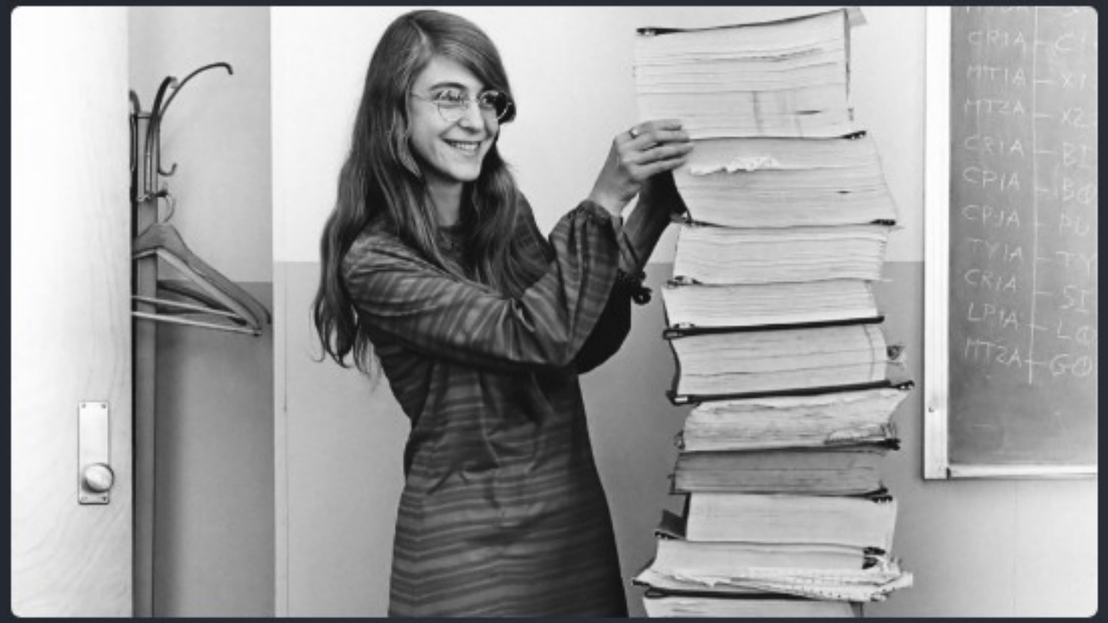

Mentimeter
tweakers
DEVELOPERS SUMMIT
Is pagespeed a backend matter?
Meet perceived performance

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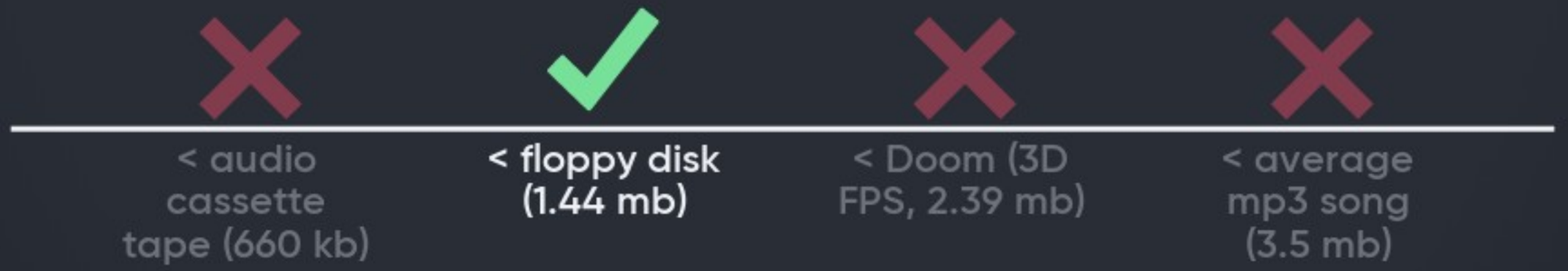


Margaret Hamilton

- Software engineer (coined the term)
- Learning on the job, building in flight sofware
- Apollo service module, lunar lander & Skylab

How large was the moon lander software

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Landing on the moon versus building a website

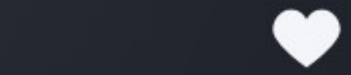
- First step for mankind: 878 kb
- Making a website work: 1,969 kb



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My goals today

- DX with UX in mind
- Change code interpretation / browsers mindset
- Make performance point of in-house discussion



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Who am I

- Erwin Hofman
- performance + accessibility
- technical UX + SEO
- consultancy + talks + training
- developer by nature



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Who are you?

