

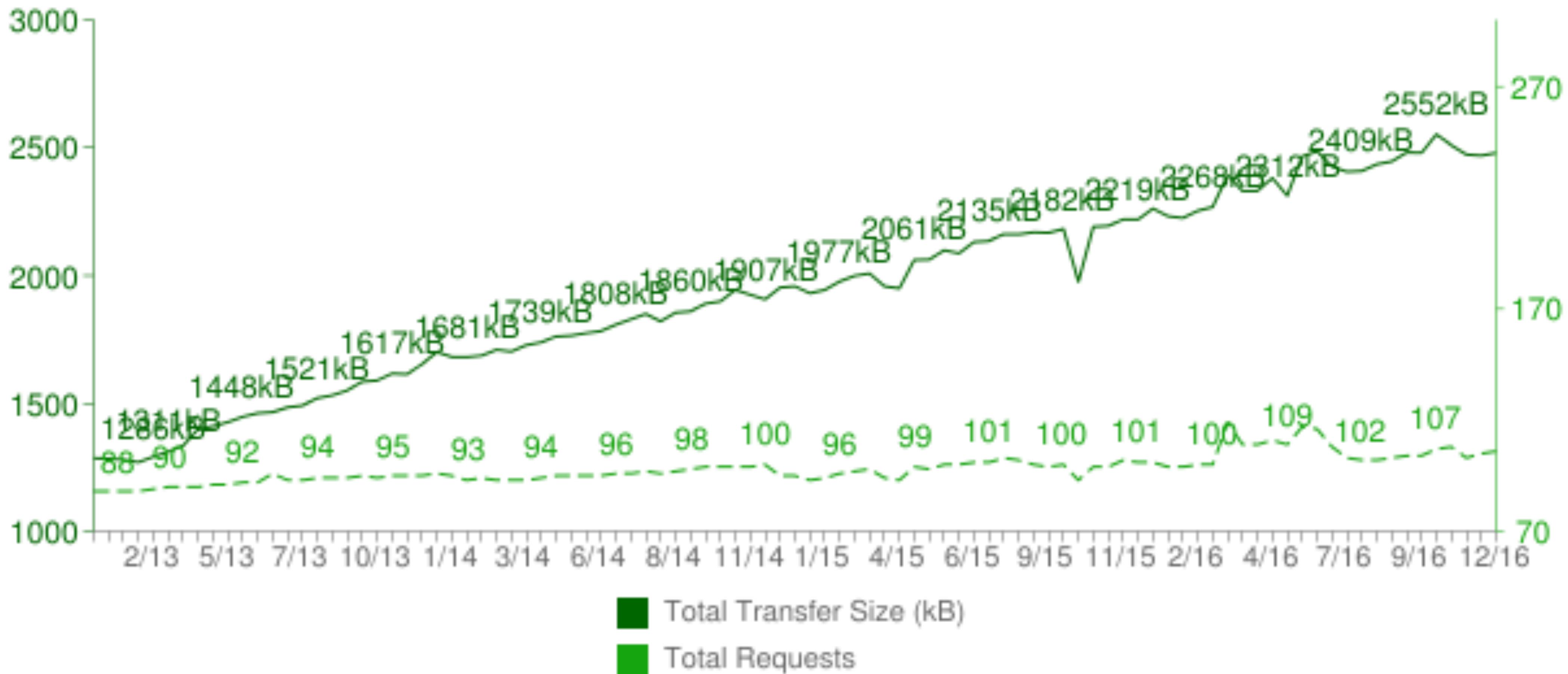
CMD PERFORMANCE MATTERS



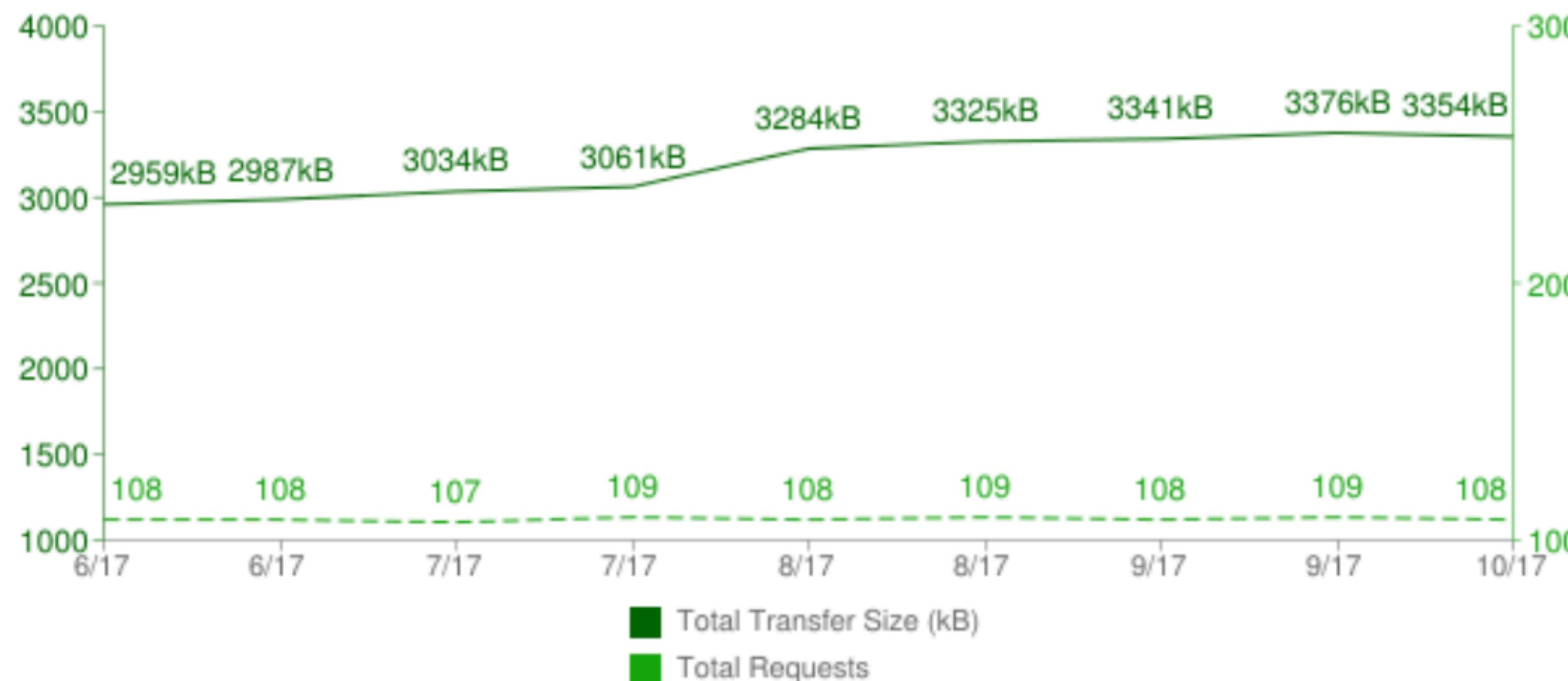
PERFORMANCE MATTERS



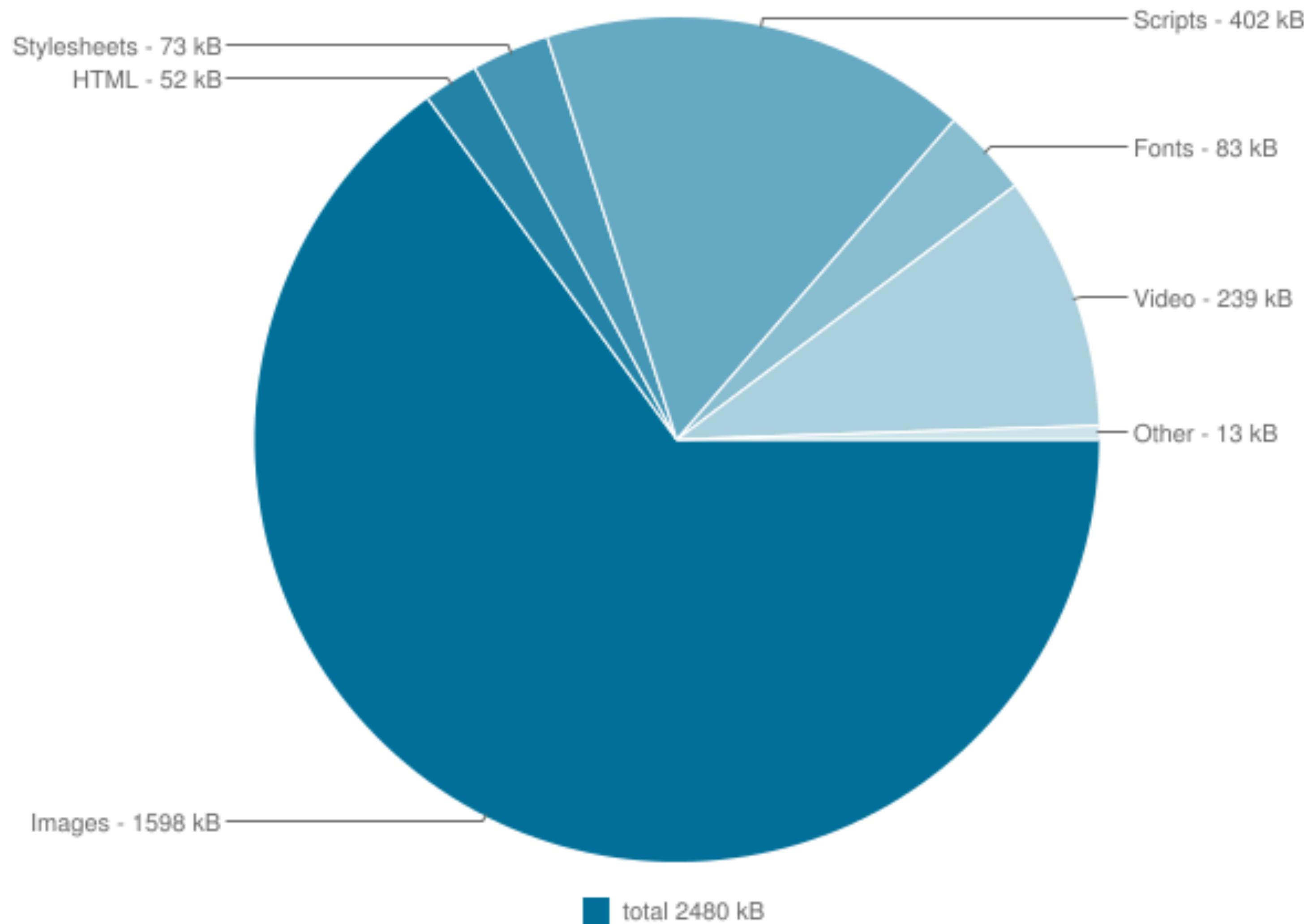
Total Transfer Size & Total Requests



Total Transfer Size & Total Requests



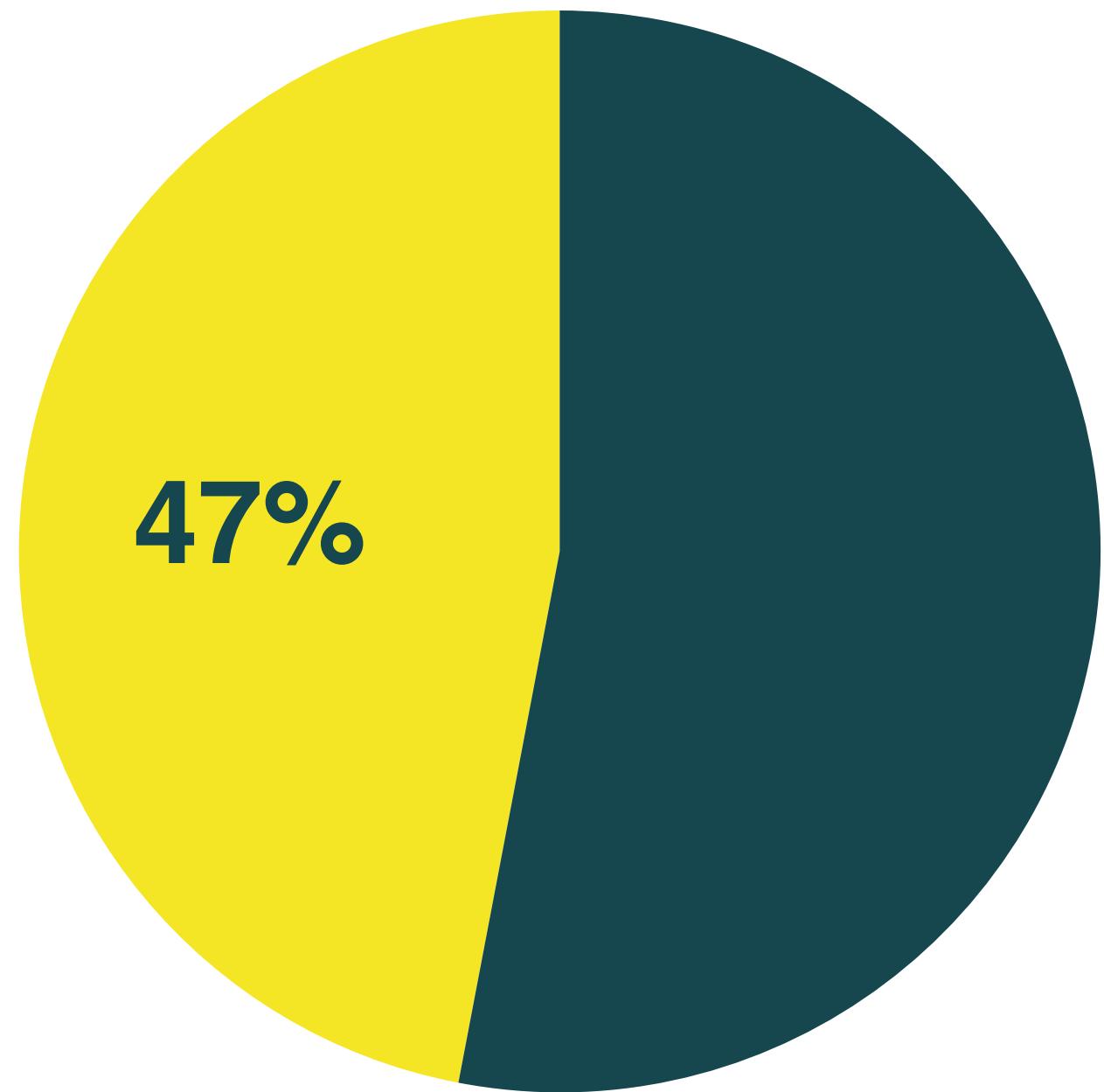
Average Bytes per Page by Content Type



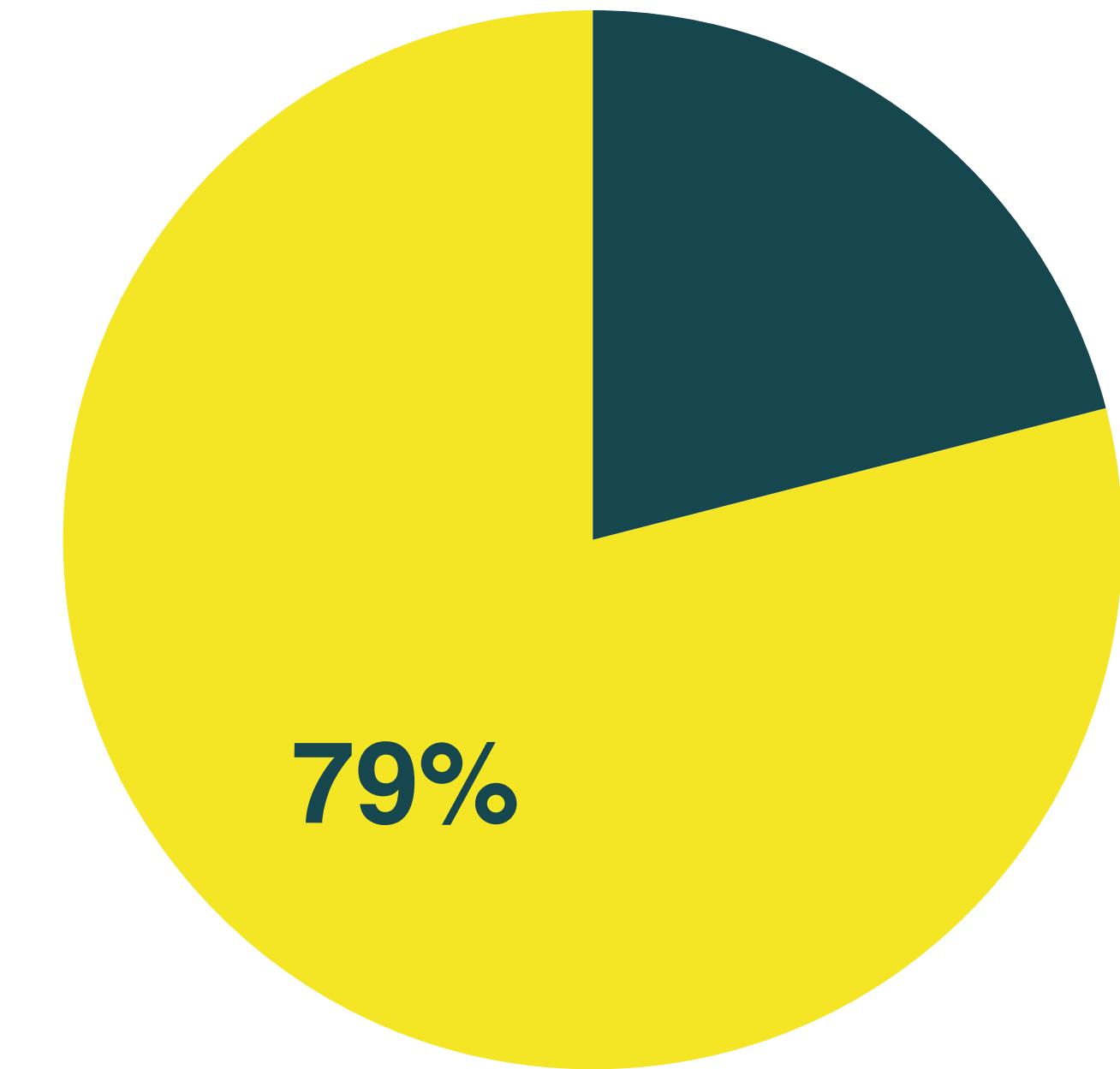
The Trainline reduced latency by 0.3 seconds across their funnel and customers spent an extra £8 million a year.

Walmart saw up to a 2% increase in conversions for every 1 second of improvement in load time. Every 100ms improvement also resulted in up to a 1% increase in revenue.

