

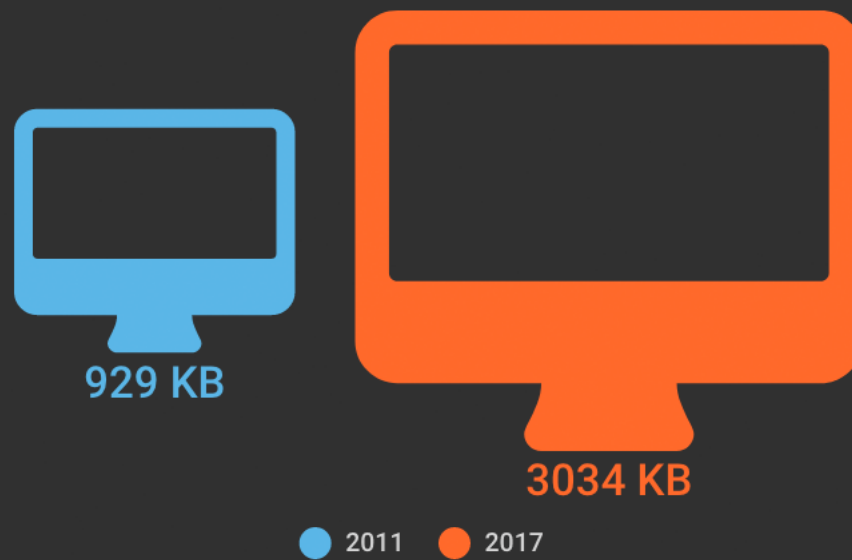
JS GONE FIT

How to reduce bundles size?