- 💛 UX/UI
- 👍 e-commerce developer
- 👎 (other) developer
- 😺 SEO specialist
- ❓ Other

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Most comfortable in which language/library?

- 💛 HTML, CSS, jQuery (SSR)
- 👍 PHP, nodeJS, Ruby, ASP (SSR)
- 👎 Angular/React/Vue.js (CSR)
- 😺 Other (OS, apps)
- ❓ No clue what you're asking here

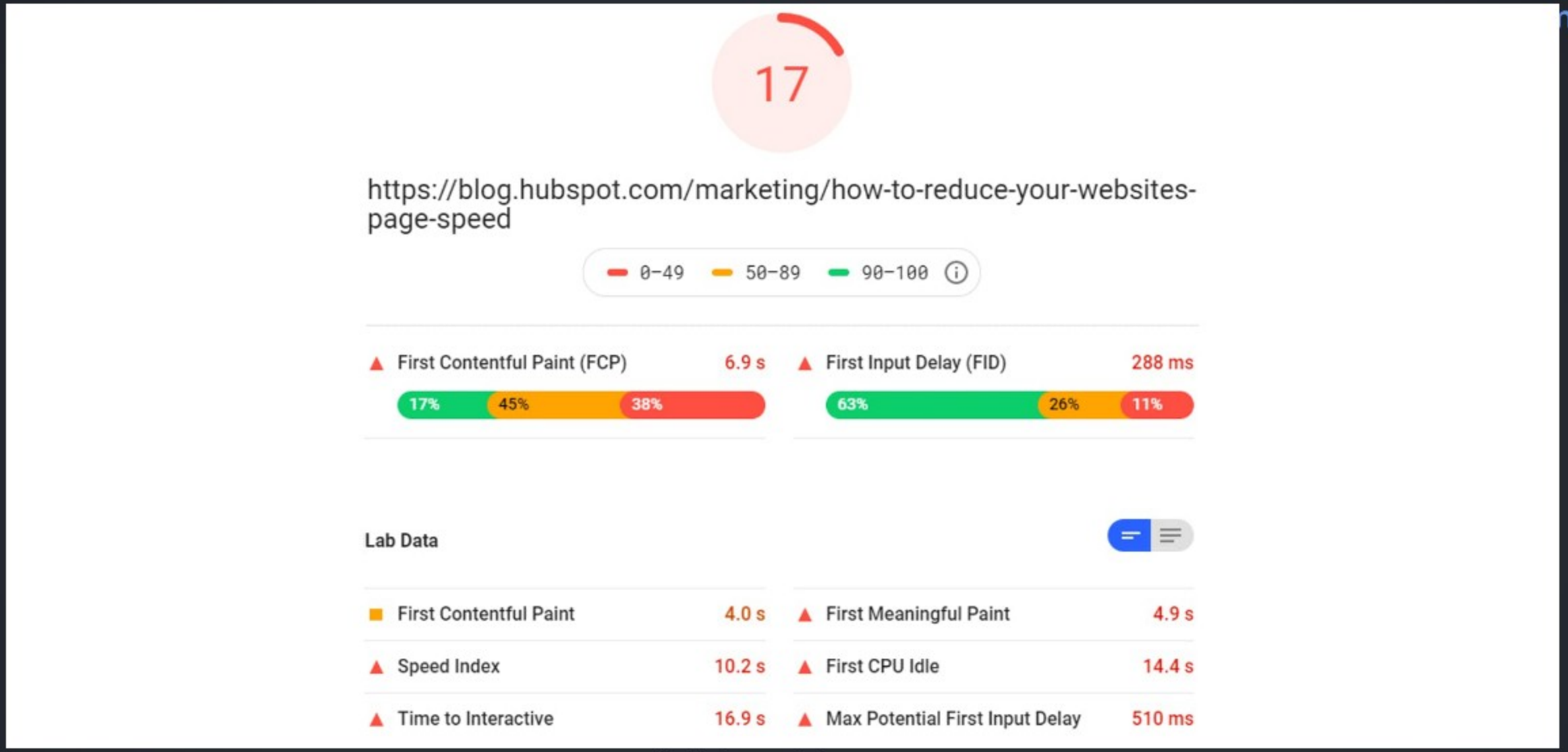


Speeding things up (no questions asked)