HIGH EXPECTATIONS



47% of consumers expect a webpage to load within 2 seconds



79% of online shoppers will not return to a website after a disappointing experience due to poor performance

Fast websites have more visitors, who visit more pages, for longer period of times, who come back more often, and are more likely to buy

PERCEIVED PERFORMANCE



**Perceived performance refers
to how fast a user thinks your
website is**



Photo by Daniel Hong

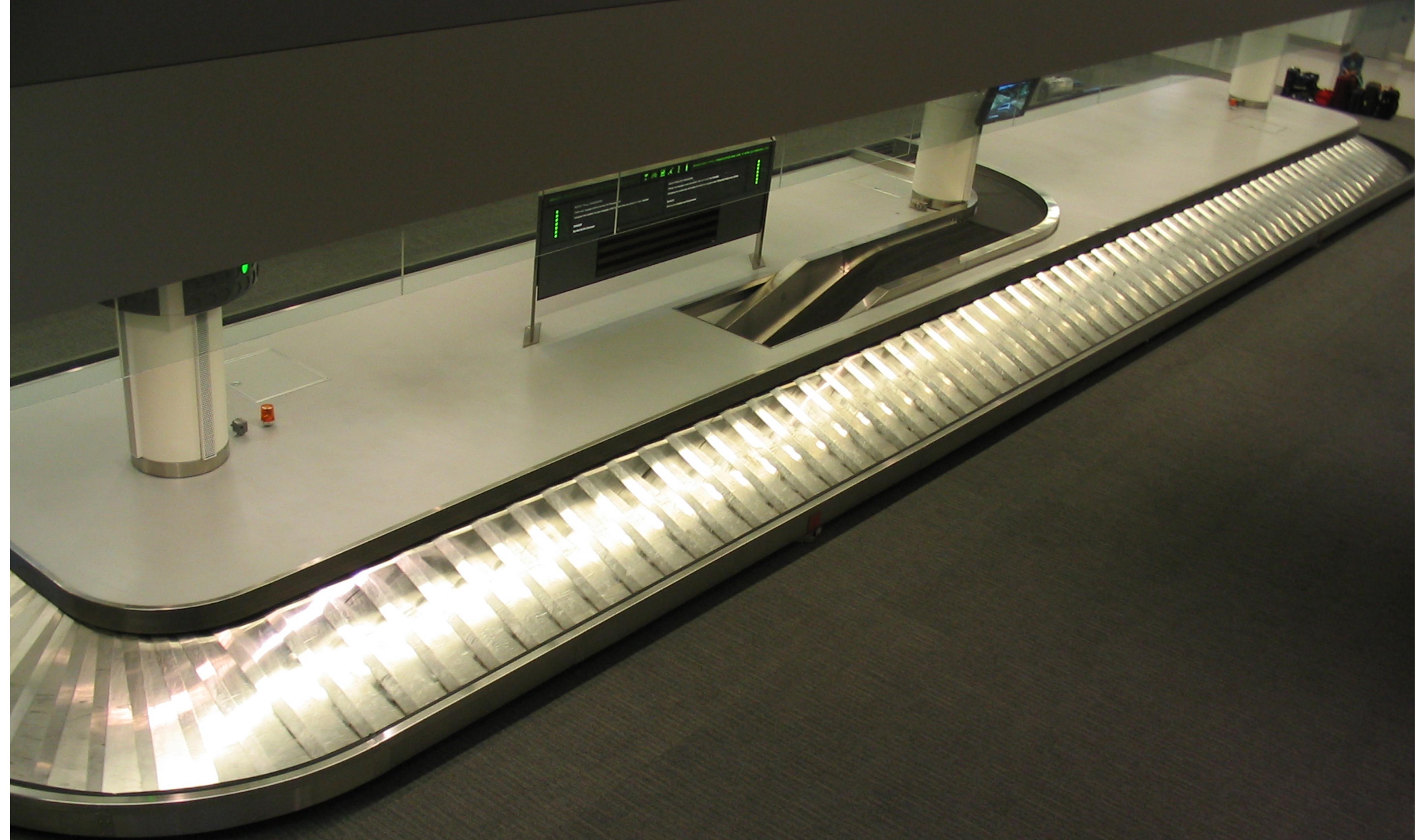
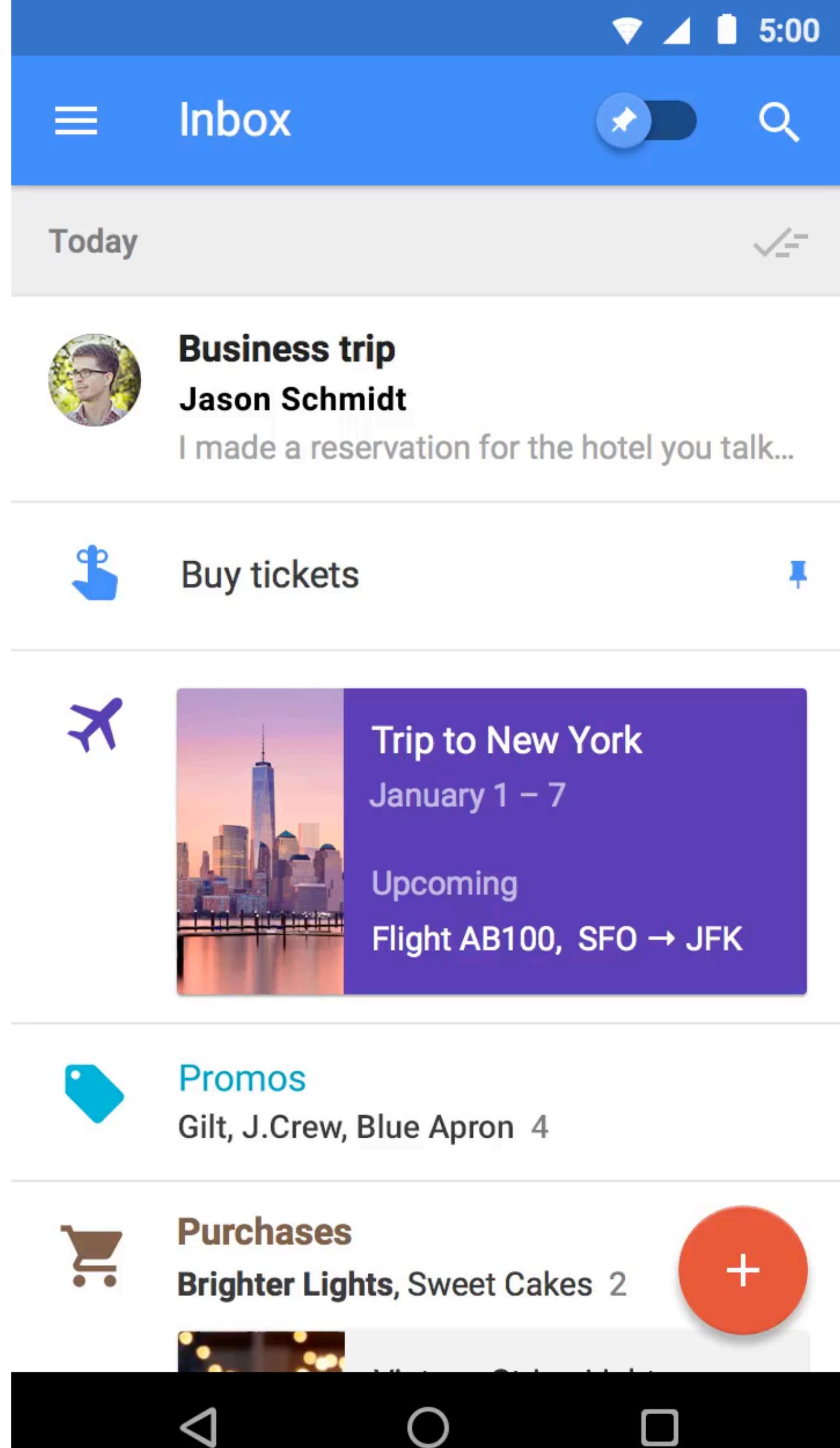
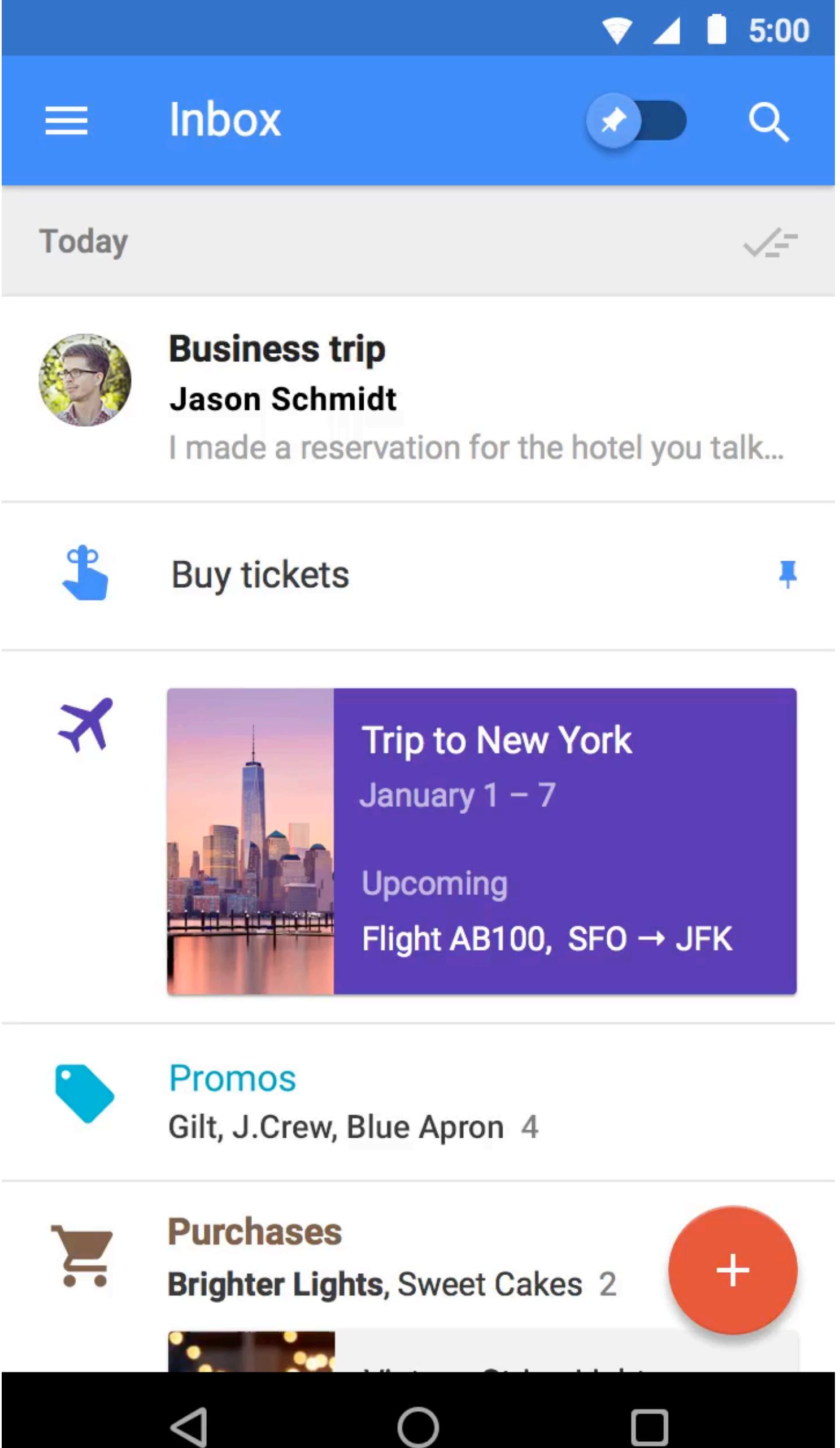


Photo by Gloom

We already know how people
behave and we already solved
these problems before



Motion material

HOW FAST IS FAST ENOUGH?

100ms = Instantaneous

1 second = Uninterrupted flow

DESIGN FOR PERFORMANCE

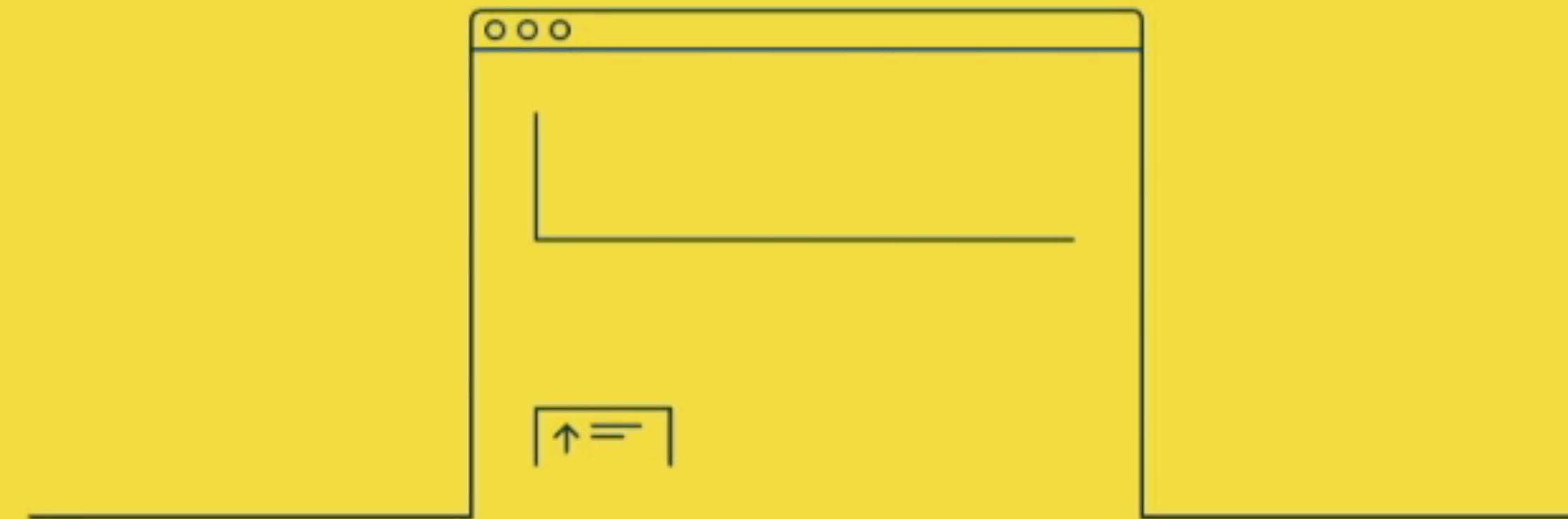


PERFORMANCE STARTS WITH DESIGN

- The message: Do you use text or images
- Colors & gradients: image format choice, transparency needs, number of sprites, how much CSS3
- Layout: impacts HTML hierarchy, number of classes, amount of CSS
- Typography: weight and number of font files

Make performance part of your
design workflow

Performance > Aesthetics



NPO Dashboard

Clear-cut insights in realtime visitor statistics



Within the Dutch Public Broadcasting (NPO) a project was started in 2015 to develop a number of pilots based on 'big data'. One of those pilots was the development of a dashboard for editorial staff to get **direct insight**



Portfolio

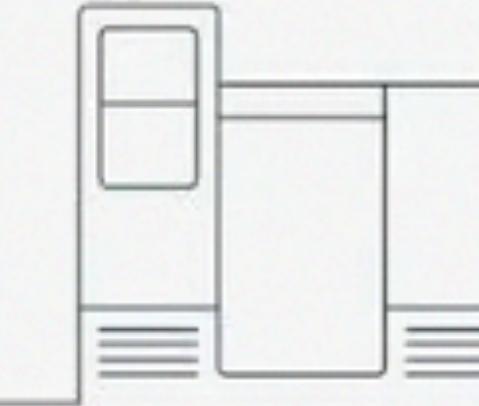
At De Voorhoeede we built web sites and apps for innovative start-ups, small businesses and large enterprises. These are the stories behind our projects.



A brand new Funda

The biggest, most responsive and modular website for real estate in the Netherlands

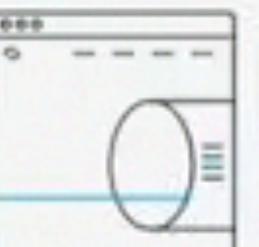
[Read more](#)



Drop & Fly

Self-service baggage drop-off with a web UI

[Read more](#)



Delft Hyperloop

The Tesla Roadster of websites

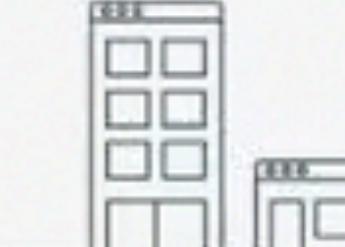
[Read more](#)



RTL Weekend Magazine

From app to web

[Read more](#)



Hotel- and Bungalow-Specials

One new front-end for 10 European websites

[Read more](#)

“That yellow color makes me think of soviet-era low-income housing. It's the color you puke in if you eat a jar of mustard. It's sad and ugly all at once. I didn't realize you could pack that much sadness into a background-color”

—

snalin(reddit user)

A HTTP REQUEST



LEGACY



<https://www.w3.org/History/19921103-hypertext/hypertext/WWW/TheProject.html>

World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#), [Policy](#), November's [W3 news](#), [Frequently Asked Questions](#).

[What's out there?](#)
Pointers to the world's online information, [subjects](#), [W3 servers](#), etc.

[Help](#)
on the browser you are using

[Software Products](#)
A list of W3 project components and their current state. (e.g. [Line Mode](#), [X11 Viola](#), [NeXTStep](#), [Servers](#), [Tools](#), [Mail robot](#), [Library](#))

[Technical](#)
Details of protocols, formats, program internals etc

[Bibliography](#)
Paper documentation on W3 and references.

[People](#)
A list of some people involved in the project.

[History](#)
A summary of the history of the project.

[How can I help ?](#)
If you would like to support the web..

[Getting code](#)
Getting the code by [anonymous FTP](#), etc.

Network tab in developer tools showing a request for "TheProject.html" taking 746ms. The timeline shows a single green bar from 100ms to 600ms. The table below shows the request details:

| Name | Method | Status | Type | Initiator | Size |
|-----------------|--------|--------|----------|-----------|------|
| TheProject.html | GET | 200 | document | Other | 2 |



Help Contact Français Inloggen

Kies categorie ▾

Uw zoekopdracht

Zoek

Geavanceerd

Antiek & Art

Audio, Video & TV

Auto's

Auto-onderdelen

Beauty & Gezondheid

Bestelwagens & Vrachtwagens

Bijoux & Horloges

Boeken & Strips

Boten

Bouw

Brommers & Scooters

Business & Industrie

Caravans & Kamperen

CD & Vinyl

Computer & Game Consoles

Dieren & Toebehoren

DVD & Video

Elektronische apparatuur

Fietsen

Foto & Camera

Hobby

Huis & Meubelen

Immo

Jobs & Diensten

Keuk

Kind

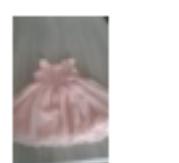
Kledi

Nieuwste zoekertjes

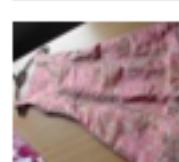
[muziek en activiteitenspel](#)
€ 15,00



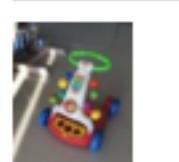
[17" originele Mini originele 17" Mini](#)
€ 350,00



[mooie jurken goede staat](#)
€ 8,00



[speciaal kleedje "Blathine"](#)
€ 40,00



[Fisher Price loopwagentje](#)
€ 13,00

[Toon meer >](#)**Populairste zoekertjes**

[spoon ek k20 240-260pk!!!](#)
€ 15.000,00



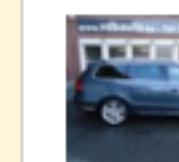
[golf 1 20vt](#)
Prijs o.t.k.