Radosław Kowalewski

AGENDA

- Why is it important?
- How to achieve the goal?
 - Tools
 - Hints
- Demo



- <https://speedcurve.com/blog/web-performance-page-bloat/>

NPM INSTALL ALL THE INTERNET



Images: Allie Brosh

**...but we have fast connection and fast devices,
right? so...**



All bytes are not equal



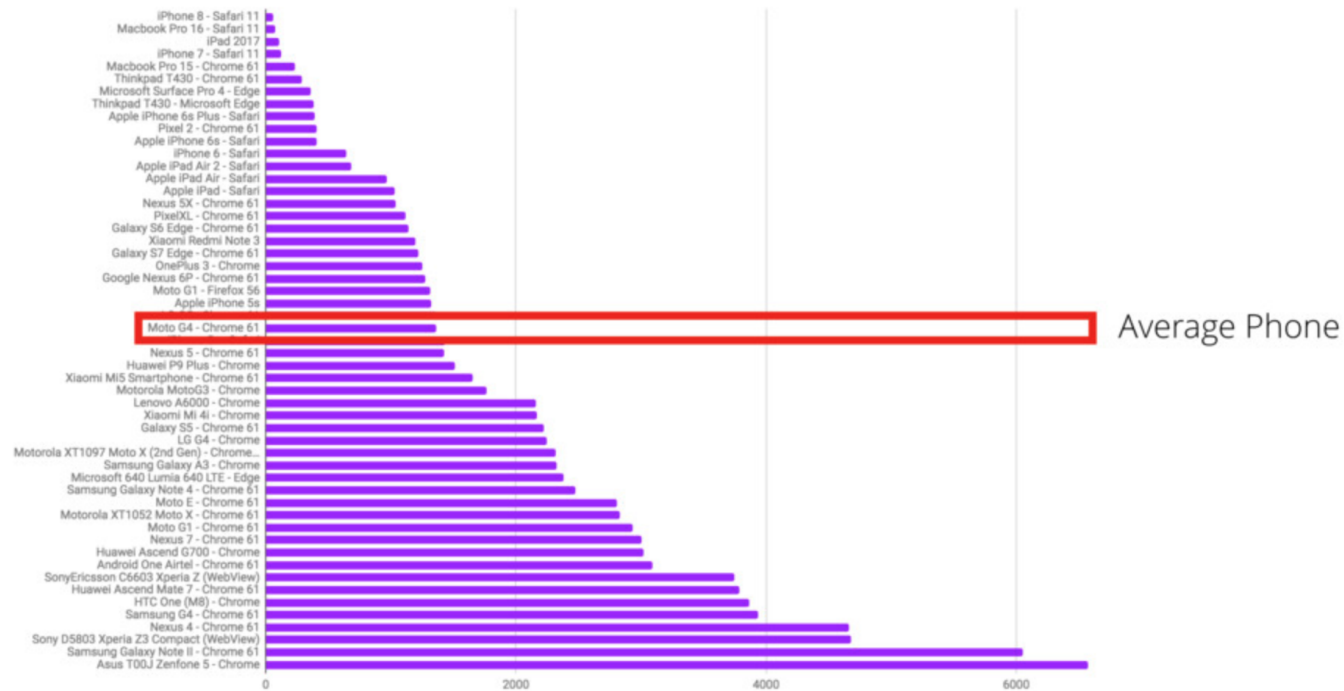
170KB JS

170KB JPEG

- Fast By Default: Modern loading best practices by Addy Osmani

2017 JavaScript Parse Costs

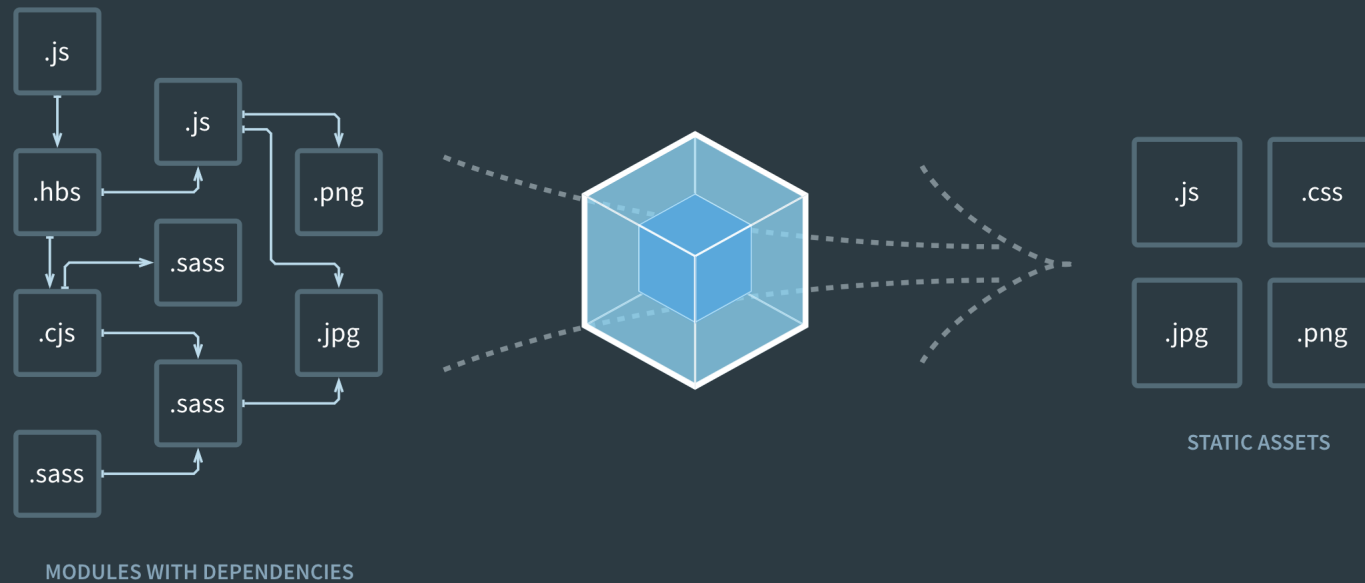
~1MB JavaScript (uncompressed)



- Fast By Default: Modern loading best practices by Addy Osmani

TOOLS

WEBPACK



At its core, webpack is a static module bundler for modern JavaScript applications. When webpack processes your application, it recursively builds a dependency graph that includes every module your application needs, then packages all of those modules into one or more bundles.

