

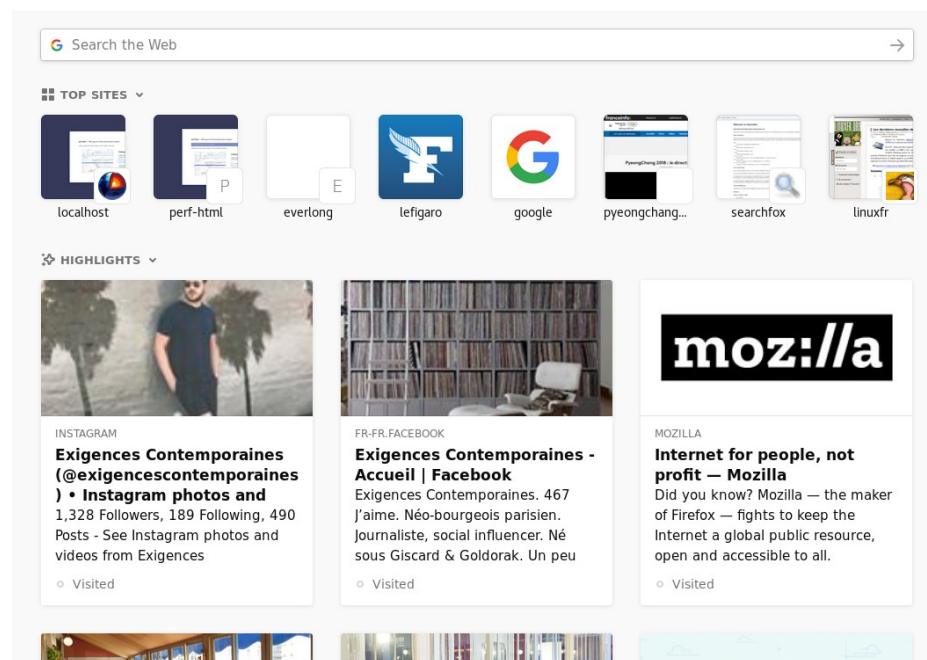
moz://a ❤️ **React**

A lot of React-based projects at Mozilla

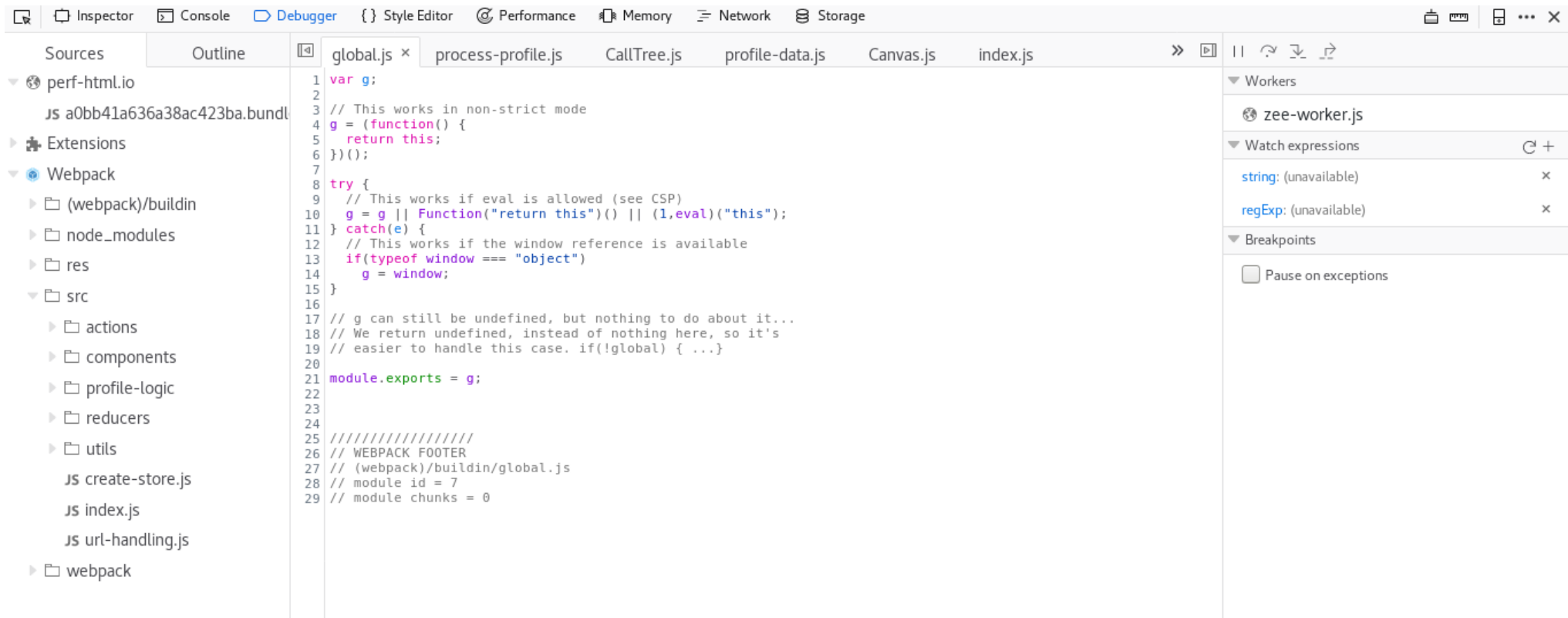
- Activity Stream
- Developer tools : Debugger, Network Monitor, Web Console, Responsive Mode, JSON View
- Gecko Profiler