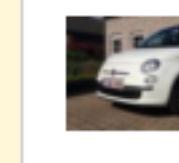
[bmw e38 725tds 1998](#)
€ 3.500,00

Auto's

[VOLVO XC 60 2.0 D3\(136\) met slechts](#)
€ 27.900,00



[V.W Passat 2.0 CR TDi Highline BMT](#)
€ 16.900,00



[Fiat 500 1.2 met garantie!!! 6maand](#)
€ 10.499,00



[audi a6 3.0 tdi quattro full option](#)
€ 6.999,00

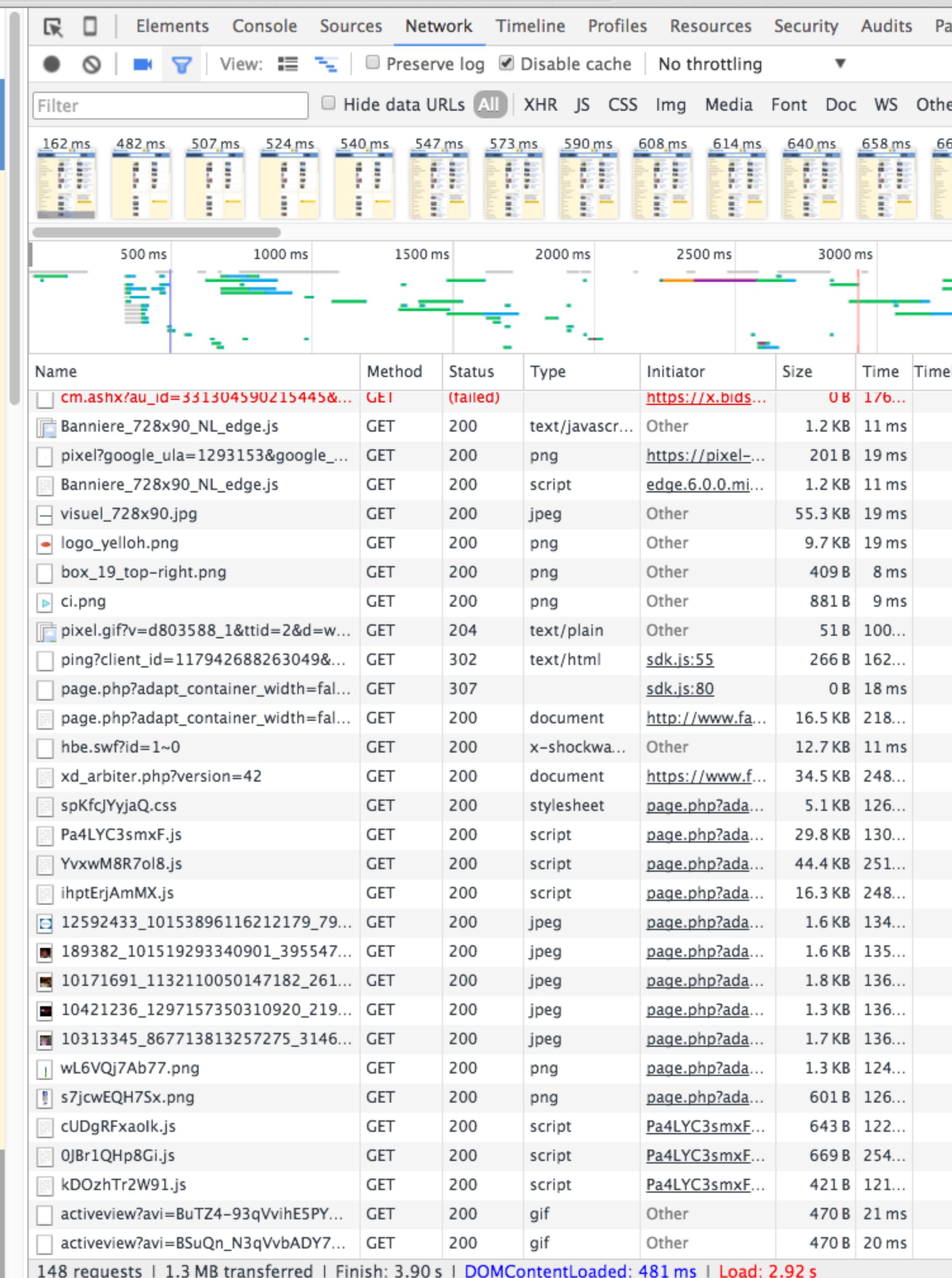


[Opel Combo 1.3Cdti 139.000km](#)
€ 4.950,00

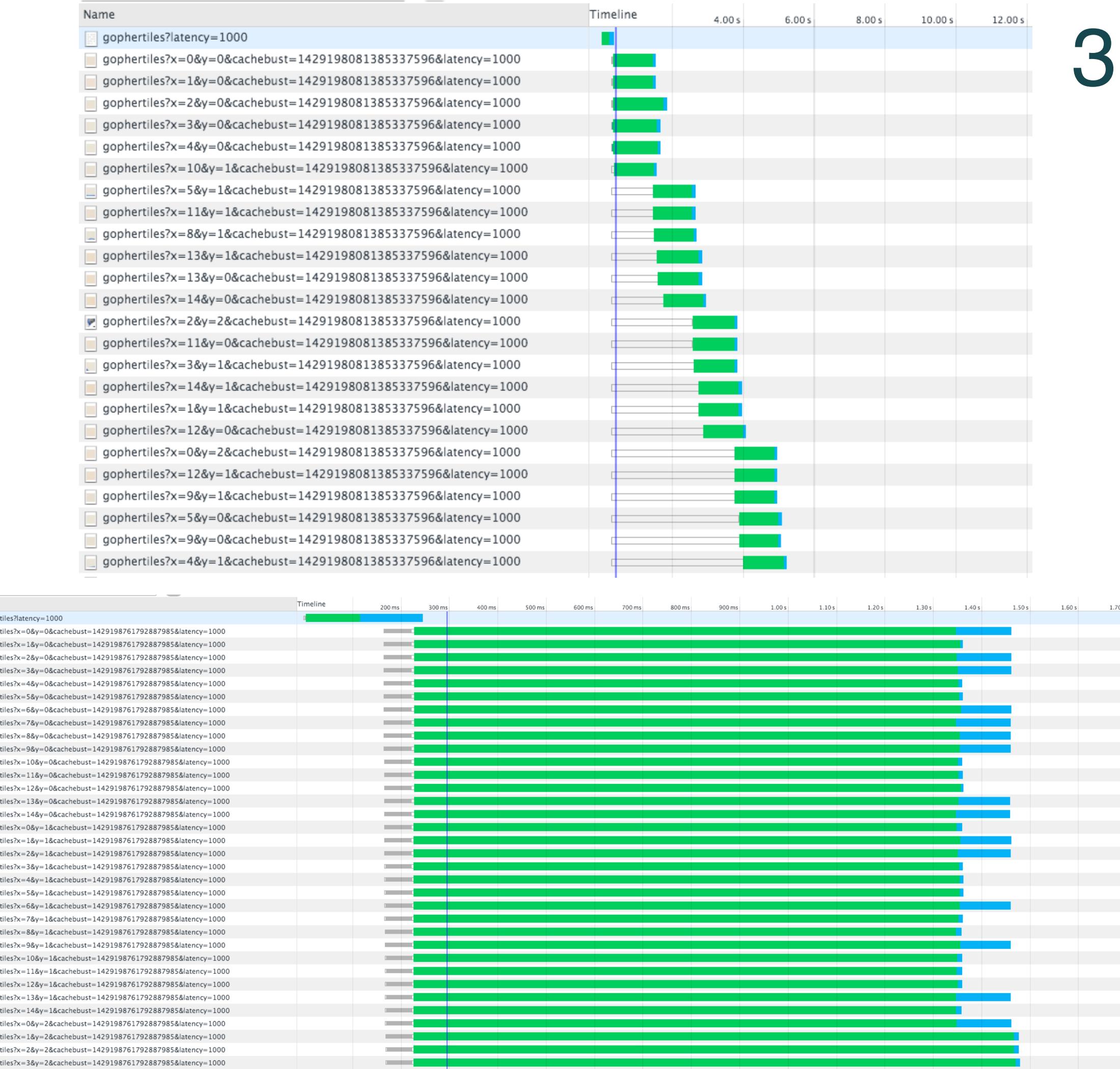
[Toon meer >](#)

Heeft u zelf spullen die u niet meer gebruikt? Zet ze op 2dehands.be, de grootste zoekertjessite van België!

[Plaats gratis zoekertje](#)



HTTP2



31s

1,7s

[http1 vs http2 loading](#)

HTTP/2

HTTP/2 protocol  - OTHER

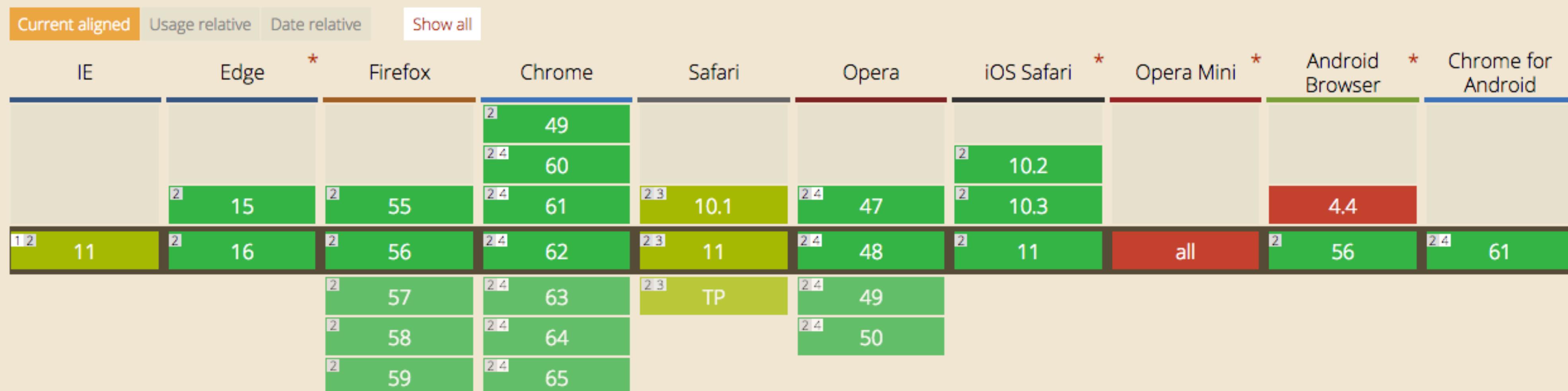
Global

78.58% + 5.16% = 83.74%

Netherlands

78.74% + 10.68% = 89.42%

Networking protocol for low-latency transport of content over the web. Originally started out from the SPDY protocol, now standardized as HTTP version 2.

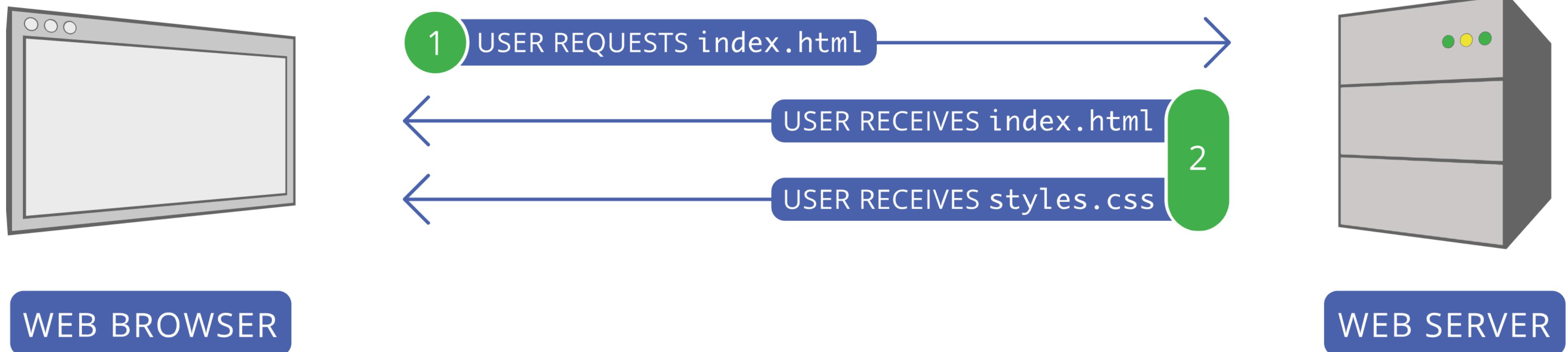




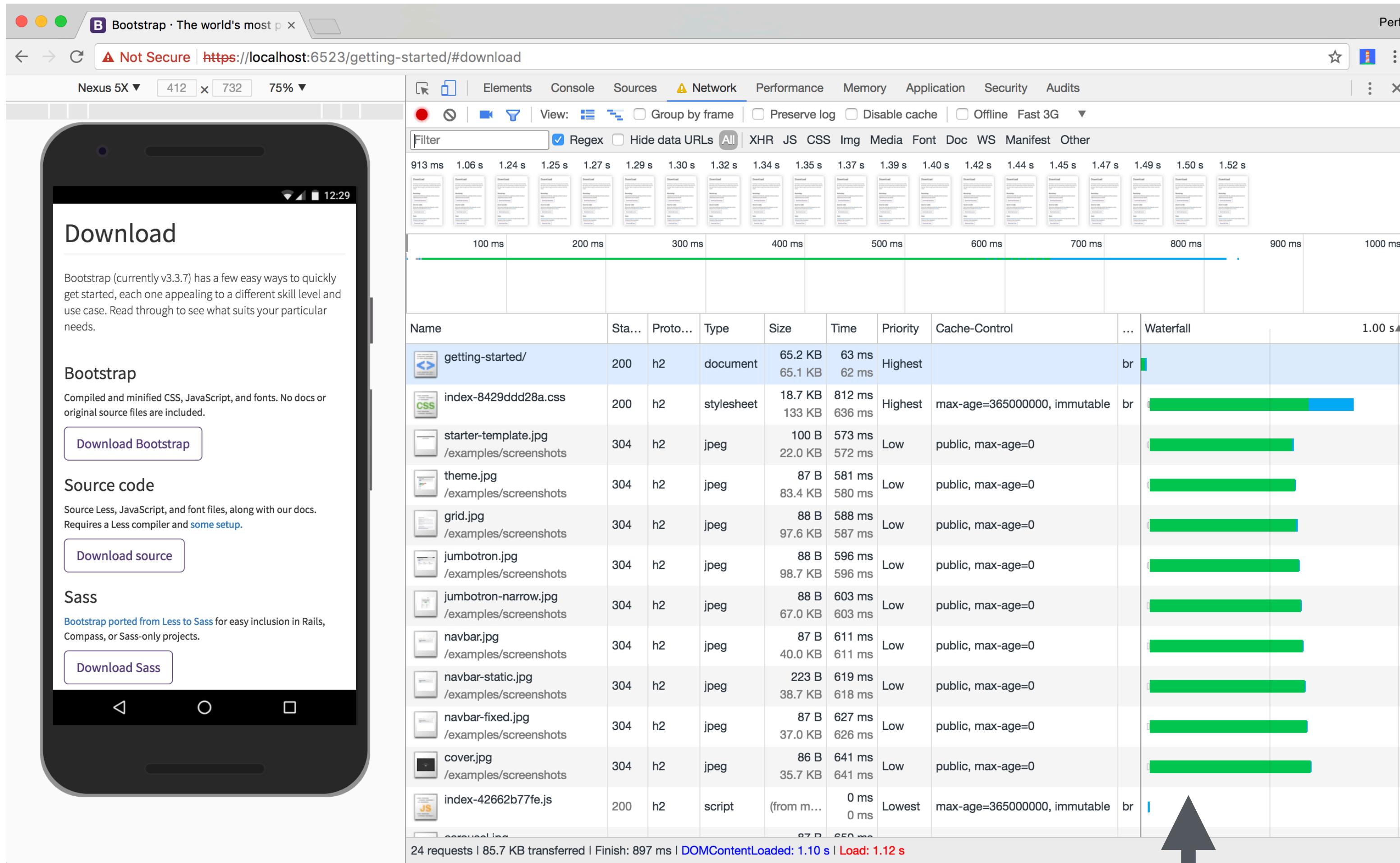
| Asset | Size | Chunks | Chunk Names |
|--|-----------|--------|----------------------------|
| static/js/mail-8a6a07f.js.map | 597 kB | 1 | [emitted] mail |
| static/img/icons-238be53/favicon-16x16.png | 463 bytes | | [emitted] |
| static/img/icons-238be53/favicon.ico | 33.3 kB | | [emitted] |
| static/img/icons-238be53/.cache | 613 bytes | | [emitted] |
| service-worker.js.map | 90.2 kB | | [emitted] |
| static/fonts/MaterialIcons-Regular-012cf6a.woff | 57.6 kB | | [emitted] |
| static/fonts/MaterialIcons-Regular-a37b0c0.ttf | 128 kB | | [emitted] |
| static/fonts/MaterialIcons-Regular-570eb83.woff2 | 44.3 kB | | [emitted] |
| static/js/vendor-async-f97e929.js | 29.6 kB | 0 | [emitted] vendor-async |
| static/js/mail-8a6a07f.js | 199 kB | 1 | [emitted] mail |
| static/js/contacts-260609d.js | 54 kB | 2 | [emitted] contacts |
| static/js/settings-1360f98.js | 30.8 kB | 3 | [emitted] settings |
| static/js/vendor-3dc70f2.js | 319 kB | 4 | [emitted] [big] vendor |
| static/js/app-eba7e23.js | 85.6 kB | 5 | [emitted] app |
| static/js/rich-text-editor-bdbd18c.js | 59.5 kB | 6 | [emitted] rich-text-editor |
| static/js/manifest-46522c8.js | 1.61 kB | 7 | [emitted] manifest |
| static/css/app-7a55945.css | 34.1 kB | 5 | [emitted] app |
| static/css/app-7a55945.css.map | 72.7 kB | | [emitted] |
| static/js/vendor-async-f97e929.js.map | 60.1 kB | 0 | [emitted] vendor-async |
| static/img/icons-238be53/favicon-32x32.png | 1.01 kB | | [emitted] |
| static/js/contacts-260609d.js.map | 159 kB | 2 | [emitted] contacts |
| static/js/settings-1360f98.js.map | 103 kB | 3 | [emitted] settings |
| static/js/vendor-3dc70f2.js.map | 1.49 MB | 4 | [emitted] vendor |
| static/js/app-eba7e23.js.map | 241 kB | 5 | [emitted] app |
| static/js/rich-text-editor-bdbd18c.js.map | 140 kB | 6 | [emitted] rich-text-editor |
| static/js/manifest-46522c8.js.map | 8.15 kB | 7 | [emitted] manifest |
| service-worker.js | 20.1 kB | | [emitted] |
| manifest.bfe27c770cf28665b5b8ca5c7f637324.json | 1.34 kB | | [emitted] |
| static/img/icon_512x512.30cf4bc5225400e83cba2e8de87e9c49.png | 15.4 kB | | [emitted] |
| static/img/icon_384x384.4254b6f6325e185d3f21d50956b978b5.png | 16.1 kB | | [emitted] |
| static/img/icon_192x192.63197b55efddfe75aff8241ea12bae14.png | 7.17 kB | | [emitted] |
| static/img/icon_152x152.64cc407db0678e69fdf2aef8cd3f8184.png | 5.58 kB | | [emitted] |
| static/img/icon_144x144.d3b59bd462d3550d1afcc1731cb35bd7.png | 5.24 kB | | [emitted] |
| static/img/icon_128x128.969802597fd2f3767470a8680b803862.png | 4.38 kB | | [emitted] |
| static/img/icon_96x96.bbbe9c0cda81e2db681d3ee32fee531e.png | 3.36 kB | | [emitted] |
| static/img/icon_72x72.e042031b33942d940f05f5de2b1ec5a3.png | 2.49 kB | | [emitted] |
| /app-shell-465081b.html | 1.93 kB | | [emitted] |
| index.html | 1.93 kB | | [emitted] |