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A bit of irony

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Lighthouse metrics

FCP / Something is happening

FMP / User engagement

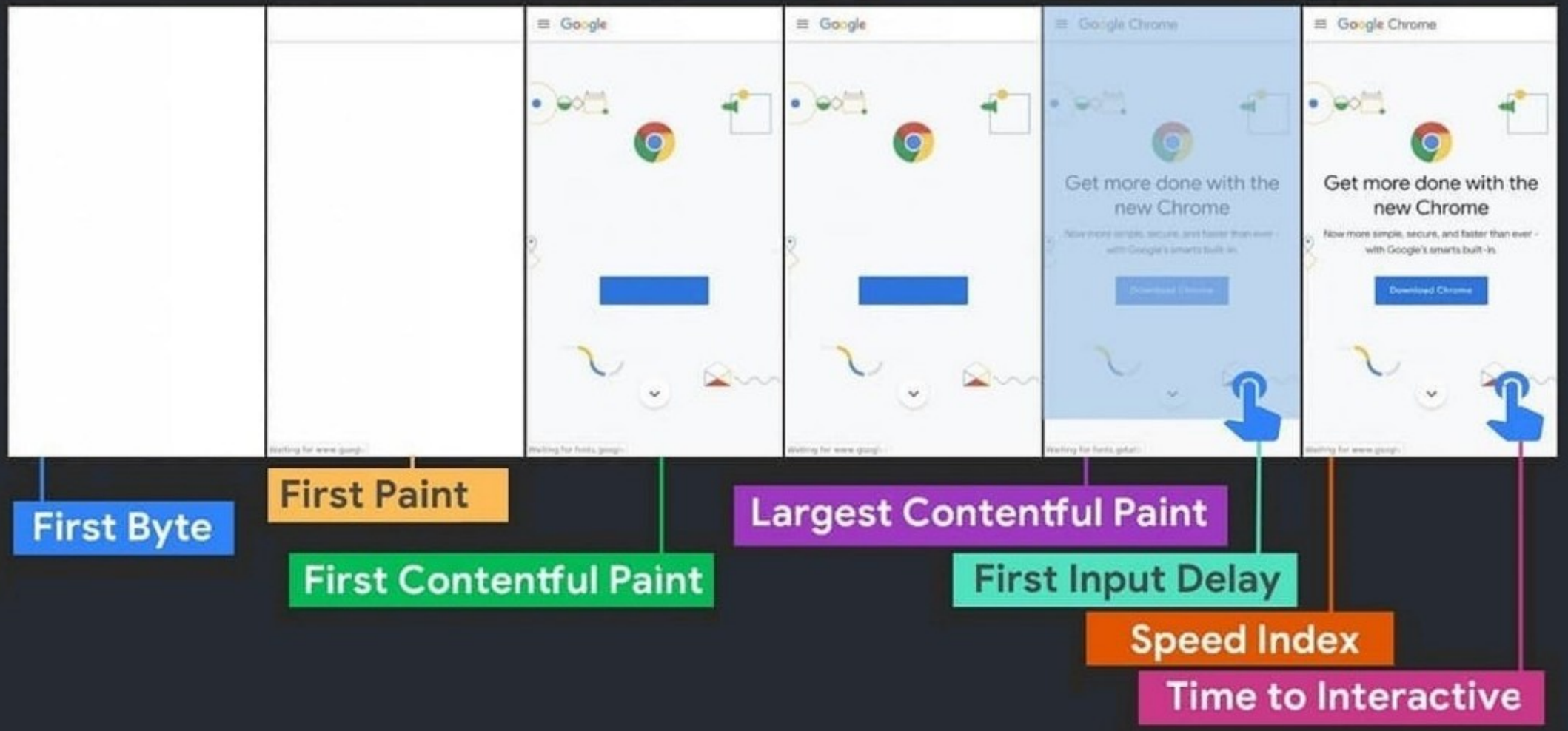
TTI / Is it working?