- <https://webpack.js.org/concepts/>

```
yarn add webpack --dev
```

```
// webpack.config.js
module.exports = {
  entry: [
    './app.js'
  ],
  output: {
    filename: "bundle.js",
  },
  plugins: [],
  module: {
    loaders: []
  }
};
```

```
cd app
webpack
```

WEBPACK MONITOR

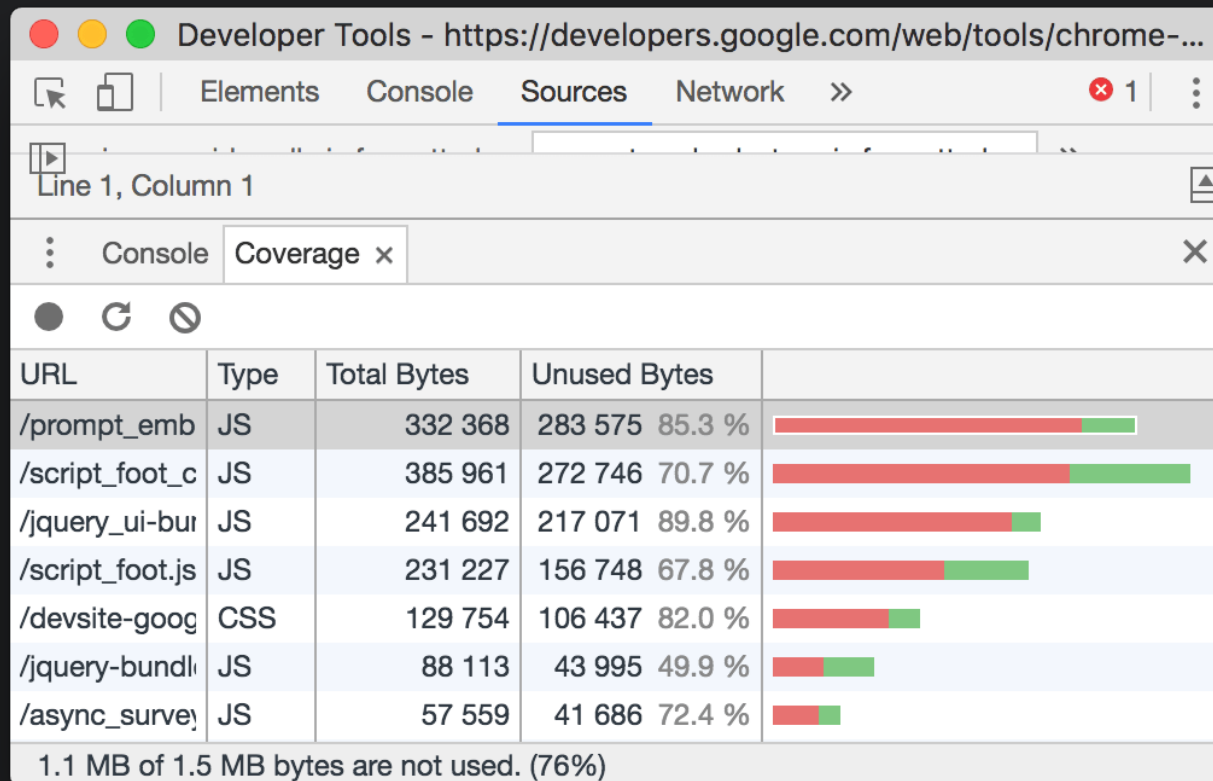


```
yarn add webpack-monitor --dev
```

```
// webpack.config.js
const WebpackMonitor = require('webpack-monitor');

module.exports = {
  entry: [
    './app.js'
  ],
  output: {
    filename: "bundle.js",
  },
  plugins: [
    new WebpackMonitor({
      capture: true,
      launch: true,
    }),
  ],
  module: {
    loaders: []
  }
};
```

CHROME DEVTOOLS / CODE COVERAGE



**Improving performance
is a journey. Lots of small
changes can lead to big
gains.**

HINTS / DEMO

Build for production

(Remove sourcemaps, uglify, make advantage of tree shaking)

Move functionality to backend

Be careful with imports

(lodash example)

Pick right dependencies

(moment vs date-fns)

Lazyload

(google maps example)

Dynamic imports

INITIAL LOAD

BEFORE:

51 requests | 3.5 MB transferred | Finish: 6.90 s | DOMContentLoaded: 672 ms | Load: 1.86 s

AFTER:

3 requests | 16.5 KB transferred | Finish: 201 ms | DOMContentLoaded: 268 ms | Load: 291 ms

MEASURE
OPTIMIZE
MONITOR

QUESTIONS?