H2 SERVER PUSH

WEB SERVER COMMUNICATION
WITH HTTP/2 SERVER PUSH



PROBLEM WITH H2



images steal bandwidth from critical resources

IP address or hostname

www.startmail.com

Ping

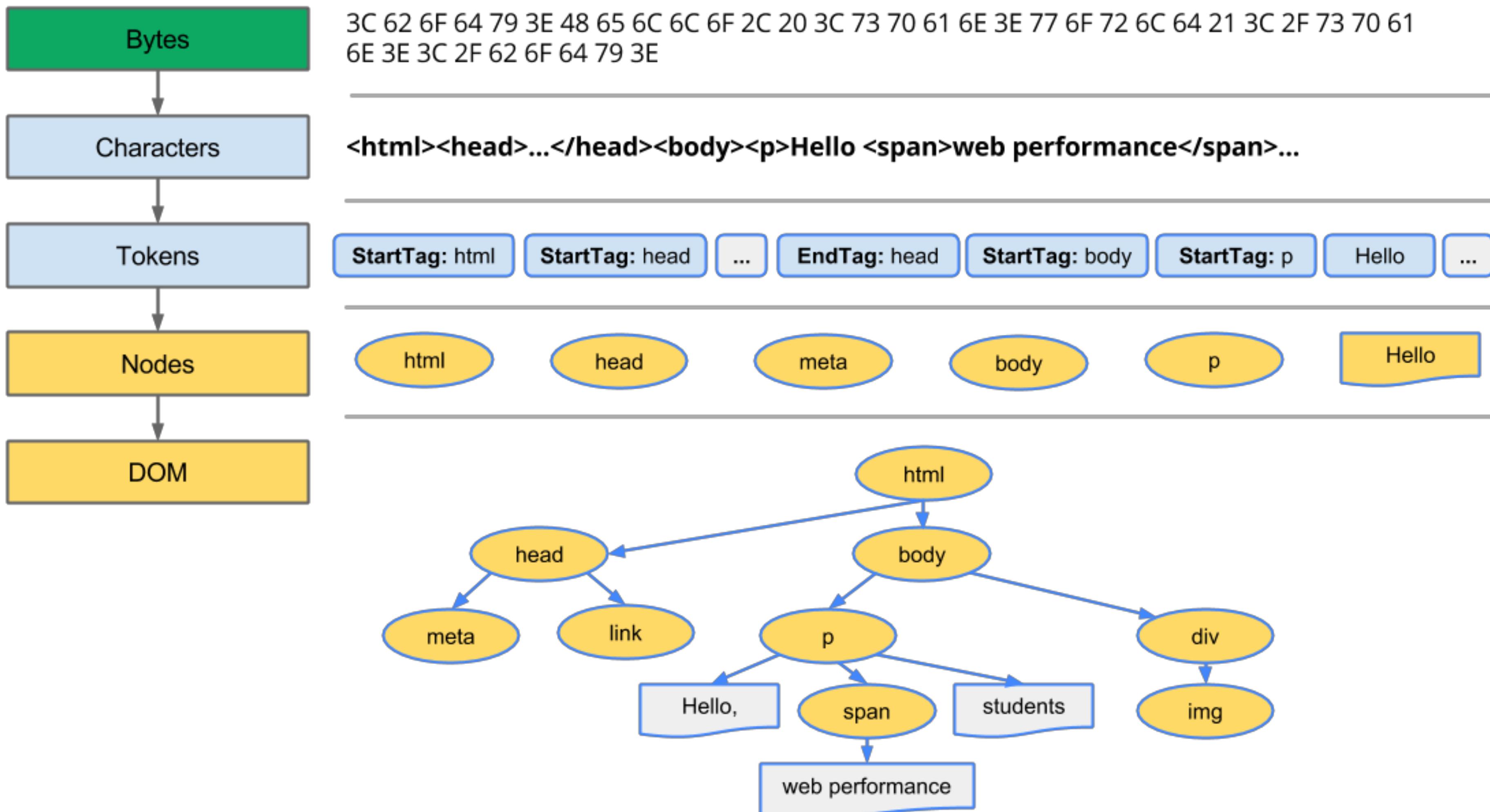


CRITICAL RENDERING PATH

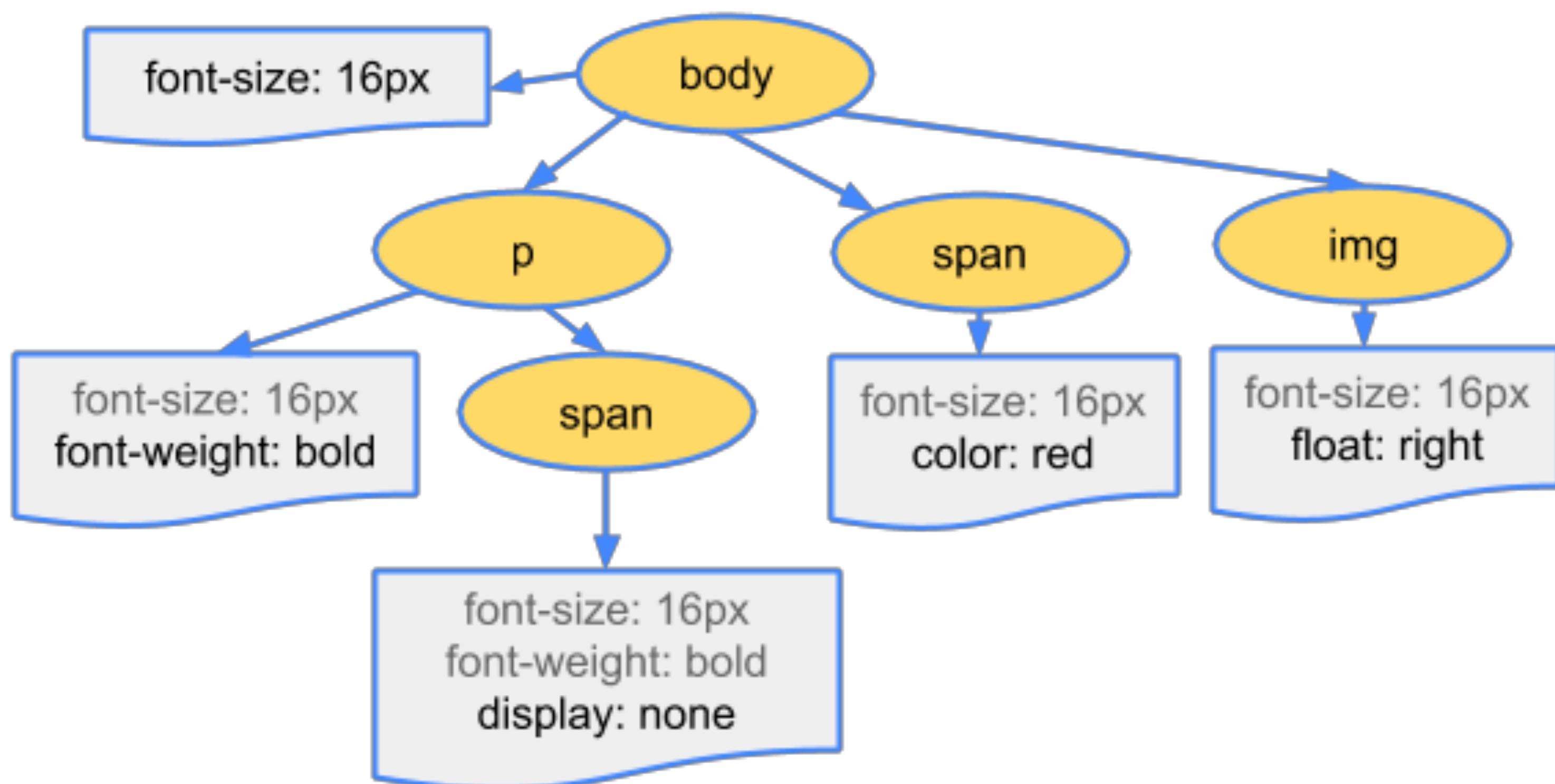
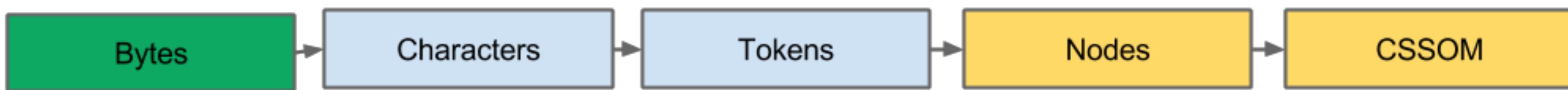


**The sequence of steps the
browser goes through to render
a page**

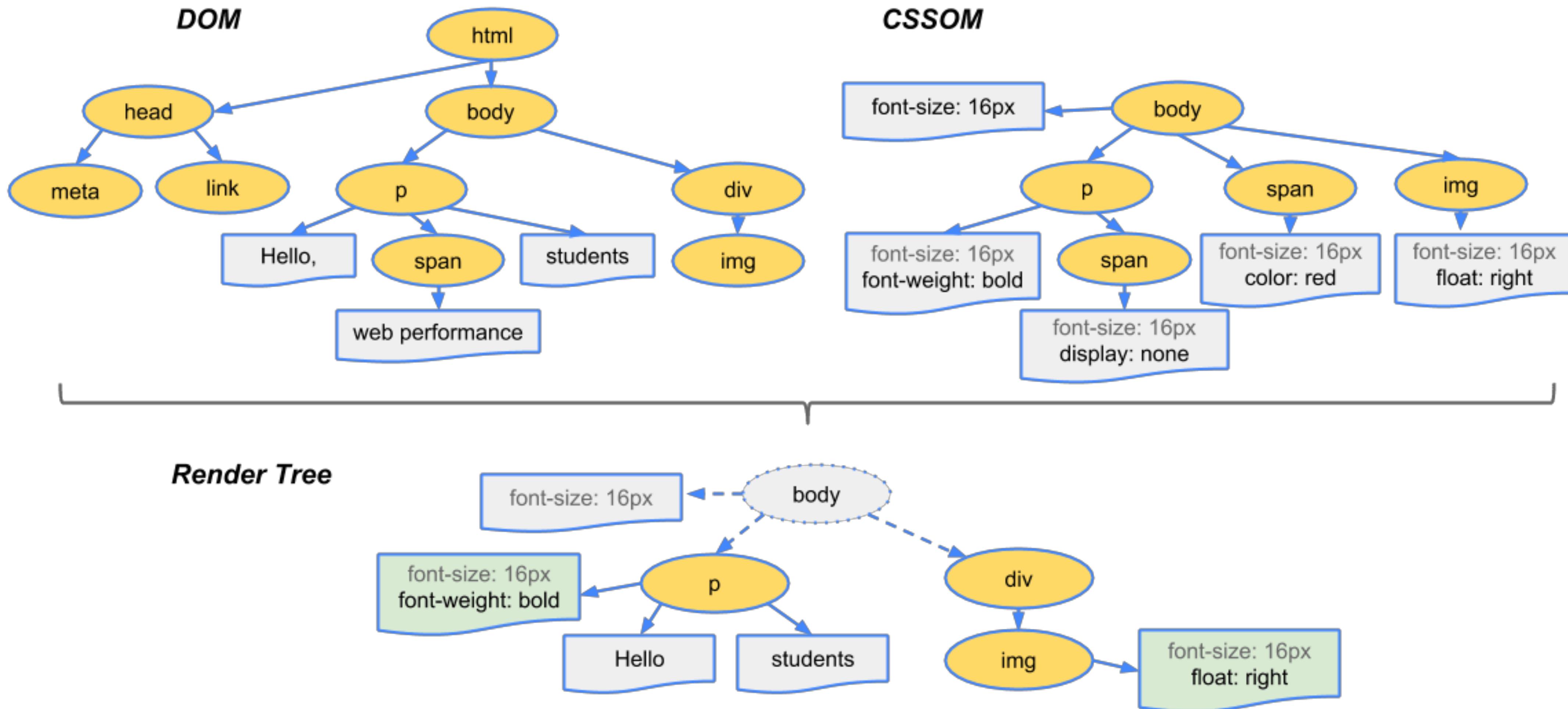
DOM



CSSOM



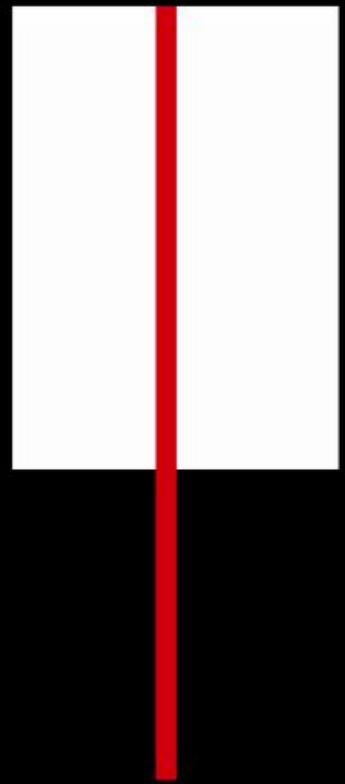
RENDER TREE CONSTRUCTION



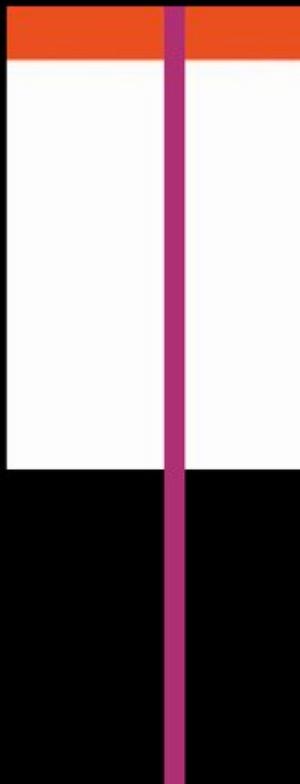
SPA VS SERVER SIDE



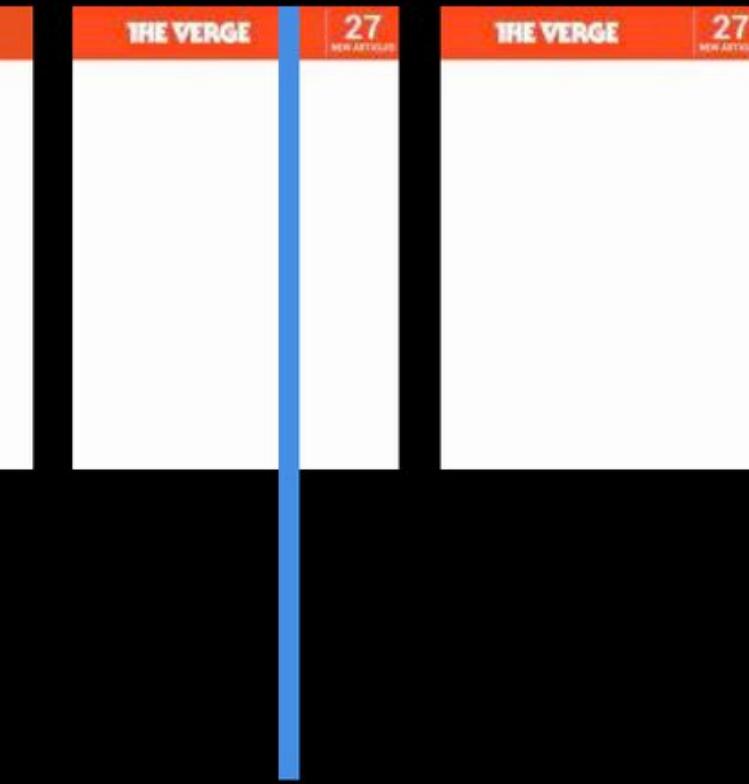
is it happening?



Navigation begins
Time to first byte



First Contentful Paint
Navigation has successfully started



First Paint
The first non-blank paint on screen

is it useful?



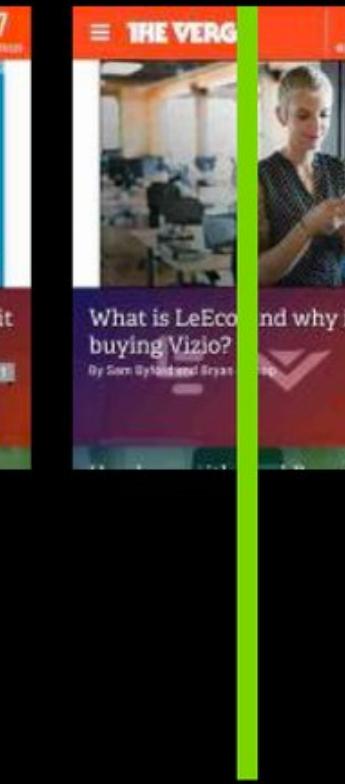
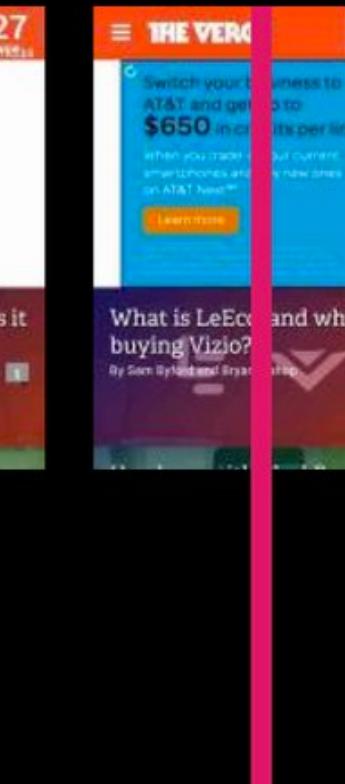
First Meaningful Paint
Page's primary content is visible



Visually ready
Page looks nearly done



is it usable?



Fully Loaded
End of load lifecycle

Time to Interactive
Visually usable and engagable

Based on Progressive Web Metrics by Paul Irish

@addyosmani

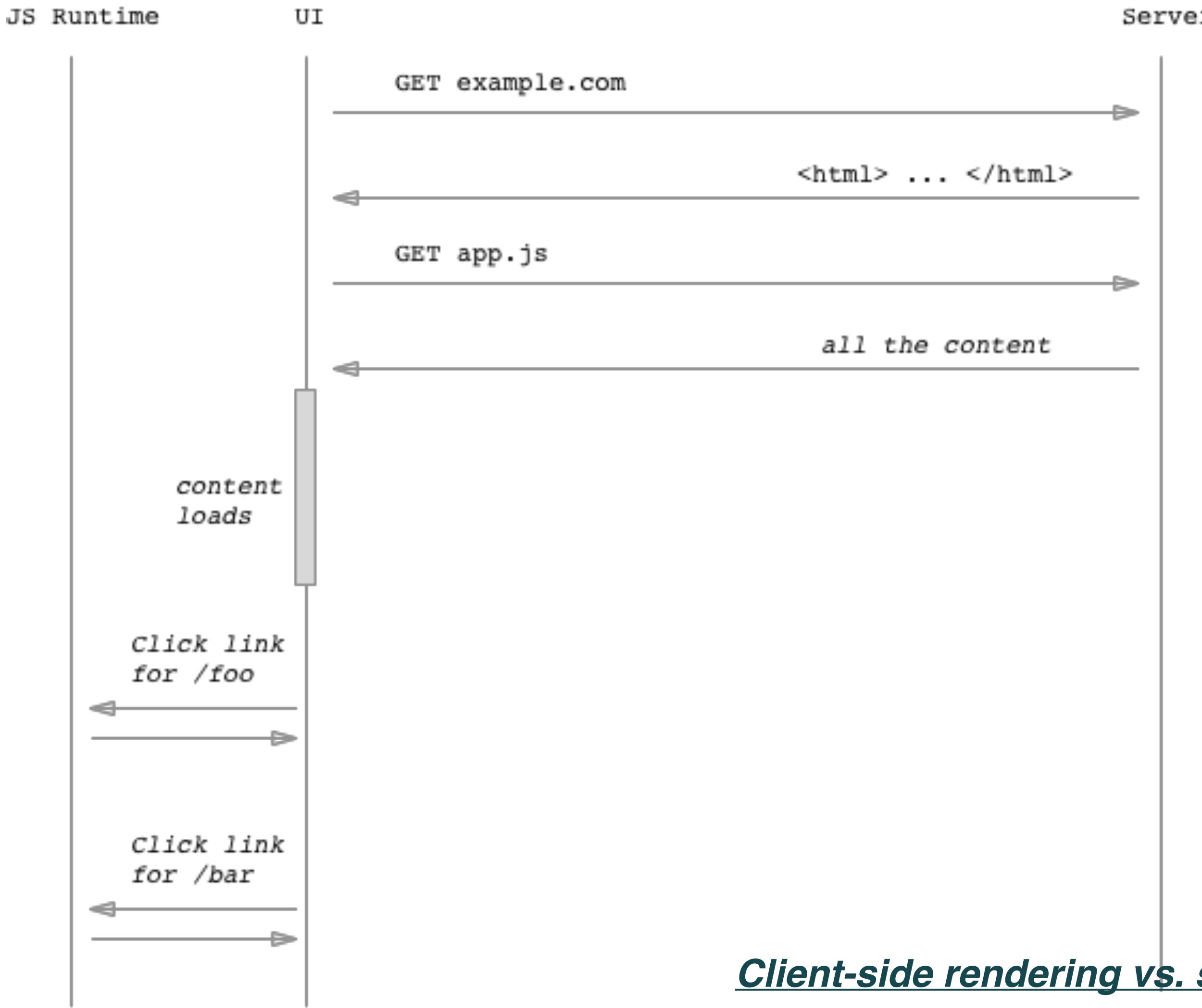
[@addyosmani, Aug 2, 2016](#)

SERVER SIDE RENDERING

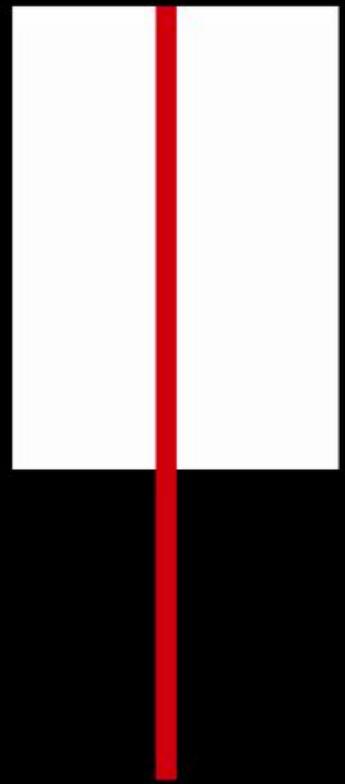


[Client-side rendering vs. server-side rendering](#)

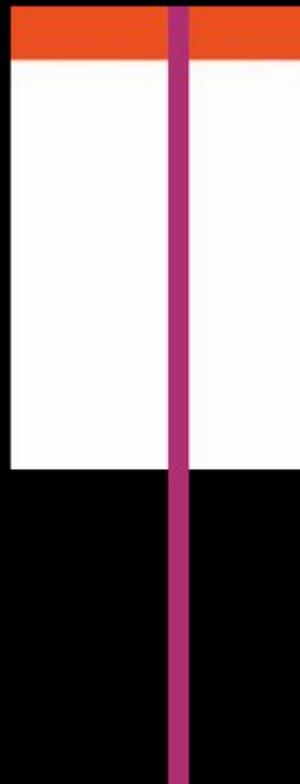
CLIENT SIDE RENDERING



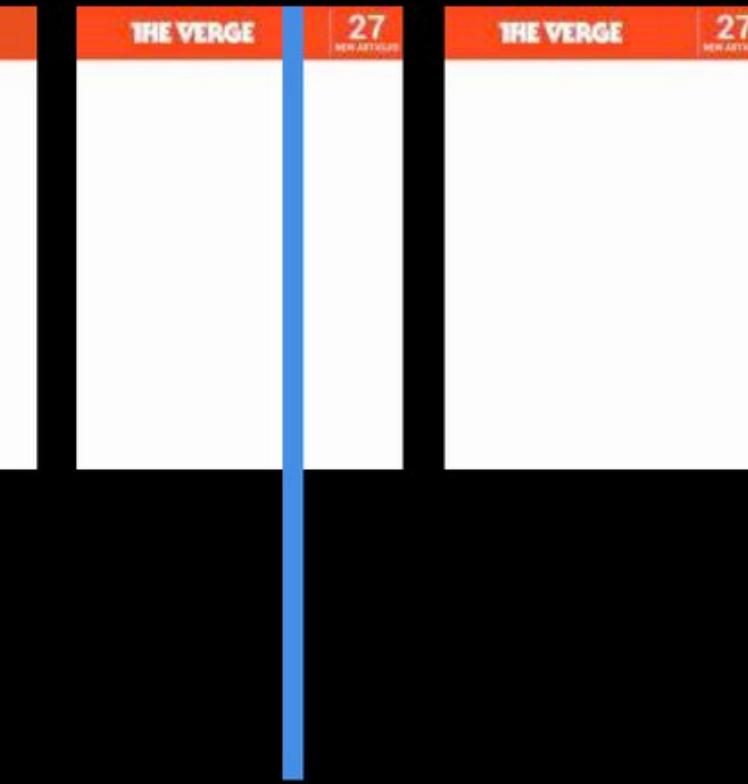
is it happening?