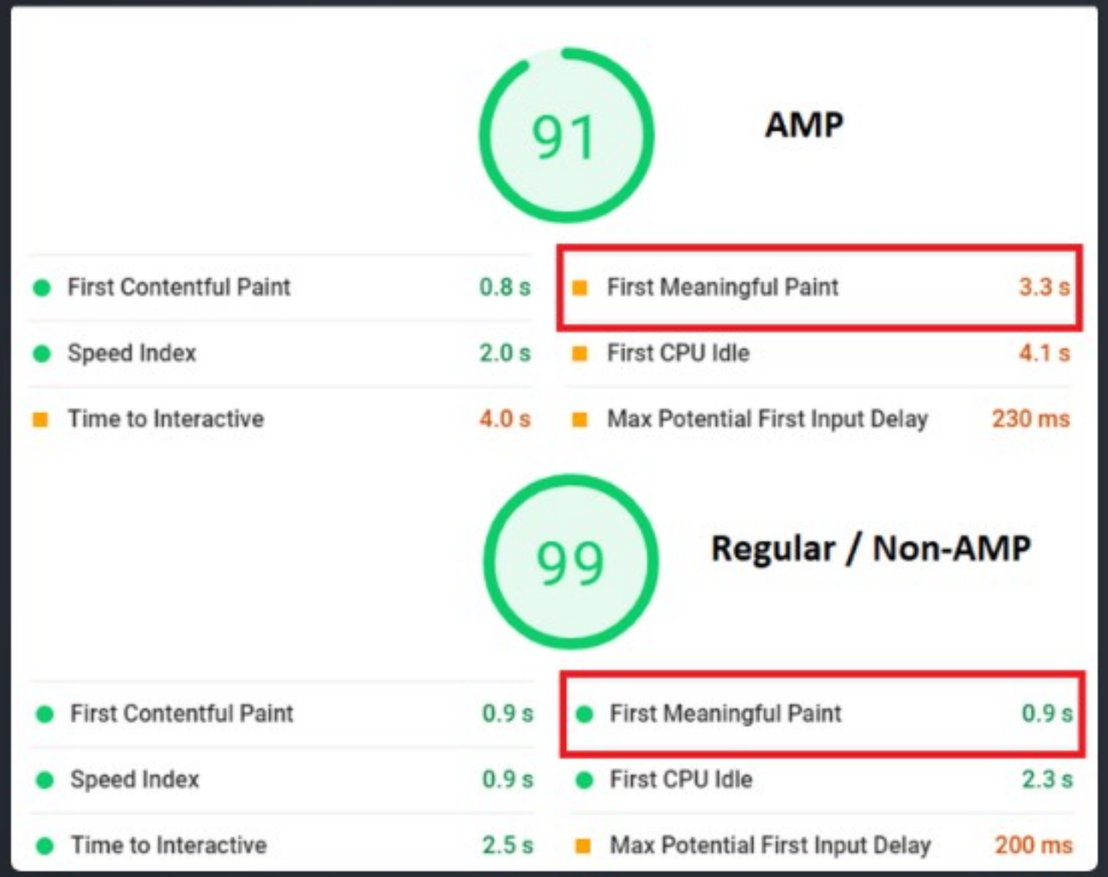
When did the user think they could interact?

When could they interact?

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Where does AMP stand?

- good boilerplate
- when original site has a lot of technical debt
- less in control of performance
- maintaining two versions
- Google is biased

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Importance (UX, SEO, marketing)

- Perceived performance
- Reduce white screen or user frustration
- Reduce cost of paid search
- Improve ranking and bounce
- Increase conversion and customer retention
- Prevent badge of shame