Activity Stream

- This is the page for an empty « new tab »
- Project is on github :
<https://github.com/mozilla/activity-stream>
- Needs a clone of all of mozilla
- Available bugs on bugzilla :
<https://mzl.la/2KAWVSE>



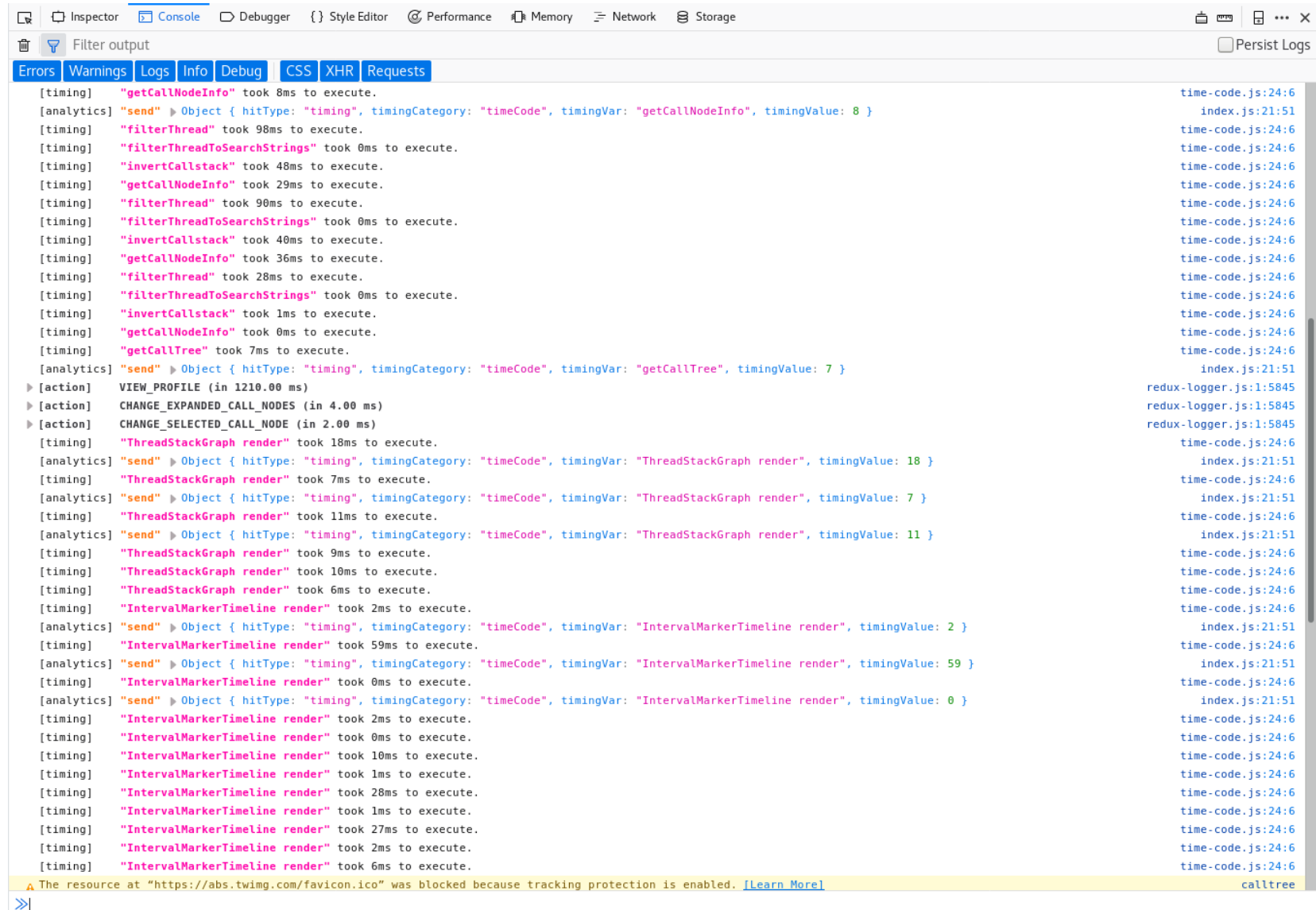
The Debugger



The Debugger

- On GitHub :
<https://github.com/devtools-html/debugger.html/>
- Doesn't need a full clone of Firefox to start
- Does a great work to help contribution
- Has good first issue bugs, label **good first issue** or **help wanted**
- Easy to work with