Navigation begins
Time to first byte



First Contentful Paint
Navigation has successfully started



First Paint
The first non-blank paint on screen

is it useful?



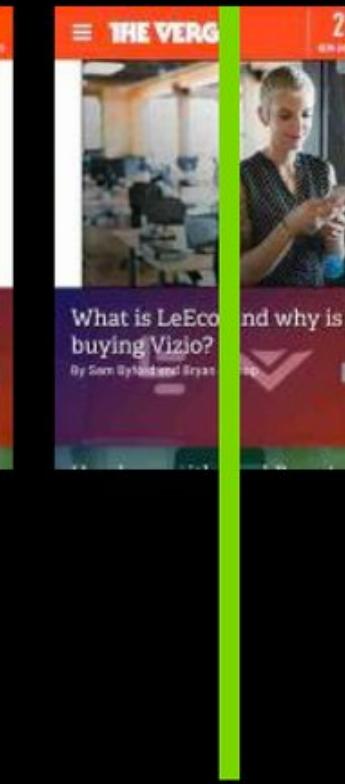
First Meaningful Paint
Page's primary content is visible



Visually ready
Page looks nearly done



Time to Interactive
Visually usable and engagable



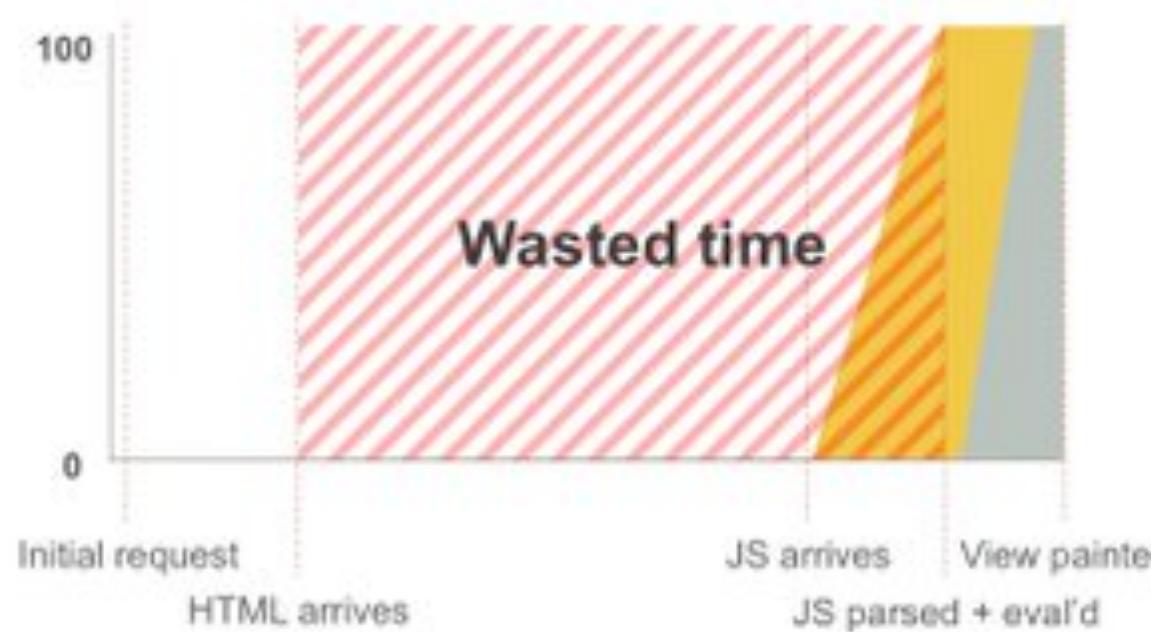
@addyosmani

Based on Progressive Web Metrics by Paul Irish

is it usable?

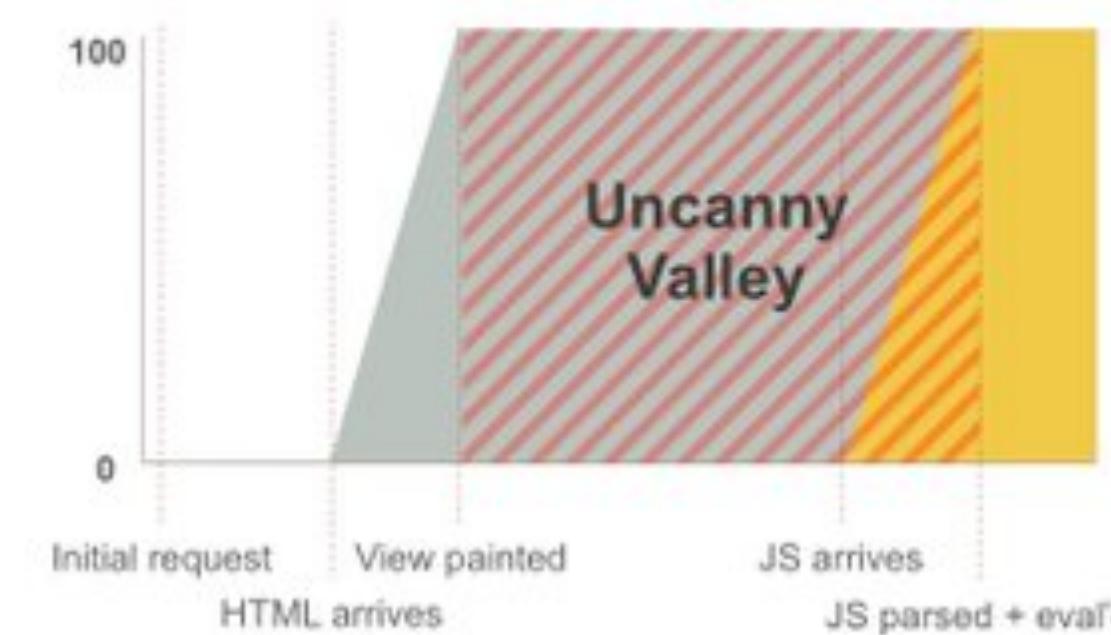
[@addyosmani, Aug 2, 2016](#)

PROGRESSIVE RENDERING



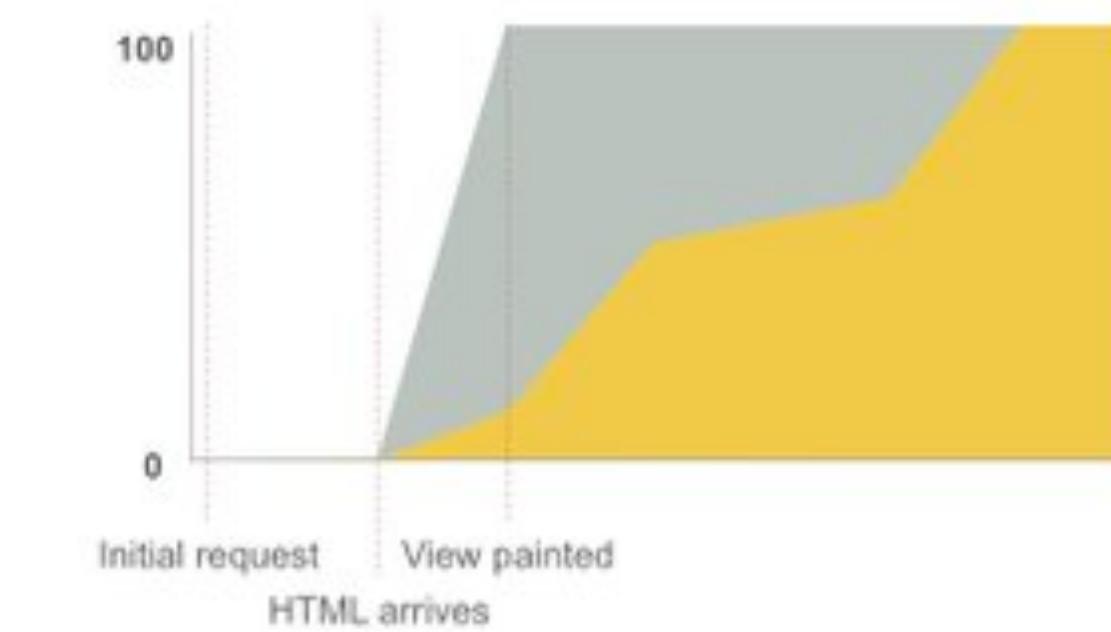
JS-based Render

In a JavaScript-based render you are reliant on all the script to be downloaded, parsed, and evaluated before you are able to render the page. This ends up with a lot of wasted time from when the HTML arrives to when you give the user something meaningful.



Server render + "Hydrate" / Fastboot

With server render + "hydration" or "fastboot", you send a view to the user, but you're still reliant on the JavaScript before functionality is available. This can result in an "uncanny valley" where the app looks interactive, but isn't.

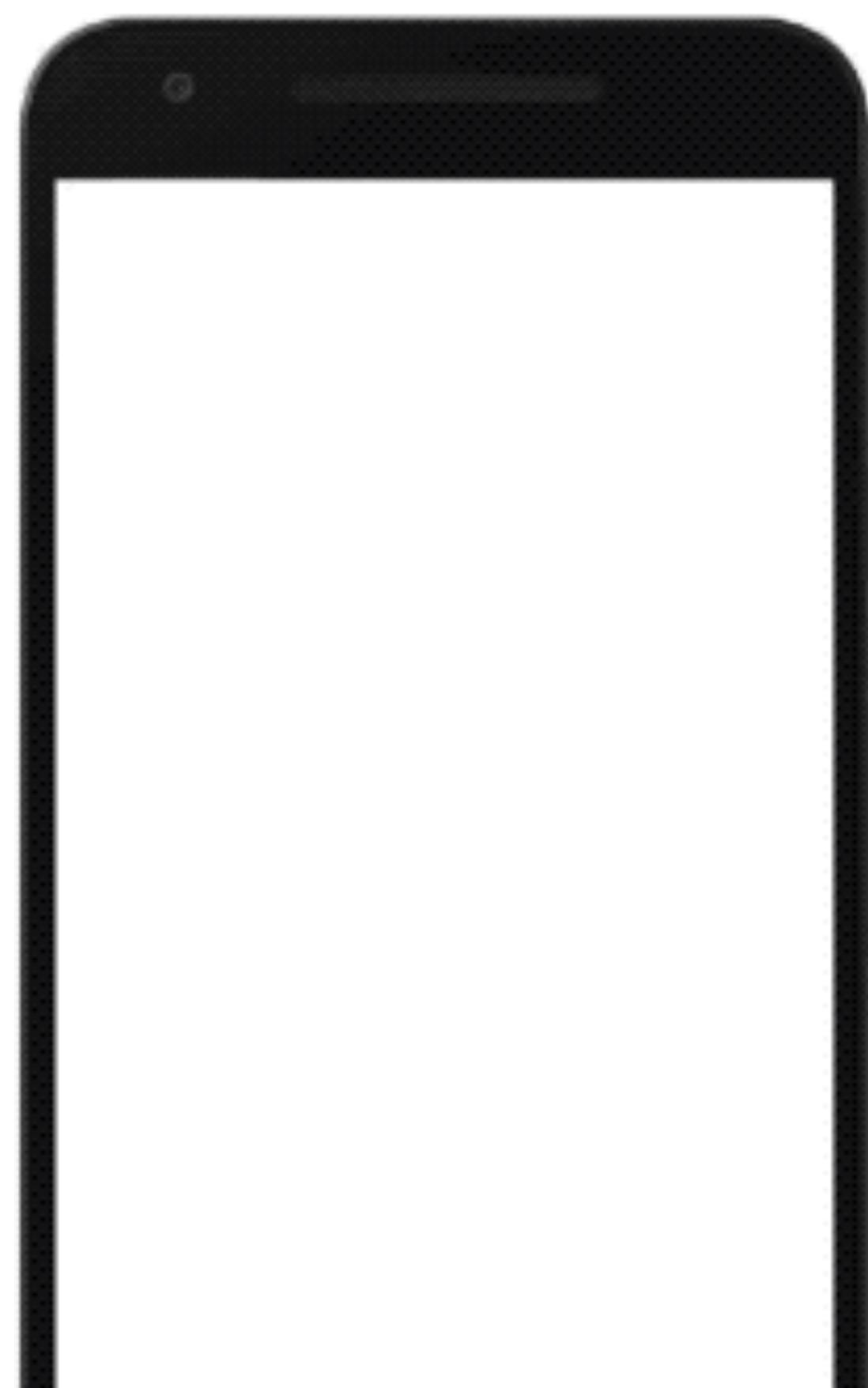


Progressive render + bootstrap

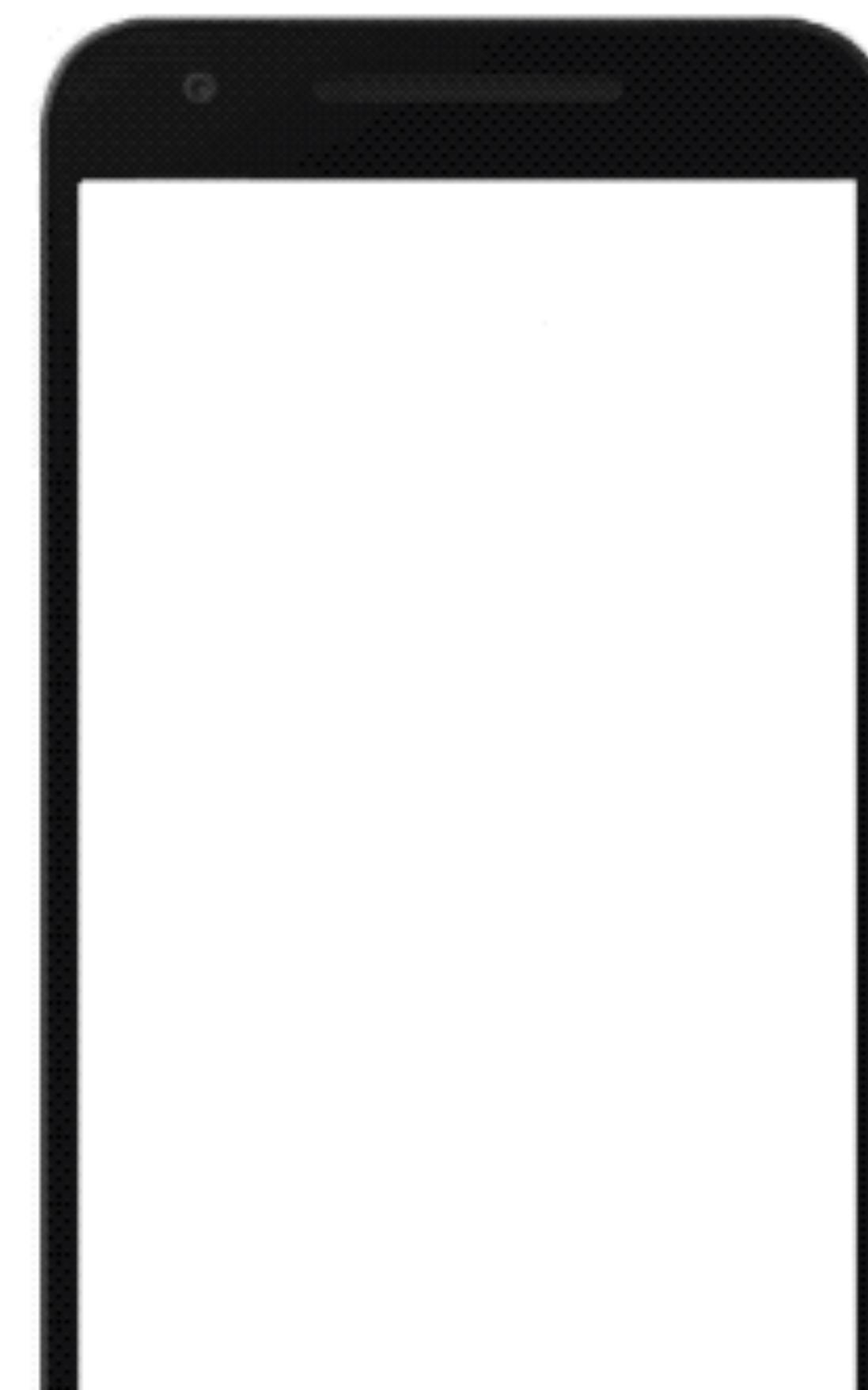
Progressive rendering and bootstrapping means you send a functionally viable (though minimal) view in the HTML, including JavaScript and CSS. As more resources arrive the app progressively "unlocks" features.