Render blocking resources

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Render blocking resources

HTML / HTML renders as it streams into the browser

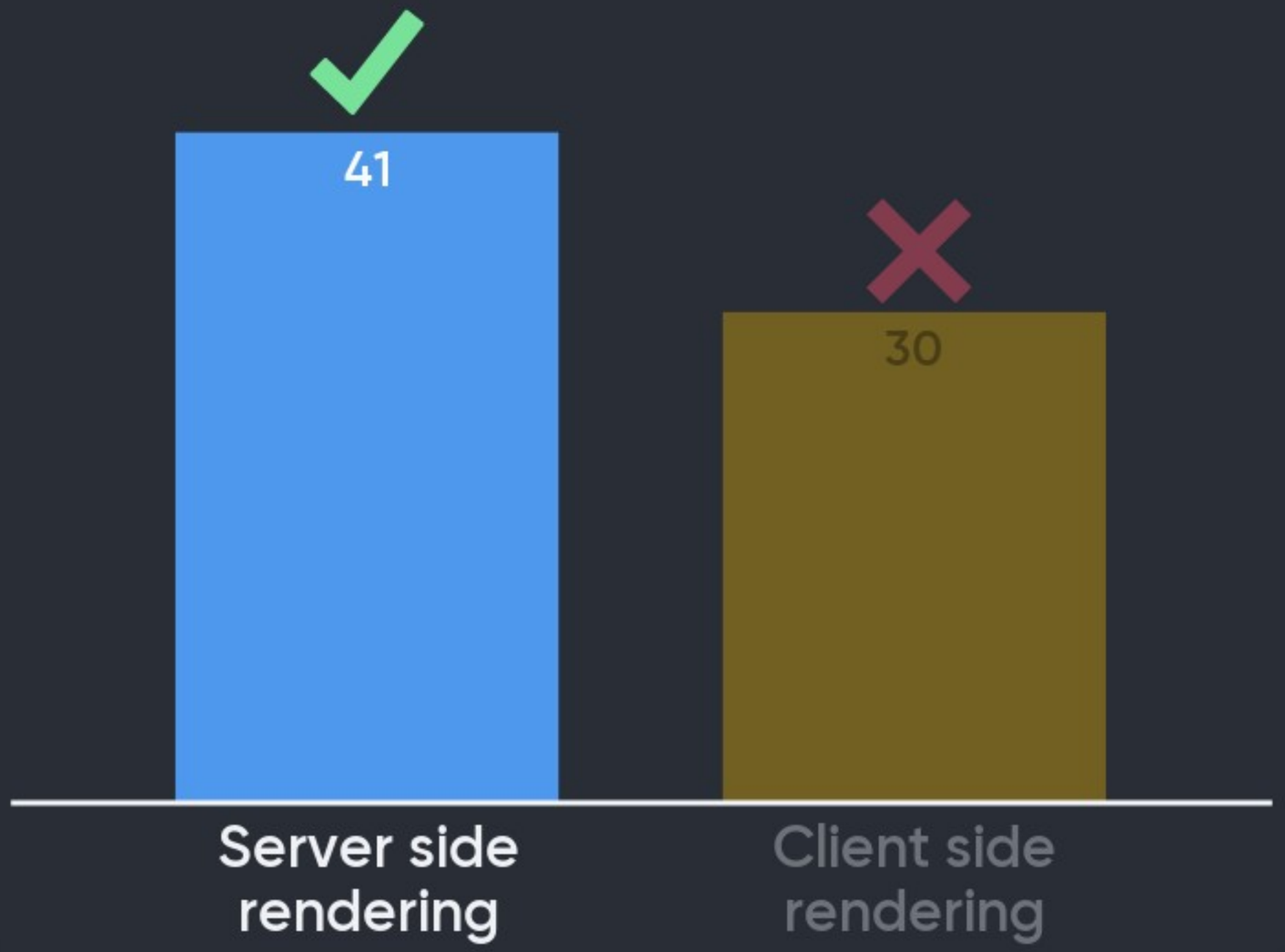
CSS / A rule can affect another (and blocks script execution)

JS / Might change DOM and CSSOM (use defer over async)
downloading, parsing, compiling, executing, compositing



So, which is best (at least from FMP perspective) ?