The Web Console



The screenshot displays the Chrome DevTools Web Console. The top toolbar includes icons for the Inspector, Console, Debugger, Style Editor, Performance, Memory, Network, and Storage. The Console panel is active, showing a list of log entries. The 'Filter output' field is empty, and the 'Persist Logs' checkbox is checked. The log entries are categorized by type: Errors, Warnings, Logs, Info, Debug, CSS, XHR, and Requests. The main log area shows a series of timing and analytics events, including 'getCallNodeInfo', 'filterThread', 'invertCallstack', 'ThreadStackGraph render', and 'IntervalMarkerTimeline render'. Each entry includes a timestamp, a message, and a source file and line number. A yellow warning banner at the bottom indicates that a resource at 'https://abs.twimg.com/favicon.ico' was blocked due to tracking protection.

```
[timing] "getCallNodeInfo" took 8ms to execute. time-code.js:24:6
[analytics] "send" ► Object { hitType: "timing", timingCategory: "timeCode", timingVar: "getCallNodeInfo", timingValue: 8 } index.js:21:51
[timing] "filterThread" took 98ms to execute. time-code.js:24:6
[timing] "filterThreadToSearchStrings" took 0ms to execute. time-code.js:24:6
[timing] "invertCallstack" took 48ms to execute. time-code.js:24:6
[timing] "getCallNodeInfo" took 29ms to execute. time-code.js:24:6
[timing] "filterThread" took 90ms to execute. time-code.js:24:6
[timing] "filterThreadToSearchStrings" took 0ms to execute. time-code.js:24:6
[timing] "invertCallstack" took 40ms to execute. time-code.js:24:6
[timing] "getCallNodeInfo" took 36ms to execute. time-code.js:24:6
[timing] "filterThread" took 28ms to execute. time-code.js:24:6
[timing] "filterThreadToSearchStrings" took 0ms to execute. time-code.js:24:6
[timing] "invertCallstack" took 1ms to execute. time-code.js:24:6
[timing] "getCallNodeInfo" took 0ms to execute. time-code.js:24:6
[timing] "getCallTree" took 7ms to execute. time-code.js:24:6
[analytics] "send" ► Object { hitType: "timing", timingCategory: "timeCode", timingVar: "getCallTree", timingValue: 7 } index.js:21:51
► [action] VIEW_PROFILE (in 1210.00 ms) redux-logger.js:1:5845
► [action] CHANGE_EXPANDED_CALL_NODES (in 4.00 ms) redux-logger.js:1:5845
► [action] CHANGE_SELECTED_CALL_NODE (in 2.00 ms) redux-logger.js:1:5845
[timing] "ThreadStackGraph render" took 18ms to execute. time-code.js:24:6
[analytics] "send" ► Object { hitType: "timing", timingCategory: "timeCode", timingVar: "ThreadStackGraph render", timingValue: 18 } index.js:21:51
[timing] "ThreadStackGraph render" took 7ms to execute. time-code.js:24:6
[analytics] "send" ► Object { hitType: "timing", timingCategory: "timeCode", timingVar: "ThreadStackGraph render", timingValue: 7 } index.js:21:51