TIME TO INTERACTIVE

0s 00

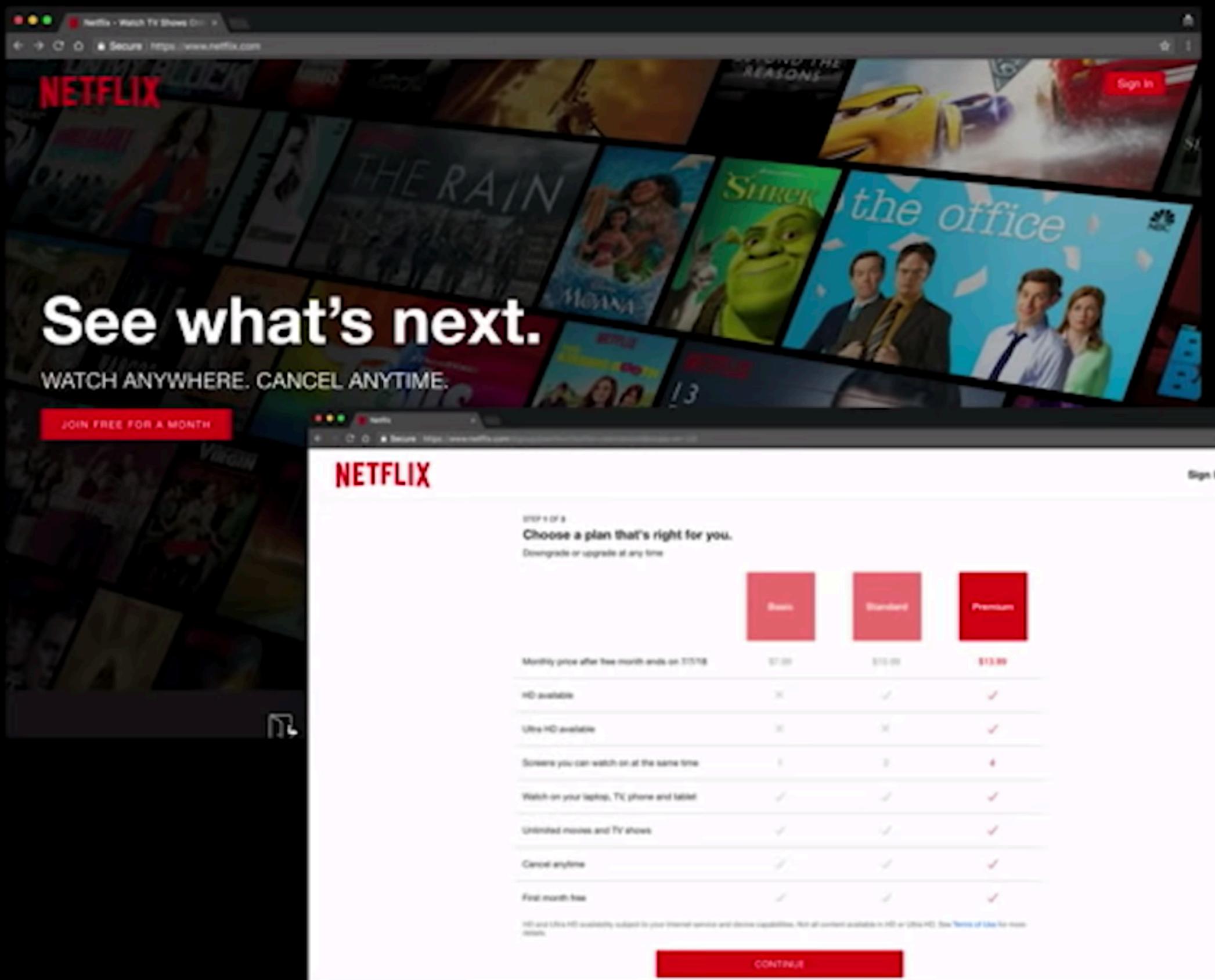


0s 00



The cost of javascript

NETFLIX



NON-MEMBER LANDING PAGE

REMOVING CLIENT-SIDE REACT, PRE-FETCHING IT FOR FUTURE PAGES IMPROVED TIME- TO-INTERACTIVE BY 50%

REACT WAS STILL USED SERVER-SIDE

The cost of javascript

JavaScript bytes

~170KB

!=

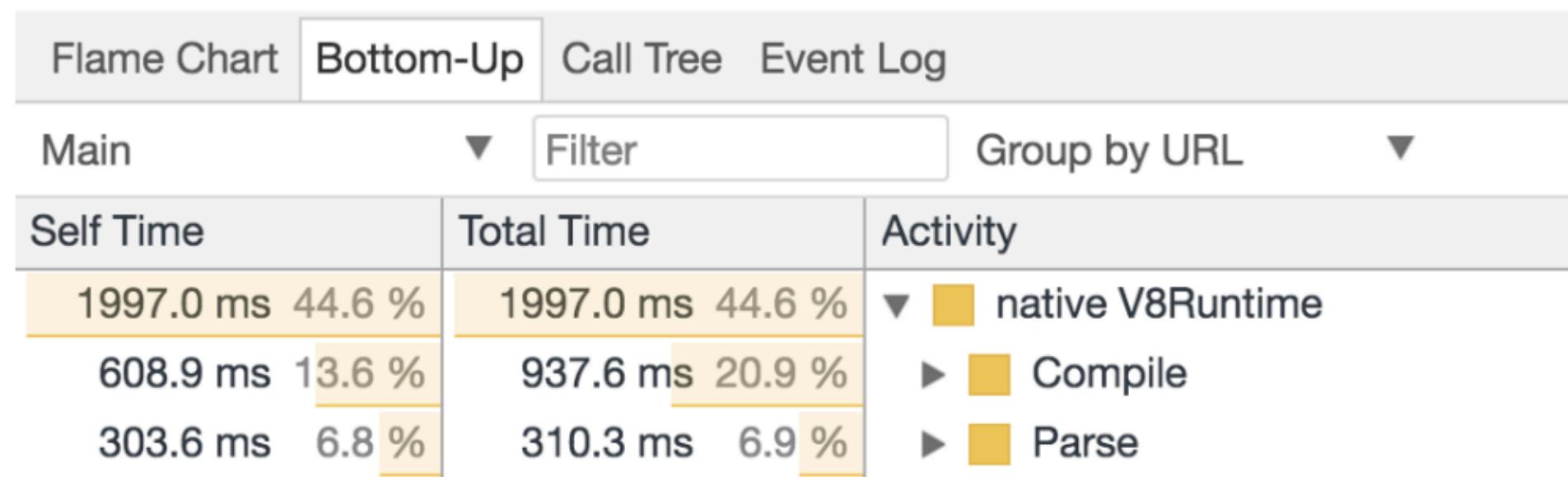
JPEG bytes

~170KB

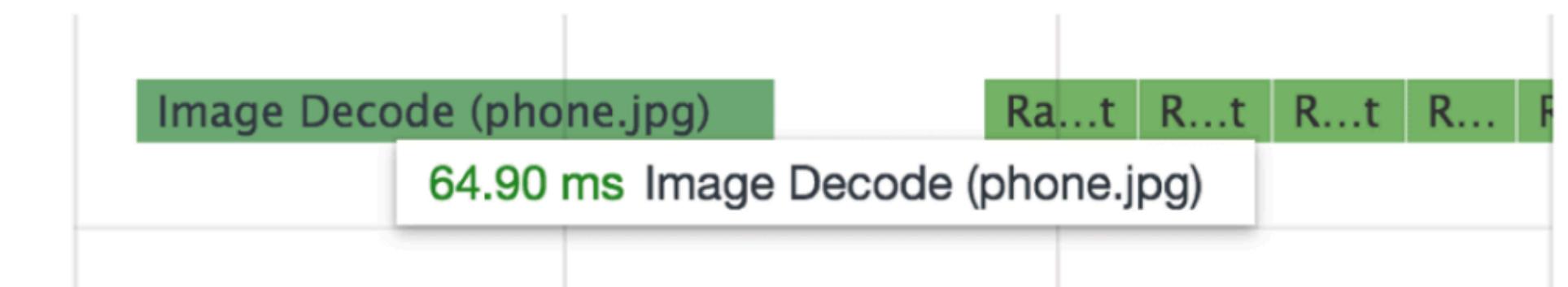
Network Transmission



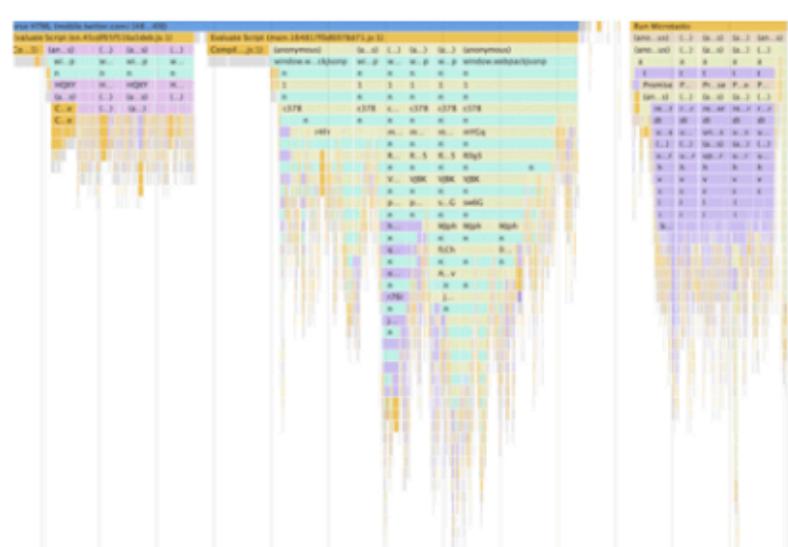
Resource Processing



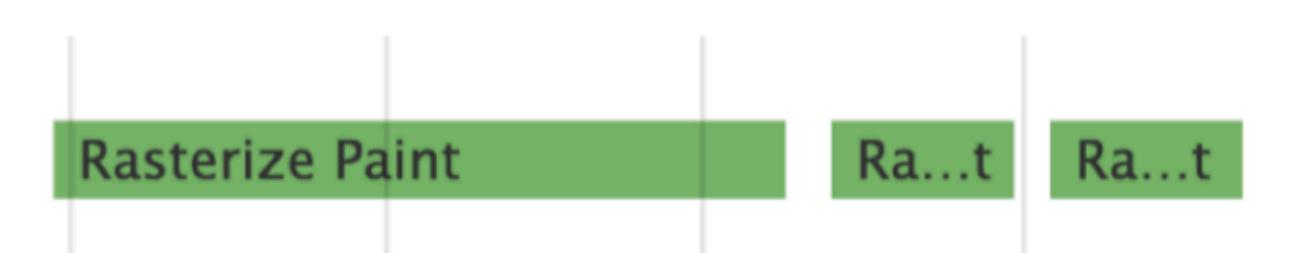
~2s in Parse/Compile



0.064s in Image Decode



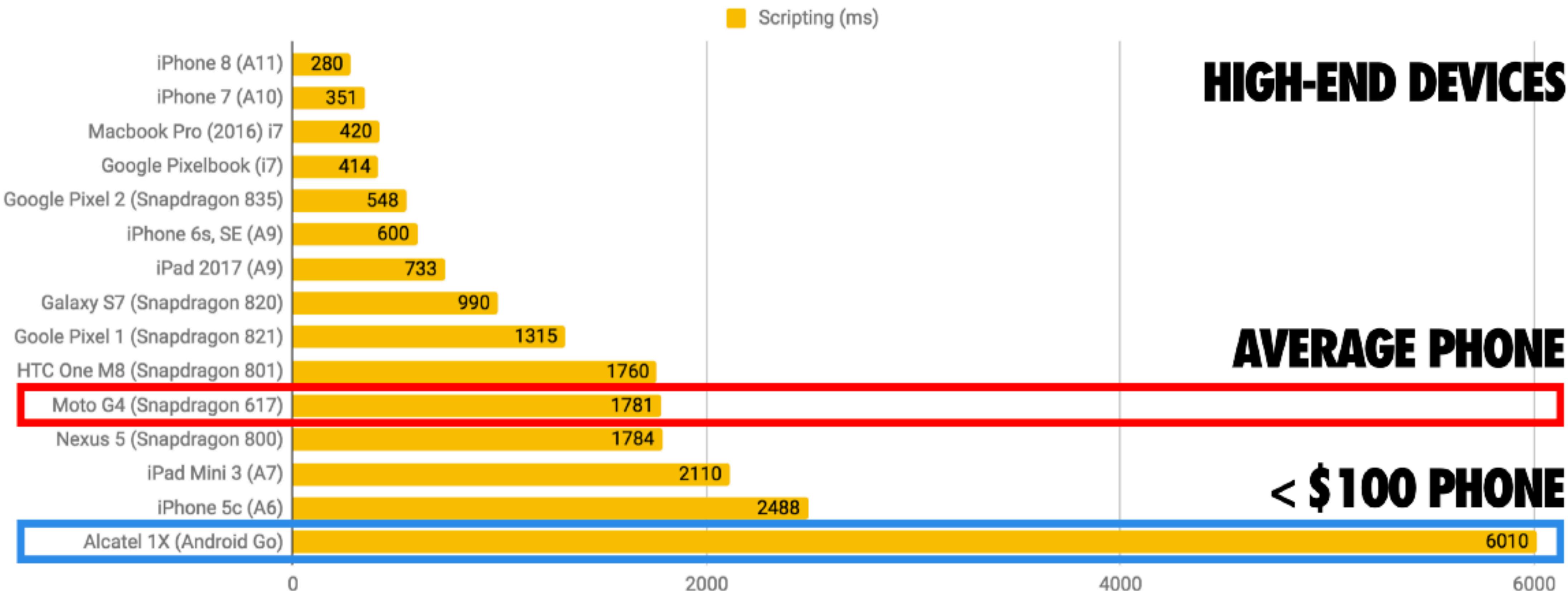
~1.5s in Execution



0.028s in Rasterize Paint

The cost of javascript

2018 JAVASCRIPT PROCESSING TIMES



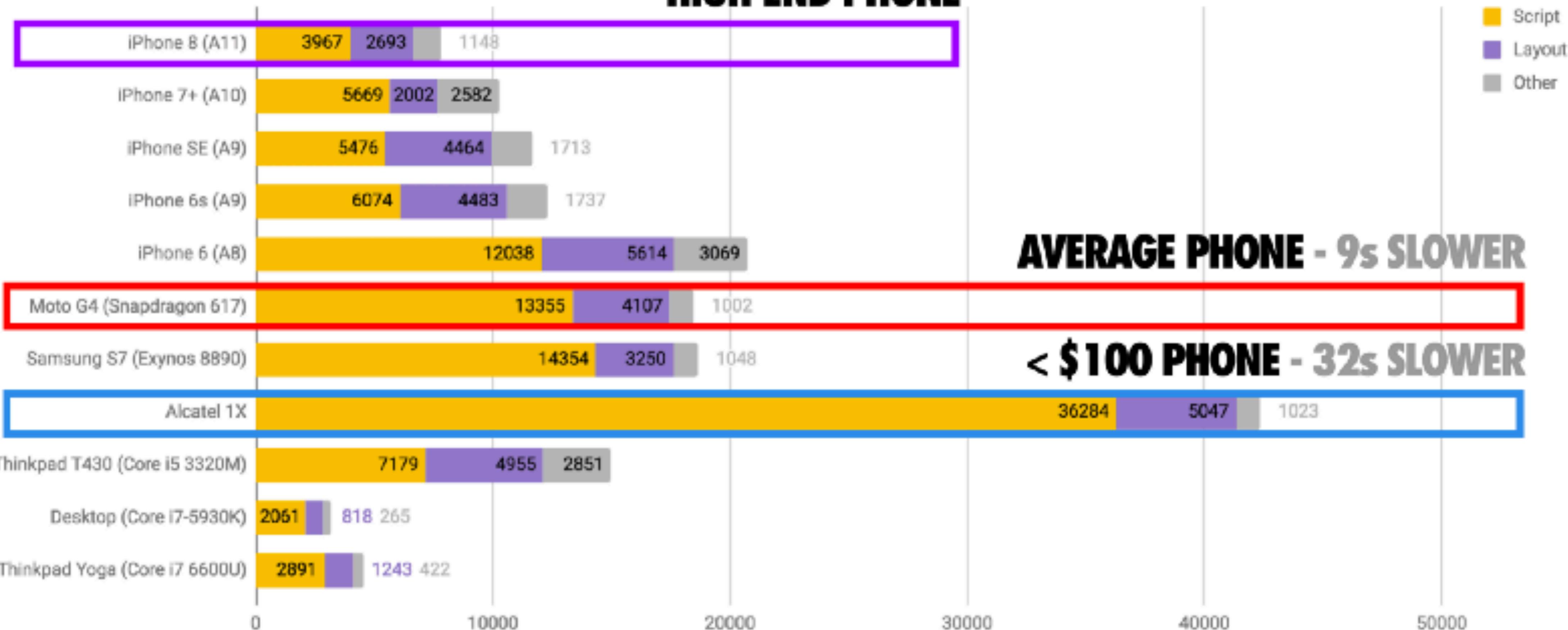
Tests run during July, 2018 on hardware running the latest versions of Android and iOS available

1MB JS UNCOMPRESSED (200KB min/compressed)

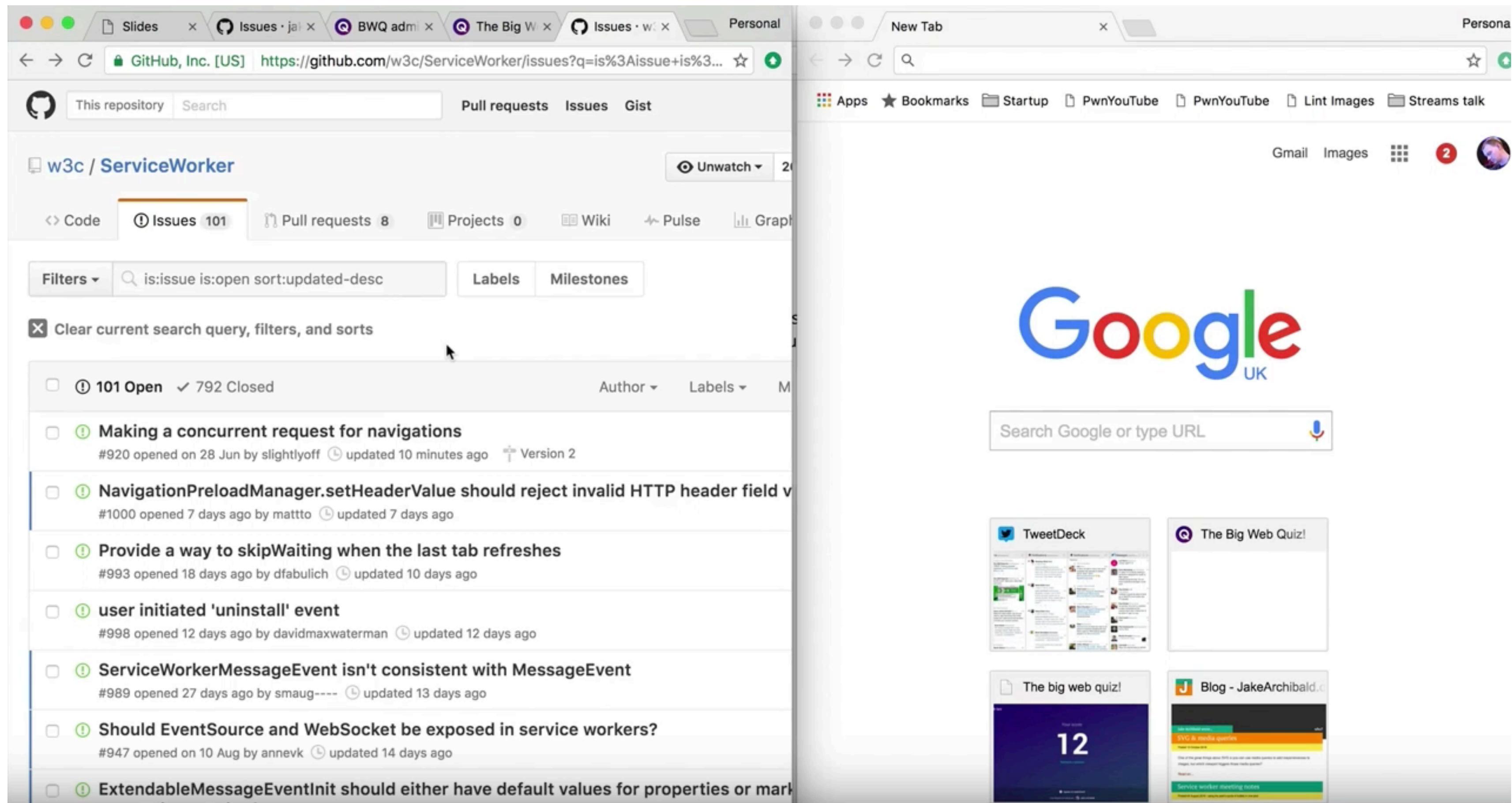
The cost of javascript

JS PROCESSING FOR CNN.COM

HIGH-END PHONE



The cost of javascript



Fun hacks for faster content

Instagram increased impressions and user profile scroll interactions by decreasing the response size of the JSON needed for displaying comments (by 33% for the median and 50% for the 95th percentile for the main endpoint).

SPEED STRATEGY



**First view is about optimising
the first meaningful paint and
critical rendering path**

**Repeat view is about
squashing bytes and caching
strategies**

TOOLING



PAGESPEED INSIGHTS

https://315f67ec.ngrok.io/ ANALYZE

! Mobile ! Desktop

Poor
47 / 100

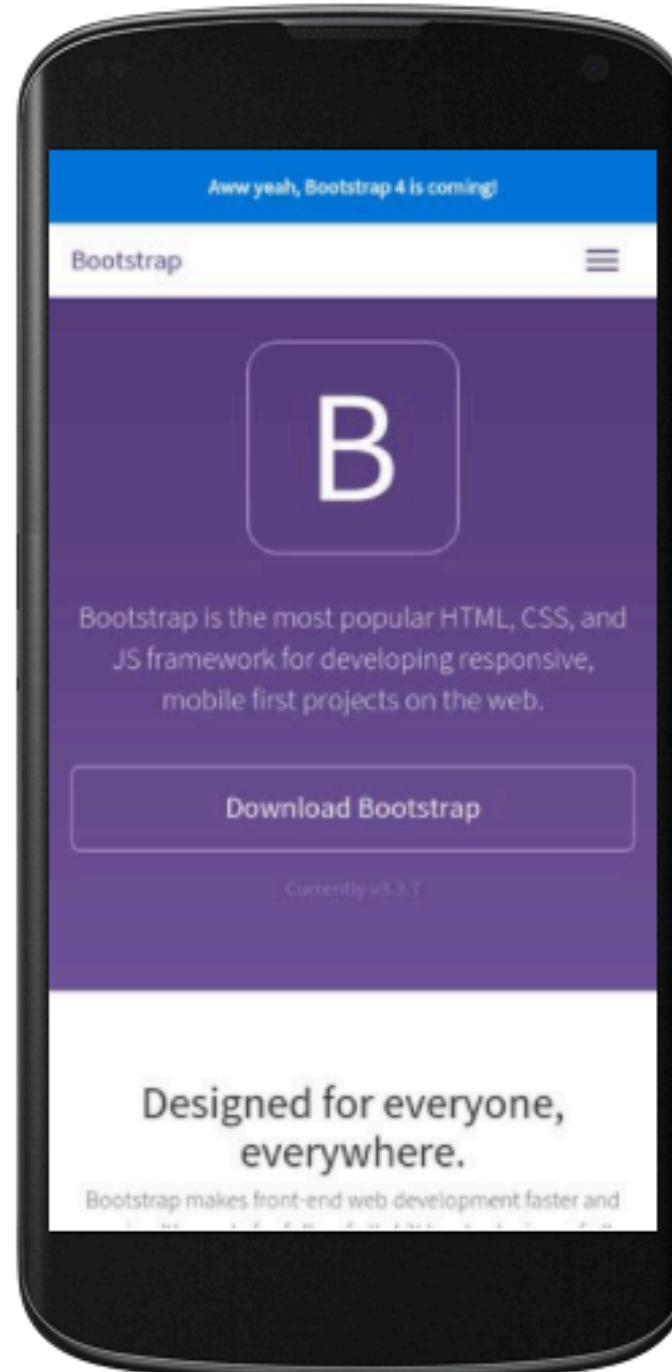
This page is not optimized and is likely to deliver a slow user experience. Please prioritize and apply the recommendations below.