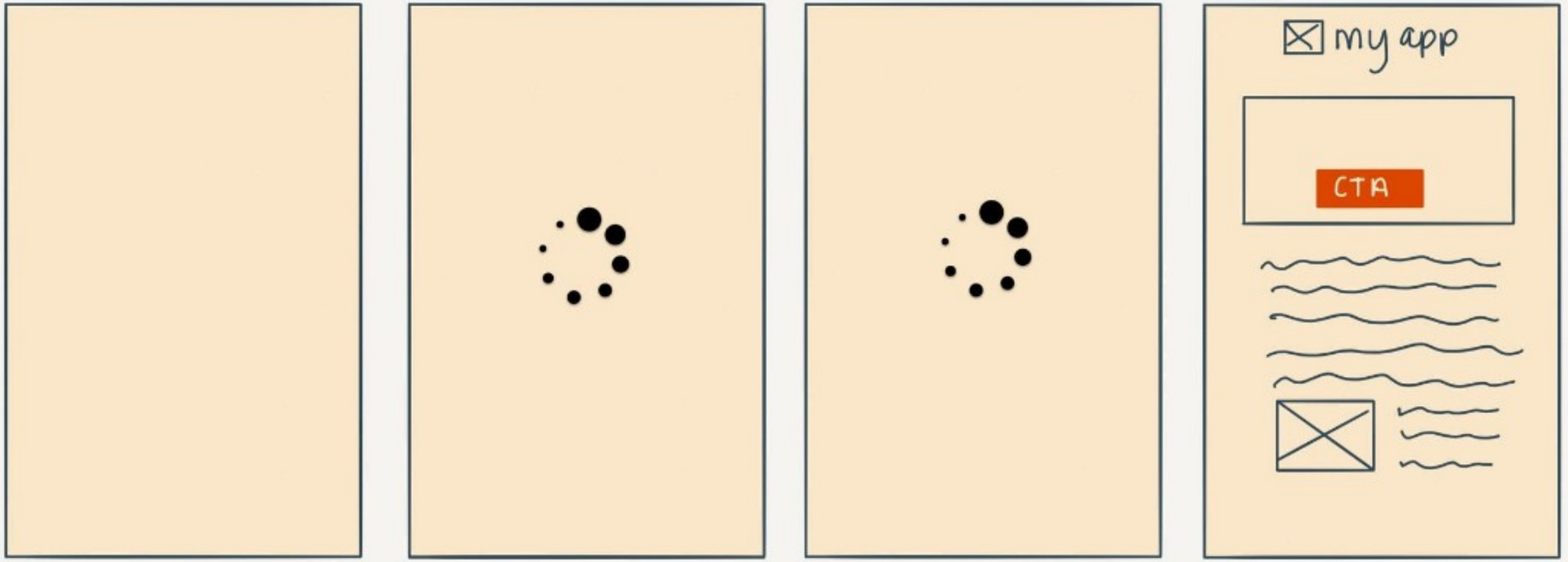
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client-rendered