[timing] "ThreadStackGraph render" took 11ms to execute. time-code.js:24:6
[analytics] "send" ► Object { hitType: "timing", timingCategory: "timeCode", timingVar: "ThreadStackGraph render", timingValue: 11 } index.js:21:51
[timing] "ThreadStackGraph render" took 9ms to execute. time-code.js:24:6
[timing] "ThreadStackGraph render" took 10ms to execute. time-code.js:24:6
[timing] "ThreadStackGraph render" took 6ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 2ms to execute. time-code.js:24:6
[analytics] "send" ► Object { hitType: "timing", timingCategory: "timeCode", timingVar: "IntervalMarkerTimeline render", timingValue: 2 } index.js:21:51
[timing] "IntervalMarkerTimeline render" took 59ms to execute. time-code.js:24:6
[analytics] "send" ► Object { hitType: "timing", timingCategory: "timeCode", timingVar: "IntervalMarkerTimeline render", timingValue: 59 } index.js:21:51
[timing] "IntervalMarkerTimeline render" took 0ms to execute. time-code.js:24:6
[analytics] "send" ► Object { hitType: "timing", timingCategory: "timeCode", timingVar: "IntervalMarkerTimeline render", timingValue: 0 } index.js:21:51
[timing] "IntervalMarkerTimeline render" took 2ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 0ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 10ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 1ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 28ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 1ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 27ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 2ms to execute. time-code.js:24:6
[timing] "IntervalMarkerTimeline render" took 6ms to execute. time-code.js:24:6
⚠ The resource at "https://abs.twimg.com/favicon.ico" was blocked because tracking protection is enabled. [Learn More] calltree
```

The Web Console

- Developed inside the Firefox code base :

<https://searchfox.org/mozilla-central/source/devtools/client/webconsole>

- A few mentored bugs : <https://mzl.la/2IuV9C4>

- React without JSX

- Start with :

https://developer.mozilla.org/en-US/docs/Mozilla/Developer_guide/Build_Instructions/Simple_Firefox_build

(<https://mzl.la/2rSy99X>)

Use **artifact** builds

The Net Monitor

The screenshot displays the Chrome DevTools Network tab. The top toolbar includes icons for Inspector, Console, Debugger, Style Editor, Performance, Memory, Network, and Storage. The Network tab is active, showing a list of requests. The selected request is a GET request to a profile-store endpoint, which is highlighted in blue. The details panel on the right shows the request headers, cookies, and response headers. The response headers are expanded, showing various headers like accept-ranges, access-control-allow-origin, and content-type.