! Possible Optimizations

- Eliminate render-blocking JavaScript and CSS in above-the-fold content
 - ▶ [Show how to fix](#)
- Optimize images
 - ▶ [Show how to fix](#)
- Enable compression
 - ▶ [Show how to fix](#)
- Minify CSS
 - ▶ [Show how to fix](#)
- Minify JavaScript
 - ▶ [Show how to fix](#)

✓ Optimizations Found

- ▶ [Show details](#)



PAGESPEED INSIGHTS

<https://getbootstrap.com/docs/3.3/> [ANALYZE](#)

 Mobile  Desktop

Poor
52 / 100

This page is not optimized and is likely to deliver a slow user experience. Please prioritize and apply the recommendations below.

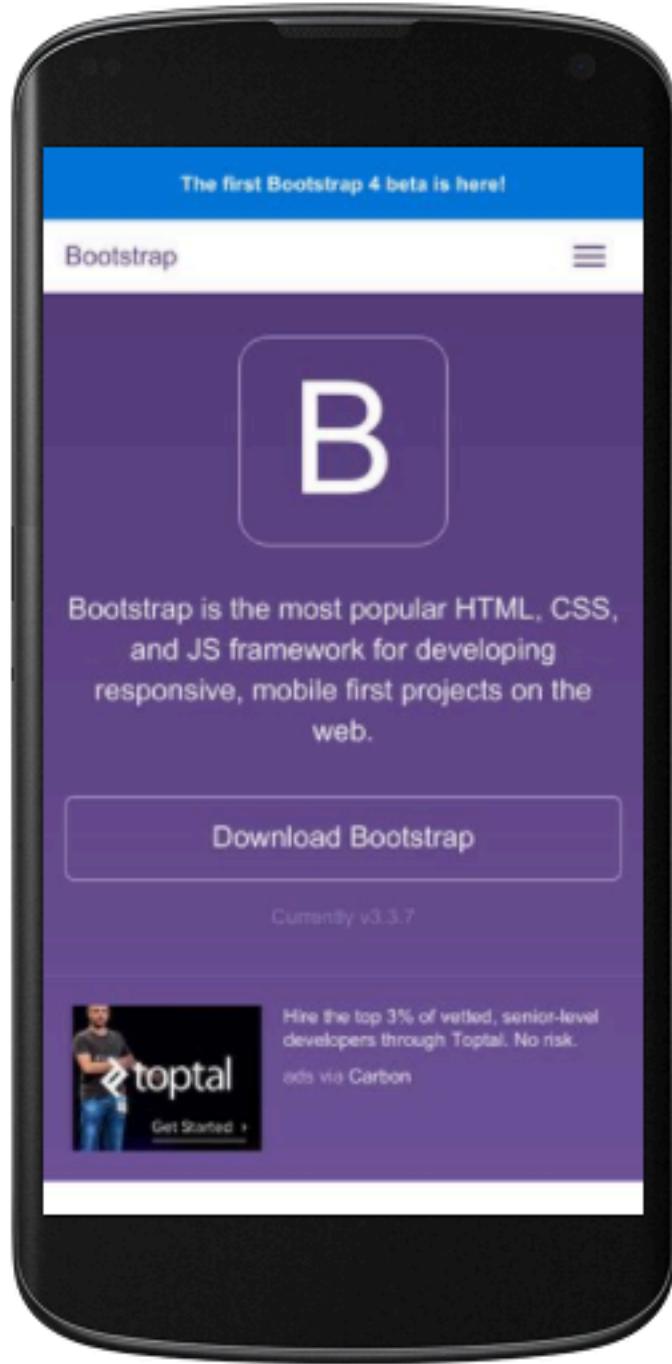
! Possible Optimizations

- Optimize images
 - ▶ [Show how to fix](#)
- Eliminate render-blocking JavaScript and CSS in above-the-fold content
 - ▶ [Show how to fix](#)
- Leverage browser caching
 - ▶ [Show how to fix](#)
- Enable compression
 - ▶ [Show how to fix](#)
- Minify JavaScript
 - ▶ [Show how to fix](#)

✓ Optimizations Found

- ▶ [Show details](#)

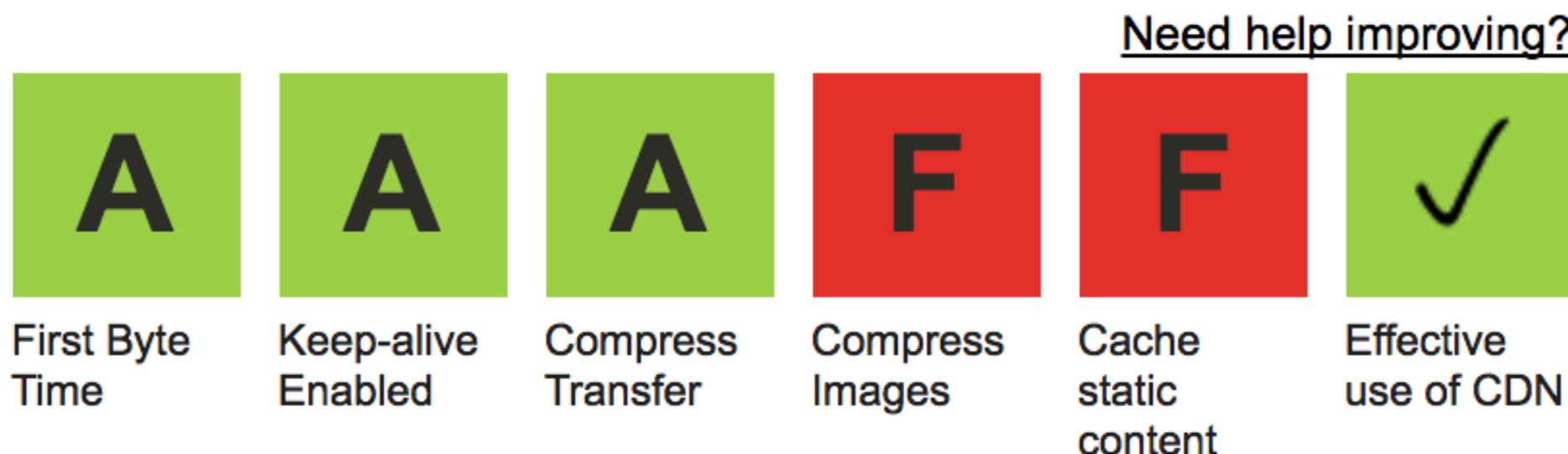
Download optimized [image](#), [JavaScript](#), and [CSS](#) resources for this page.



WEBPAGETEST

Web Page Performance Test for getbootstrap.com

From: Amsterdam, NL - IISpeed - Chrome - Cable
26/01/2017, 21:22:40



[Summary](#) [Details](#) [Performance Review](#) [Content Breakdown](#) [Domains](#) [Processing Breakdown](#) [Screen Shot](#)

Tester: VPS16230-93.191.133.233

Test runs: 5

[Re-run the test](#)

[Raw page data](#) - [Raw object data](#)

[Export HTTP Archive \(.har\)](#)

[View Test Log](#)

Performance Results (Median Run)

| | Load Time | First Byte | Start Render | Speed Index | DOM Elements | Document Complete | | | Fully Loaded | | | | |
|---------------------|-----------|------------|--------------|-------------|--------------|-------------------|----------|----------|--------------|----------|----------|--------------|-------|
| | | | | | | Time | Requests | Bytes In | Time | Requests | Bytes In | Certificates | Cost |
| First View (Run 3) | 2.950s | 0.452s | 0.812s | 866 | 155 | 2.950s | 25 | 884 KB | 3.013s | 26 | 886 KB | 16 KB | \$--- |
| Repeat View (Run 4) | 0.837s | 0.572s | - | 0 | 153 | 0.837s | 4 | 10 KB | 0.837s | 4 | 10 KB | 3 KB | |

2.0s

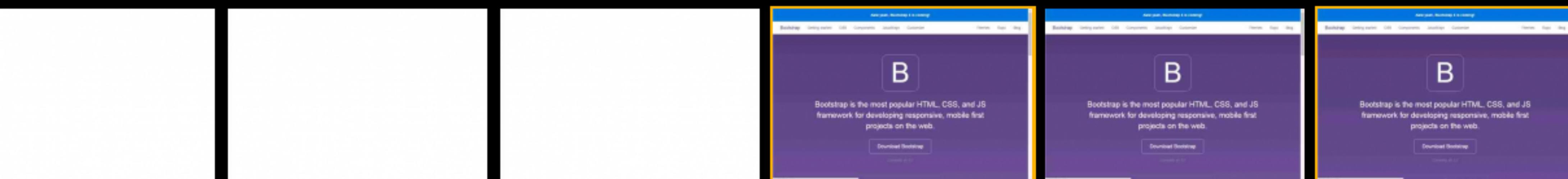
2.5s

3.0s

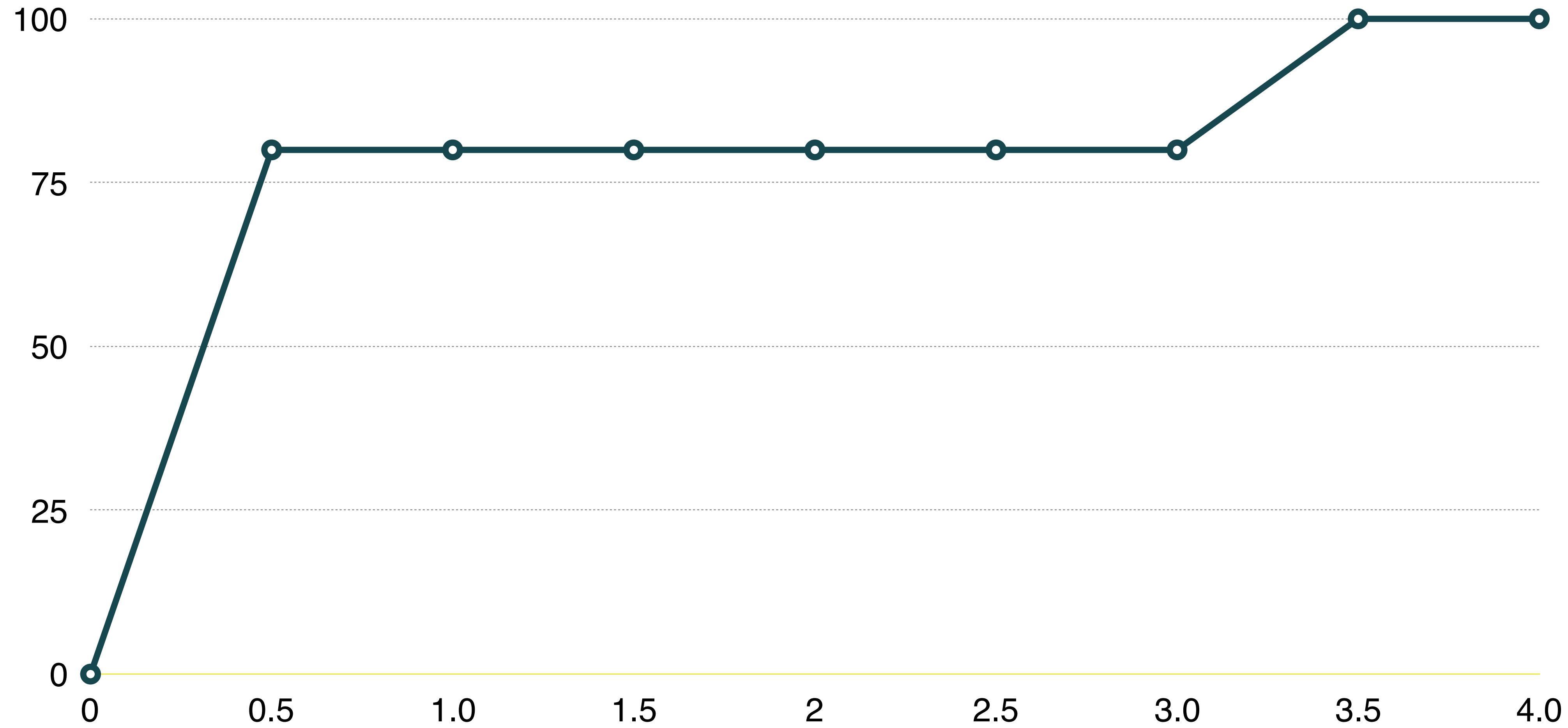
3.5s

4.0s

4.5s



SPEED INDEX



Latest SRP

PAINT
1.6 Sec.

USABLE PAGE
2.2 Seconds



Min + gzip

PAINT
1.6 Sec.

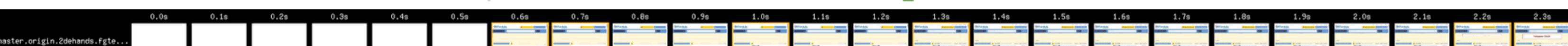
USABLE PAGE
2.0 Seconds



CriticalCSS + min + gzip

PAINT
0.6 Sec.

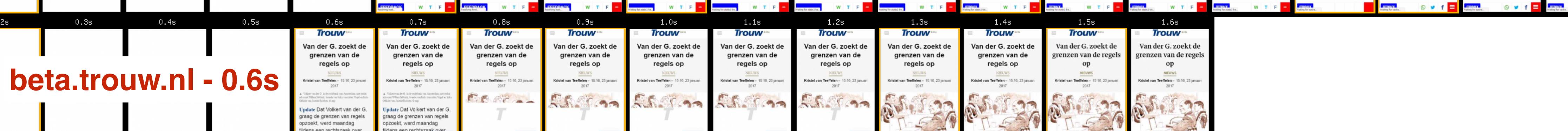
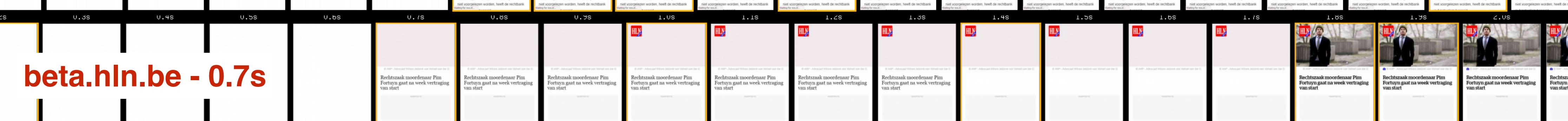
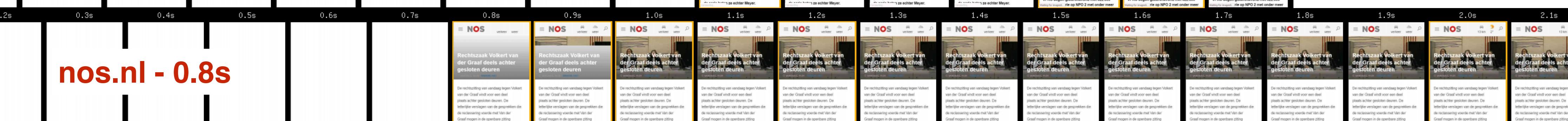
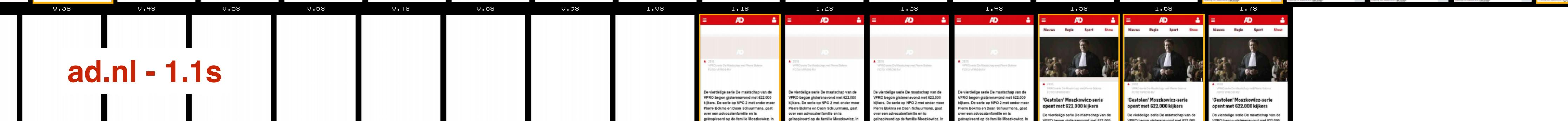
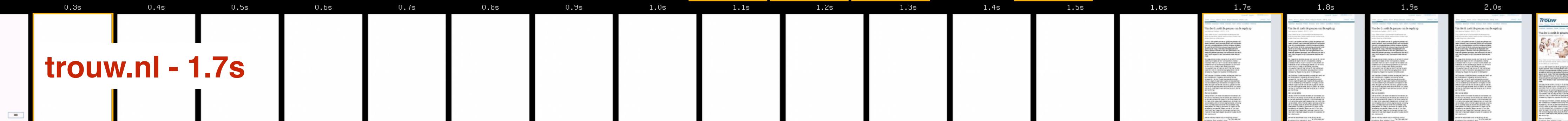
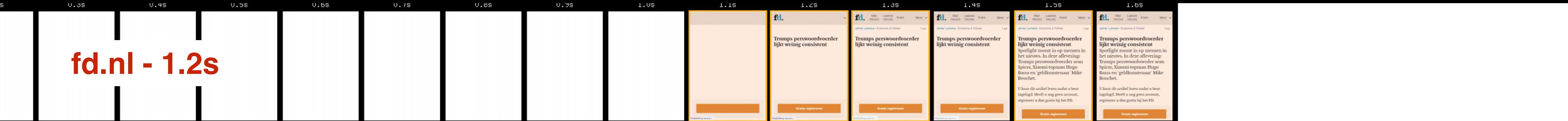
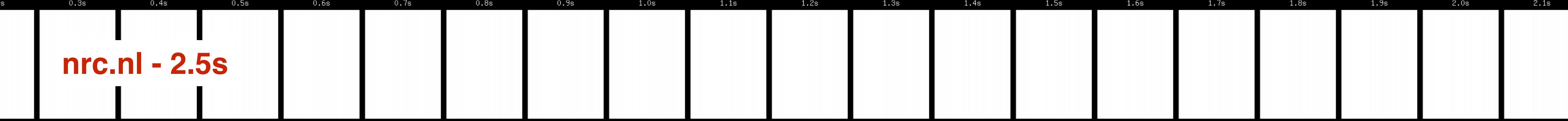
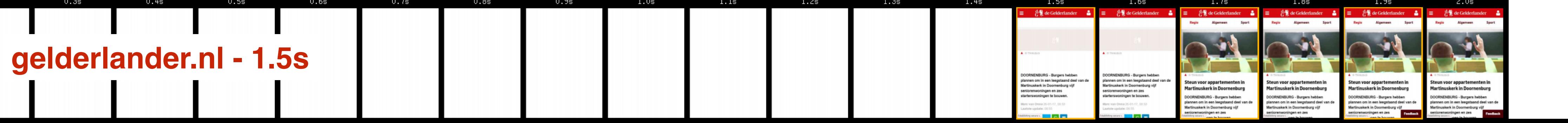
USABLE PAGE
1.3 Seconds



Critical + FOIT + min + gzip

PAINT and USABLE PAGE
0.7 Sec.





CHROME DEV TOOLS

The screenshot shows a browser window with the URL `localhost:3003`. The main content area displays a purple Bootstrap landing page with a large white 'B' logo and text about Bootstrap's popularity and responsive design. The Chrome Dev Tools Network tab is open, showing a timeline of 18 requests. The requests include files like `localhost`, `bootstrap.css`, and various image files. The timeline shows the start times of these requests, with most of them starting between 3.00s and 4.00s. The total transfer time is 1.2MB transferred, and the load time is 6.62s.

Aww yeah, Bootstrap 4 is coming!