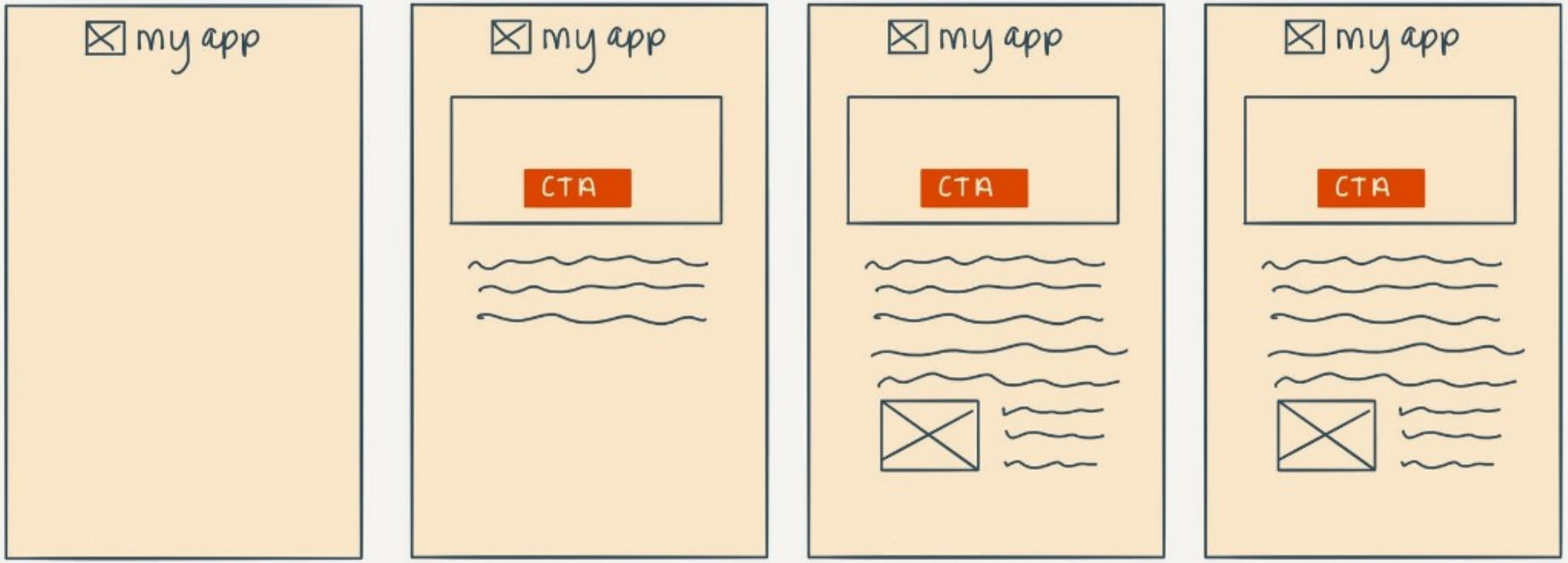


FCP

FMP
TTI

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server-rendered



FCP **FMP** **FID** **TTI**



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Lorem Ipsum Dolor Amet Consectetur Adipiscing Elusmod Tempor

Home | Incididunt ut labore



Incididunt ut labore

Dolore magna

De **incididunt ut labore**, Dolore magna, Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat aute irure dolor in reprehenderite... Lees verder ↓

Bloeikleur
Wit

Winterhardheid
Winterhard

Bloeiperiode
Mei, juni

Gebruiksmogelijkheden
Bodembedekker, onderbeplanting, vakbeplanting

Grondsoort
Alle grondsoorten

Standplaats
Zon, halfschaduw

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—Design On Stock Barran 2 b Design On Stock Amra e

Design on Stock Aikon Lounge bank



Deze prachtige leefbank **Aikon Lounge** van **Design on Stock** is ontworpen door Marike Andeweg.

Design on Stock Aikon Lounge bank kleuren en stoffen



* Dit is slechts een greep uit de Design On Stock collectie Bankstellen collectie. Deze stoffen geven een indicatie van de mogelijkheden, maar kunnen in de praktijk afwijken van de werkelijkheid. In onze winkels laten wij u graag de exacte mogelijkheden zien.

Ik heb interesse >

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‹ Design On Stock Barran 2 ba » Design On Stock Amra eet

Design on Stock Aikon Lounge bank

Deze prachtige leefbank **Aikon Lounge** van Design on Stock is ontworpen door Marike Andeweg.

