
302 Found	6

Content size by content type

CONTENT TYPE	PERCENT	SIZE
Image	58.14%	984.2 KB
Script	31.16%	527.5 KB
CSS	5.51%	93.3 KB
Font	3.32%	56.2 KB
HTML	1.32%	22.3 KB
Redirect	0.41%	6.9 KB
XHR	0.14%	2.3 KB
Total	100.00%	1.7 MB

Requests by content type

CONTENT TYPE	PERCENT	REQUESTS
Image	45.63%	47
Script	29.13%	30
CSS	8.74%	9
Redirect	6.80%	7
HTML	3.88%	4
Font	3.88%	4
XHR	1.94%	2
Total	100.00%	103

track.adform.net	0.28%	31.6 KB
other	0.69%	78.7 KB
Total	100.00%	11.4 MB

px.ads.linkedin.com	2.78%	3
other	24.07%	26
Total	100.00%	108

File requests

Sort by: Load Order | Rising | Filter | Legend: DNS SSL Connect Send Wait Receive Blocked

FILE	SIZE
https://marketingclinic.fi/	11.2 KB
https://fonts.googleapis.com/css?family=Muli%3A400...	1.6 KB
https://apis.google.com/js/platform.js	20.6 KB
https://marketingclinic.fi/wp-includes/css/dist/bl...	4.9 KB
https://marketingclinic.fi/wp-includes/js/jquery/j...	4.6 KB
https://marketingclinic.fi/wp-includes/js/jquery/j...	34.6 KB
https://marketingclinic.fi/wp-content/plugins/yop-...	26.0 KB
https://marketingclinic.fi/wp-content/themes/mc/bo...	25.1 KB
https://marketingclinic.fi/wp-content/themes/mc/th...	1.9 KB
https://marketingclinic.fi/wp-content/themes/mc/ad...	680.0 B

0.0s 0.3s 0.6s 0.9s 1.2s

108 requests 1/11 Entries per page: 10

Nobody Likes a Slow Website

We built this Website Speed Test to help you analyze your website load speed.

The test is designed to help make your site faster by identifying what about a webpage is fast, slow, too big, and so on.

We have tried to make it useful both for experts and novices alike. In short, we wanted it to be an easy-to-use tool built to help webmasters and web developers everywhere optimize their website performance.

About Pingdom

State Colors

The following colors are used in the chart bars to indicate the different stages of a request.

DNS	Web browser is looking up DNS information
SSL	Web browser is performing an SSL handshake
Connect	Web browser is connecting to the server
Send	Web browser is sending data to the server
Wait	Web browser is waiting for data from the server
Receive	Web browser is receiving data from the server
Blocked	Web browser is not ready to send

Your results for marketingclinic.fi

Your mobile page speed is 4.2 seconds on a 4G connection.

RATING

Slow

Slow pages start to load in over 2.5 seconds.

Complete the steps below to build your report

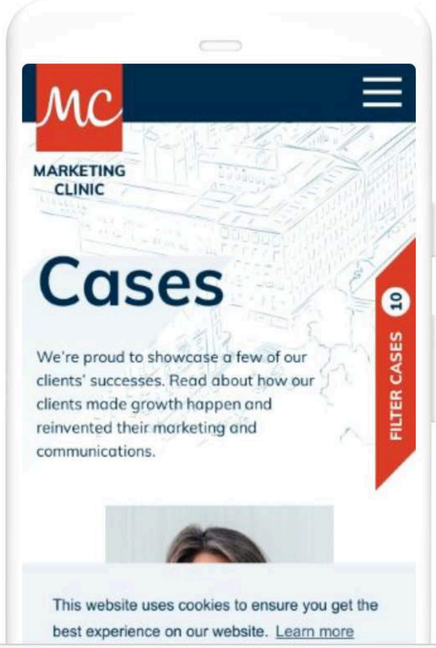
Page Speed Tools

Optimize your page speed

1. Get custom fixes to make each page on your site faster.

Enter another page on your site

marketingclinic.fi /our-team /cases/



PAGE SPEED

3.3 seconds

Your current page speed on 4G networks is slow.

RECOMMENDED FIXES

Reduce JavaScript Execution Time

Inefficient javascript can slow down your page. Reduce the time spent parsing, compiling, and executing your code.

1. Device interaction
2. Layout model
3. Visuals
4. Elements
5. Auditing
6. Technical terminology

HTML

- HTML is structured content
- CSS determines how HTML elements should be rendered by a browser
- HTML and CSS are declarative languages
- https://html.spec.whatwg.org/#toc-semantics

Server

Client

Window

Document

CSS

HTML

JavaScript

React

Vue

PHP

Amazon

Deployment

SEO

That's it!

Jerry Jäppinen

Product design consultant

DC MN · elisa · visable · OLX · PB ProductBeat

jerryjappinen@lateralnord.com
+358 40 7188776
@jerryjappinen

Lateral Nord