Stat...	Method	File	Do	Cause	Type	Transferred	Size	0 ms	5.12 s	10.24 s	15.36 s	20.48 s
200	GET	/publi...	lo...	document	html	1.26 KB	606 B	→ 2 ms				
200	GET	analyt...	lo...	script	js	1.49 KB	766 B	→ 2 ms				
200	GET	835e...	lo...	script	js	2.63 MB	2.63 MB	→ 110 ms				
200	GET	280e...	pr...	fetch	text	9.73 MB	45.81 MB	→ 19397				
200	GET	info?t...	lo...	xhr	json	356 B	78 B	→ 1 ms				
200	GET	zee-...	lo...	script	js	324.83 KB	324.09 KB	→ 46 ms				
101	GET	webs...	lo...	websocket	plain	129 B	0 B	→ 3 ms				
200	GET	favico...	e-...	img	vnd.micr...	1.28 KB	898 B					→ 22
200	GET	2be6...	lo...	img	svg	1.27 KB	618 B					→ 1 r
200	GET	e127...	lo...	img	svg	1.29 KB	631 B					→ 2 r
200	GET	831dc...	lo...	img	svg	1.77 KB	1.09 KB					→ 2 r
200	GET	91c82...	lo...	other	svg	1.66 KB	0.99 KB					→ 3 r
200	GET	favico...	e-...	img	vnd.micr...	1.28 KB	898 B					→ 6

Request URL: https://profile-store.commondatastorage.googleapis.com/...
Request method: GET
Remote address: [2a00:1450:4007:805::2010]:443
Status code: 200
Version: HTTP/2.0

Response headers (1.118 KB)

- accept-ranges: bytes
- access-control-allow-origin: *
- access-control-expose-headers: Content-Length, Date, Server, ...E-Load-Report, X-Google-Trace
- alt-svc: hq=":443"; ma=2592000; quic=51...a=2592000; v="43,42,41,39,35"
- cache-control: max-age: 365000000, immutable
- content-encoding: gzip
- content-length: 10199745
- content-type: plain/text
- date: Fri, 18 May 2018 20:19:10 GMT
- etag: "c7e938bde901e310104ef8d1a3fe191e"
- expires: Sat, 18 May 2019 20:19:10 GMT
- last-modified: Fri, 24 Nov 2017 13:46:44 GMT
- server: UploadServer
- vary: Accept-Encoding
- X-Firefox-Spdy: h2
- x-goog-generation: 1511531204946964
- x-goog-hash: crc32c=r2ZOqQ==
- x-goog-hash: md5=y+k4vskB4vAQTuiRn/17Hq--