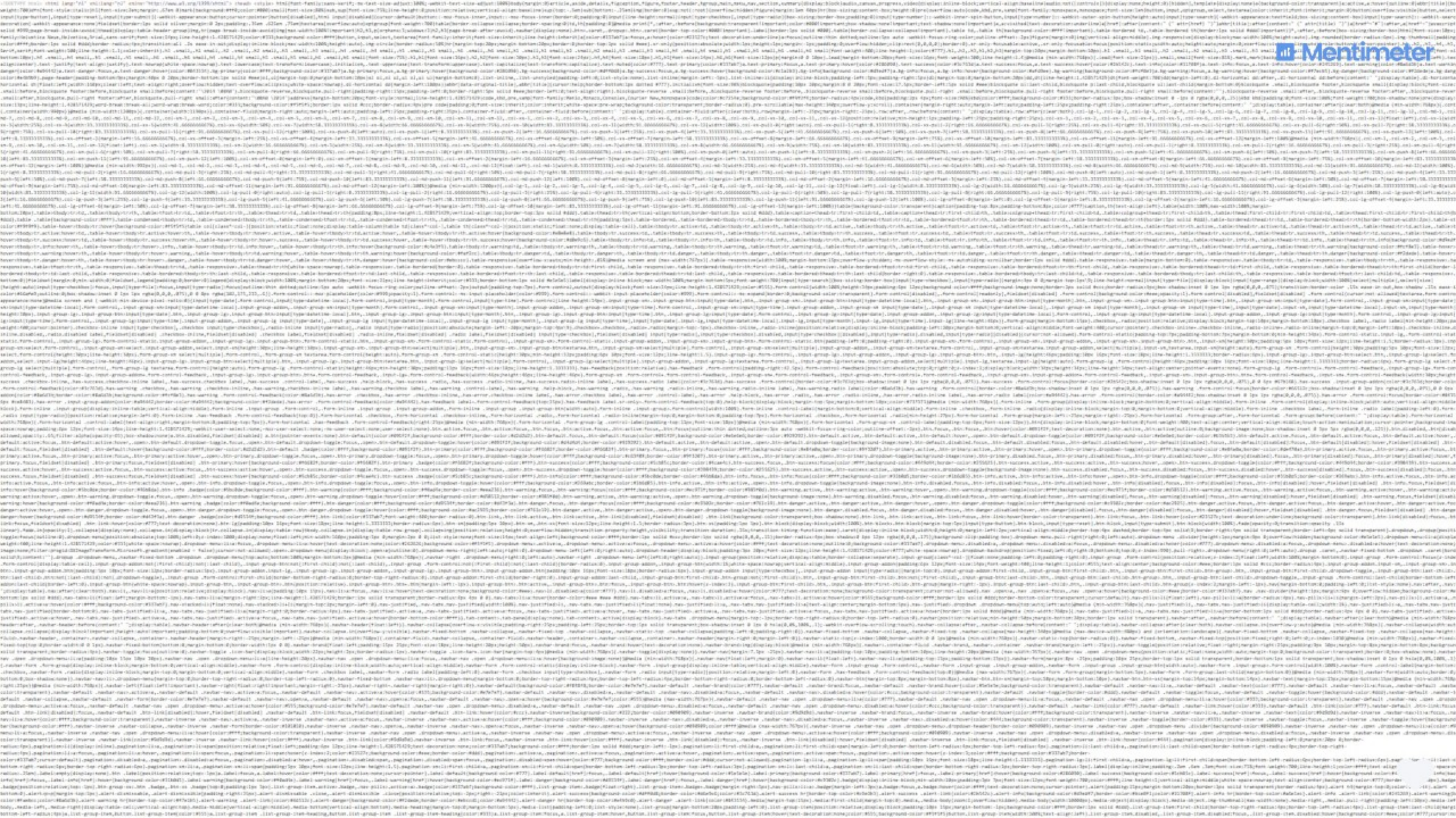
Design on Stock Aikon Lounge bank kleuren en stoffen



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Ik heb interesse ›

Pagina delen


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Inline Critical CSS (the bad)

- 76% is CSS
- 412% increase



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Inline Critical CSS (the good)

- 30% is CSS
- 43% increase



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Pagespeed Proof of Concept

- uncommissioned
- video comparison
- of a HEMA product page

FMP gains from slow 3G to 4G

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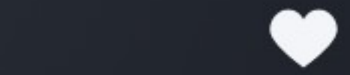
Desktop improvements

- 4G: 1.1 vs 3.6 (= 69% faster)
- fast 3G: 1.1 vs 6.5 (= 83% faster)
- slow 3G: 2.9 vs 10.4 (= 72% faster)

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Mobile improvements

- growing device variety = UX gap
- CPU main bottleneck today
- responsive instead of mobile first



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UX gap

- Budget / Device and internetplan
- Setup / Updates
- Provider / User location and coverage
- Situation / Traffic light
- Configuration / Noscript / saveData
- Congestion / Resource competition



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What did I do

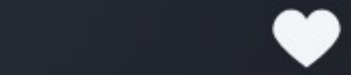
- Async/defer JS + CSS
- Added critical CSS
- Removed unnecessary resource hints
- Preloaded main product image
- FOIT / FOUT



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Bonus optimization

- JS code splitting
- Reduce layout shifts / reflows
- Anticipate on 2G / saveData / reduceMotion
- Coloured / blurred img placeholders
- Non-JS fallback



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Challenges

- Critical CSS only (Above the fold)
- Lazyload full CSS (browser-wait)
- CSS specificity / inheritance
- Hide non-critical/JS elements (fancybox/nav)



What's next? Your call!

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Leaderboard

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No results yet

Top Quiz participants will be displayed here once there are results!

0

Your questions

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0 questions

0 upvotes

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Erwin Hofman

- linkedin.com/in/erwinhofman
- info@erwinhofman.nl
- 0031 6 2161 5721