Bootstrap

B

Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web.

Download Bootstrap

Currently v3.3.7

Designed for everyone,

1.72s 1.85s 1.92s 2.13s 2.98s 3.00s 3.14s 3.22s 4.14s 4.19s 4.30s

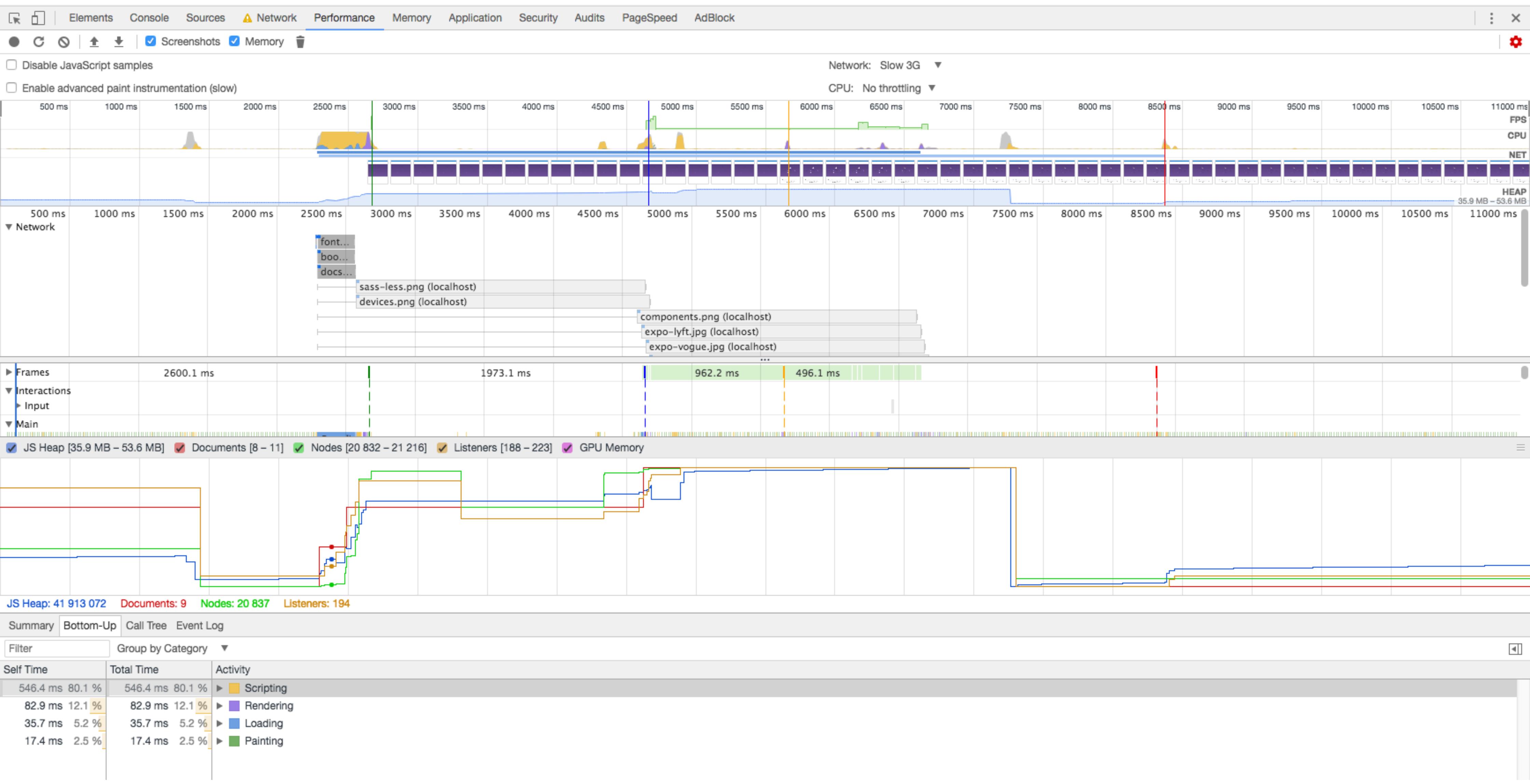
Elements Console Sources Network Timeline Profiles Application Security Audits PageSpeed AdBlock

View: Preserve log Disable cache Offline Good 3G (40ms, 1.5M)

| Name | M... | Status | Protocol | Type | Initiator | Size | Time | Content... | Timeline – Start Time | 3.00s | 4.00s | 5.00s |
|-------------------------------|------|--------|----------|----------|-----------------|------------------|---------------|------------|-----------------------|-------|-------|-------|
| localhost | GET | 200 OK | http/1.1 | doc... | Other | 9.4KB 9.1KB | 91ms 45ms | | | | | |
| bootstrap.css /dist/css | GET | 200 OK | http/1.1 | style... | (inde... Parser | 144KB 143KB | 1.56s 43ms | | | | | |
| docs.css /assets/css/src | GET | 200 OK | http/1.1 | style... | (inde... Parser | 30.6KB 30.3KB | 410ms 51ms | | | | | |
| sass-less.png /assets/img | GET | 200 OK | http/1.1 | png | (inde... Parser | 14.4KB 14.2KB | 450ms 67ms | | | | | |
| devices.png /assets/img | GET | 200 OK | http/1.1 | png | (inde... Parser | 6.7KB 6.5KB | 244ms 75ms | | | | | |
| components.png /assets/img | GET | 200 OK | http/1.1 | png | (inde... Parser | 3.1KB 2.9KB | 167ms 82ms | | | | | |
| expo-lyft.jpg /assets/img | GET | 200 OK | http/1.1 | jpeg | (inde... Parser | 156KB 156KB | 4.06s 91ms | | | | | |
| expo-vogue.jpg /assets/img | GET | 200 OK | http/1.1 | jpeg | (inde... Parser | 194KB 194KB | 4.48s 84ms | | | | | |
| expo-riot.jpg /assets/img | GET | 200 OK | http/1.1 | jpeg | (inde... Parser | 158KB 158KB | 3.97s 84ms | | | | | |
| expo-newsweek.jpg /assets/img | GET | 200 OK | http/1.1 | jpeg | (inde... Parser | 197KB 197KB | 3.52s 83ms | | | | | |

18 requests | 1.2MB transferred | Finish: 6.62s | DOMContentLoaded: 3.13s | Load: 6.62s

CHROME PERFORMANCE



CHROME AUDITS

The image shows a split-screen view. On the left is a screenshot of the Bootstrap website, featuring a large purple header with the text "Aww yeah, Bootstrap 4 is coming!" and a large white letter "B". Below the header, there's a section about Bootstrap being the most popular framework for responsive web development, followed by a "Download Bootstrap" button and the text "Currently v3.3.7". At the bottom, it says "Designed for everyone, everywhere." and describes Bootstrap as making front-end development faster and easier. On the right is a screenshot of the Chrome DevTools Audits tab, showing four audit scores: Progressive Web App (45), Performance (70), Accessibility (100), and Best Practices (77). The Performance section details six failed audits related to service workers and splash screens, five passed audits, and manual checks. The Metrics section shows a timeline of 10 frames with their respective times. The Accessibility section is fully green. The Best Practices section is also mostly green.

Aww yeah, Bootstrap 4 is coming!

Bootstrap

B

Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web.

Download Bootstrap

Currently v3.3.7

Designed for everyone, everywhere.

Bootstrap makes front-end web development faster and easier. It's made for folks of all skill levels, devices of all shapes, and projects of all sizes.

Progressive Web App

These audits validate the aspects of a Progressive Web App, as specified by the baseline [PWA Checklist](#).

45

6 failed audits

- ▶ Does not register a Service Worker
- ▶ Does not respond with a 200 when offline
- ▶ Does not redirect HTTP traffic to HTTPS
- ▶ User will not be prompted to Install the Web App
Failures: No manifest was fetched, Site does not register a Service Worker, Manifest start_url is not cached by a Service Worker.
- ▶ Is not configured for a custom splash screen
Failures: No manifest was fetched.
- ▶ Address bar does not match brand colors
Failures: No manifest was fetched, No '<meta name="theme-color">' tag found.

▶ 5 Passed Audits

▶ Manual checks to verify

Performance

These encapsulate your app's performance.

70

Metrics

These metrics encapsulate your app's performance across a number of dimensions.

| 471 ms | 942 ms | 1.4 s | 1.9 s | 2.4 s | 2.8 s | 3.3 s | 3.8 s | 4.2 s | 4.7 s |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | | | | |

- ▶ First meaningful paint 4,710 ms
- ▶ First Interactive (beta) 4,710 ms
- ▶ Consistently Interactive (beta) 4,710 ms
- ▶ Perceptual Speed Index: 3,277 (target: < 1,250)
- ▶ Estimated Input Latency: 16 ms (target: < 50 ms)

77

100

Opportunities

Nexus 5X ▾ 412 X 732 100% ▾ Online ▾

Elements Console Sources Network Performance Memory Application Security Audits

11:08:20 - www.vogsy.io Emulation: Mobile 3G w/ CPU slowdown Clear storage

29 55 53 88 78

Performance Progressive Web App Accessibility Best Practices SEO

Performance
These encapsulate your web app's current performance and opportunities to improve it.

29

Metrics
These metrics encapsulate your web app's performance across a number of dimensions.

1.4 s 2.8 s 4.1 s 5.5 s 6.9 s 8.3 s 9.6 s 11 s 12.4 s 13.8 s

First meaningful paint 12,930 ms
First Interactive (beta) 12,930 ms
Consistently Interactive (beta) 12,930 ms

Perceptual Speed Index: 12,993 11
Estimated Input Latency: 16 ms 100

Opportunities
These are opportunities to speed up your application by optimizing the following resources.

Reduce render-blocking stylesheets 7,650 ms
Unused CSS rules 4,520 ms 346 KB
Preload key requests 780 ms
Offscreen images 430 ms 33 KB

Diagnostics
More information about the performance of your application.

Uses inefficient cache policy on static assets: 10 assets found 57
Critical Request Chains: 7
15 Passed Audits

VOGSY

Professional Services Automation in the Google Cloud

Sign in with Google

PRIVACY POLICY

TERMS OF USE

HELP

◀ ○ □

Nexus 5X ▾ 412 x 732 100% ▾ Custom ▾

Elements Console Sources Network Performance Memory Application Security Audits

View: Group by frame □ Preserve log Disable cache Offline Fast 3G

Filter Hide data URLs All XHR JS CSS Img Media Font Doc WS Manifest Other

621 ms 2.60 s 5.36 s 5.73 s 5.75 s 5.76 s 5.77 s 5.79 s 5.81 s 5.82 s 5.84 s 5.86 s 5.87 s 5.89 s 5.91 s 5.92 s 5.94 s 5.96 s 5.98 s 5.99 s 6.01 s 6.02 s 6.04 s 6.06 s 6.07 s 6.09 s 6.11 s 6.13 s 6.14 s 6.16 s 6.18 s 6.19 s 6.20 s 6.21 s 6.22 s 6.23 s 6.24 s 6.25 s 6.26 s 6.27 s 6.28 s 6.29 s 6.30 s 6.31 s 6.32 s 6.33 s 6.34 s 6.35 s 6.36 s 6.37 s 6.38 s 6.39 s 6.40 s 6.41 s 6.42 s 6.43 s 6.44 s 6.45 s 6.46 s 6.47 s 6.48 s 6.49 s 6.50 s 6.51 s 6.52 s 6.53 s 6.54 s 6.55 s 6.56 s 6.57 s 6.58 s 6.59 s 6.60 s 6.61 s 6.62 s 6.63 s 6.64 s 6.65 s 6.66 s 6.67 s 6.68 s 6.69 s 6.70 s

12:29

VOGSY

Professional Services Automation
in the Google Cloud

Sign in with Google

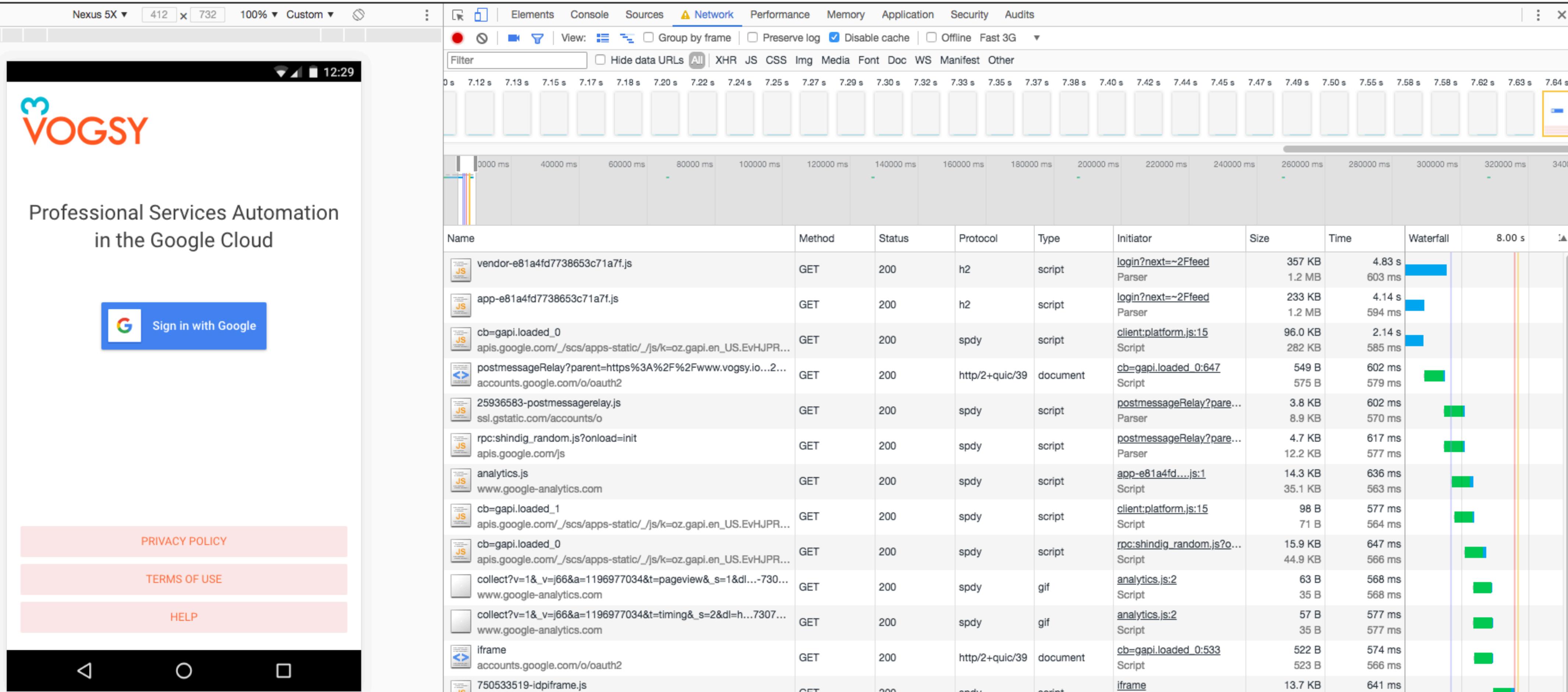
PRIVACY POLICY

TERMS OF USE

HELP

◀ ○ □

| Name | Method | Status | Protocol | Type | Initiator | Size | Time | Waterfall |
|---|--------|--------|----------|------------|-----------------------|---------|--------|-----------|
| app-e81a4fd7738653c71a7f.css | GET | 200 | h2 | stylesheet | login?next=~2Ffeed | 78.4 KB | 1.94 s | |
| | | | | Parser | | 543 KB | 588 ms | |
| client:platform.js | GET | 200 | spdy | script | login?next=~2Ffeed | 16.6 KB | 931 ms | |
| apis.google.com/s | | | | Parser | | 43.1 KB | 580 ms | |
| vendor-e81a4fd7738653c71a7f.js | GET | 200 | h2 | script | login?next=~2Ffeed | 357 KB | 4.83 s | |
| | | | | Parser | | 1.2 MB | 603 ms | |
| app-e81a4fd7738653c71a7f.js | GET | 200 | h2 | script | login?next=~2Ffeed | 233 KB | 4.14 s | |
| | | | | Parser | | 1.2 MB | 594 ms | |
| service-worker.js | GET | 200 | h2 | javascript | service-worker.js | 0 B | 627 ms | |
| www.vogsy.io | | | | Parser | | 33.8 KB | 572 ms | |
| cb=gapi.loaded_0 | GET | 200 | spdy | script | client:platform.js:15 | 96.0 KB | 2.14 s | |
| apis.google.com/_scs/apps-static/_/js/k=oz.gapi.en_US.EvHJPR... | | | | Script | | 282 KB | 585 ms | |



Aww yeah, Bootstrap 4 is coming!

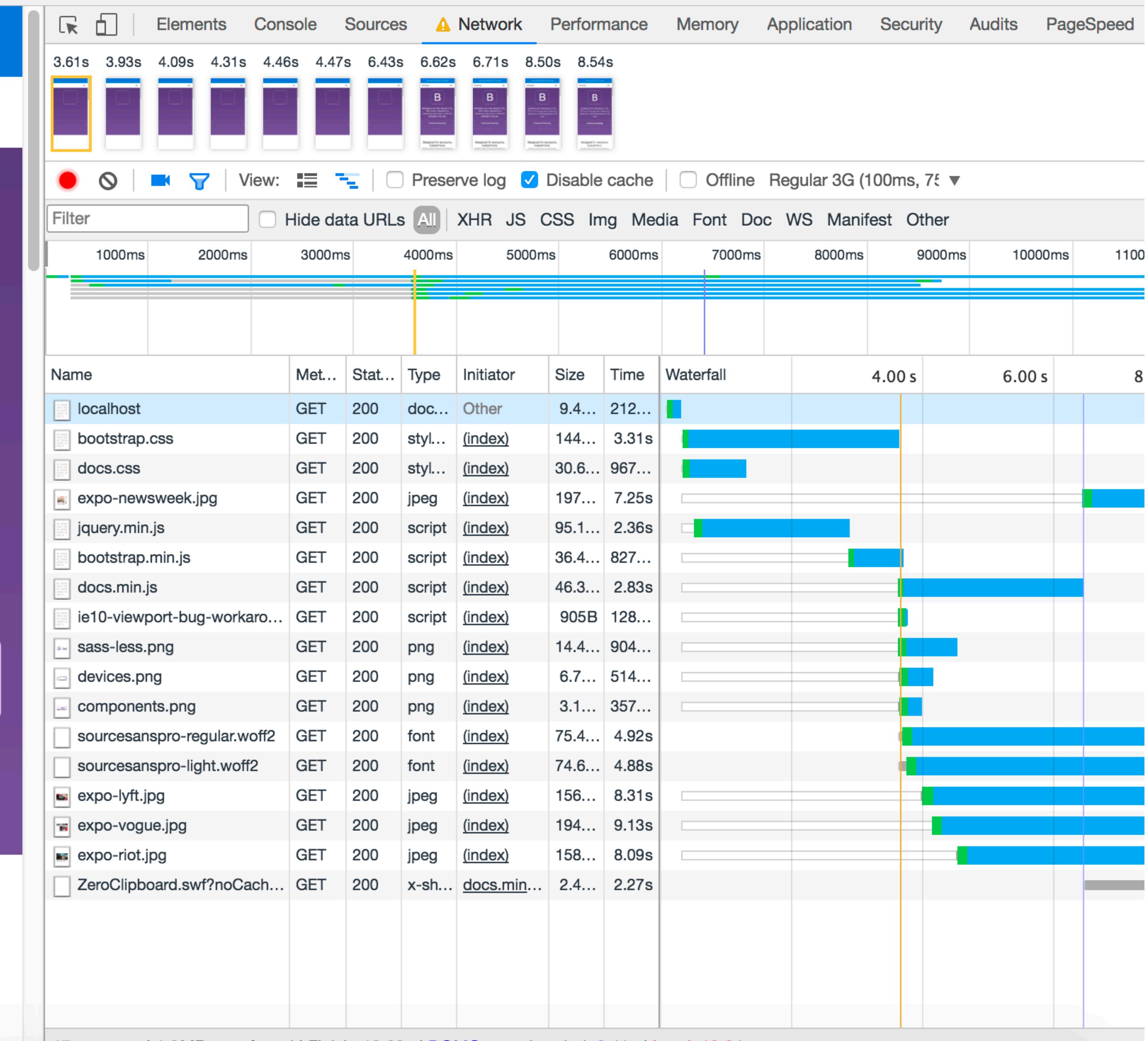
Bootstrap



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[Download Bootstrap](#)

Currently v3.3.7





DE VOORHOEDE

front-end developers