The Net Monitor

- Developed inside the Firefox code base too

<https://searchfox.org/mozilla-central/source/devtools/client/netmonitor>

- More mentored bugs : <https://mzl.la/2rSx3Ln>

- React without JSX as well

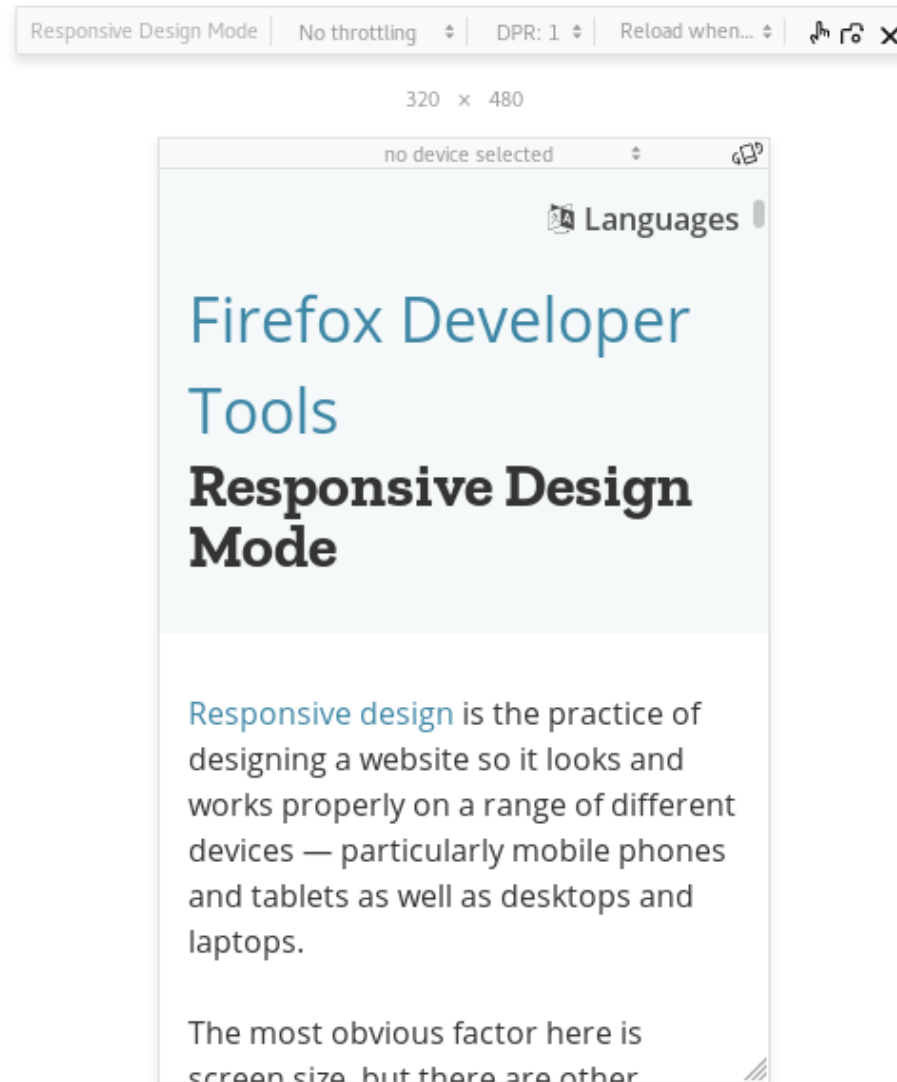
- Start with :

https://developer.mozilla.org/en-US/docs/Mozilla/Developer_guide/Build_Instructions/Simple_Firefox_build

(<https://mzl.la/2rSy99X>)

Use **artifact** builds

Responsive Mode



Responsive Mode

- Same characteristics :

<https://searchfox.org/mozilla-central/source/devtools/client/responsive.html>

- A few mentored bugs : <https://mzl.la/2rSpVyw>
- Good opportunity to have an impact : very few people working on this tool

JSON Viewer

JSON	Raw Data	Headers
Save	Copy	Collapse All Expand All
\$schema:	"http://json-schema.org/draft-06/schema#"	
description:	"A representation of an event"	
type:	"object"	
▼ required:		
0:	"dtstart"	
1:	"summary"	
▼ properties:		
▼ dtstart:		
format:	"date-time"	
type:	"string"	
description:	"Event starting time"	
▼ dtend:		
format:	"date-time"	
type:	"string"	
description:	"Event ending time"	

JSON Viewer

- Developed in Firefox as well :

<https://searchfox.org/mozilla-central/source/devtools/client/jsonview>

- Not very maintained these days, good opportunity to have an impact
- List of bugs : <https://mzl.la/2luXLjm>

Others in devtools...

- The new accessibility tool :

<https://searchfox.org/mozilla-central/source/devtools/client/accessibility>

- The new profiler panel :

<https://searchfox.org/mozilla-central/source/devtools/client/performance-new>

- The memory tool :

<https://searchfox.org/mozilla-central/source/devtools/client/memory>

- The new application panel :

<https://searchfox.org/mozilla-central/source/devtools/client/application>

The Gecko Profiler



The Gecko Profiler

- Development happens exclusively on github :
<https://github.com/devtools-html/perf.html/>
- Labels **help wanted** and **good first issue**
- ❤️ Super nice team ❤️
- Very normal React + Redux application
- Domain can be complex, but super interesting