

JavaScript Debugging

Advanced
JavaScript

JS

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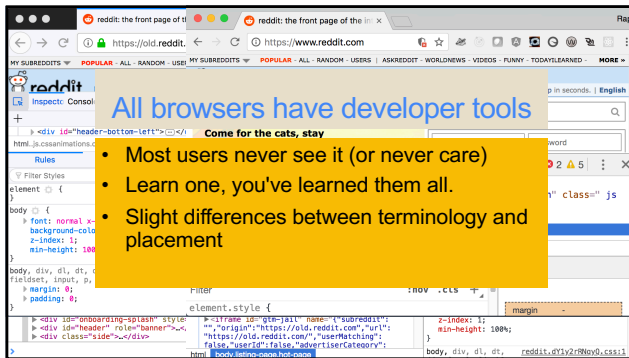
tl;dr

- If JavaScript runs in the browser it must be debugged in the browser
- All browsers have their own debugging tools
- Fortunately they all behave pretty much the same way and all have ...
 - DOM inspection
 - CSS debugging
 - JavaScript debugging
 - Network analysis

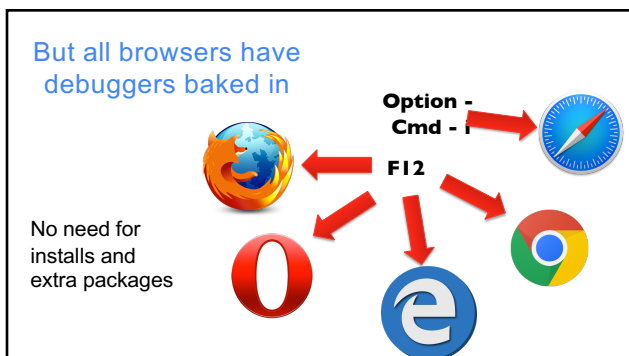
3



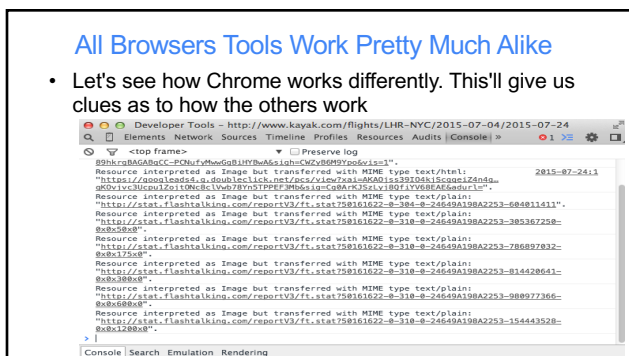
4



5



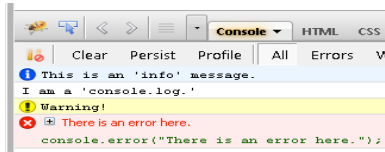
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We can send messages to the console

```
console.info("This is an 'info' message.");
console.log("I am a 'console.log.'");
console.warn("Warning!");
console.error("There is an error here.")
```



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```
console.log(
  "%s %s works as a %s. Whole object: %o",
  person.title, person.lastName,
  person.job, person);
```

- %s - string
- %f - floating point number
- %d or %i - integer
- %o - Expandable DOM object
- %O - Expandable JavaScript object

console.log can
format

```
Dr. Honeydew works as a Professor. Whole object: {
  assistant: "Beaker",
  birthDate: "Tue Apr 18 1978 18:00:00 GMT-0600 (CST)",
  firstName: "Bunsen",
  job: "Professor",
  lastName: "Honeydew",
  title: "Dr.",
  __proto__: Object
}
```

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Like cookies,
local &
session
storage

Application shows memory storage

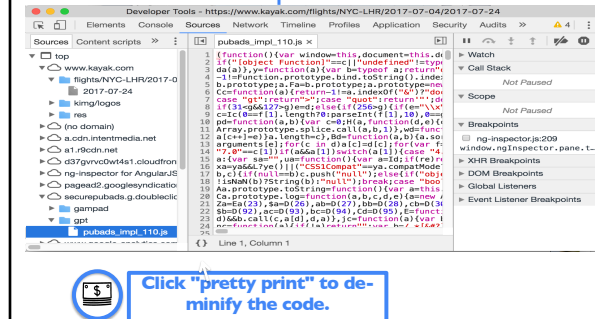
| Name | Value | Domain | P... | Expires / ... | Size | HT... | Se... | Se... |
|----------|--------------------------|----------------|------|---------------|------|-------|-------|-------|
| __gads | 10-607050008000971... | kayak.com | / | 2020-12-... | 75 | | | |
| _ga | GA1.1.430731201.1482... | www.googl... | / | 2019-02-... | 29 | | | |
| _ga | GA1.2.1324386372.154... | kayak.com | / | 2020-12-... | 30 | | | |
| _gat | 1 | kayak.com | / | 2018-12-... | 5 | | | |
| _gid | 1.1829151302.1543856... | kayak.com | / | 2019-03-... | 31 | | | |
| _gid | GA1.2.1406716498.154... | kayak.com | / | 2018-12-... | 31 | | | |
| _pk3 | 13e017e0d11b1198b0f... | kayak.com | / | 2018-12-... | 335 | | | |
| _pkft_tm | 1 | www.kaya... | / | 2018-12-... | 9 | | | |
| _pkvid | 918bc0d-f71d-11e8-b11... | kayak.com | / | 2020-05-... | 42 | | | |
| _soid | 1819b88f-de0e-4005-b5... | www.kaya... | / | 2019-06-... | 41 | | ✓ | Str. |
| _scr | 111545816800000 | www.kaya... | / | 2020-01-... | 20 | | | Str. |
| aackid | 106480517236 | adaraanal... | / | 2020-12-... | 18 | | | |
| anj | dTM7xM4-S4R0E-0zNK... | adrox.com | / | 2019-03-... | 2268 | ✓ | | |
| au | JF4HAC3-1KD2-10.138... | rubiconpr... | / | 2019-03-... | 30 | | | |
| audit | *ATpcaoQrQHPPY1Ps... | pixel.rubic... | / | 2019-12-... | 115 | | | |
| audit | *ATpcaoQrQHPPY1Ps... | rubiconpr... | / | 2018-11-... | 115 | | | |
| fbclid | 13e017e0d11b1198b0f... | rubiconpr... | / | 2019-03-... | 7 | | | |
| ckid | 106480517236 | adaraanal... | / | 2020-12-... | 16 | | | |

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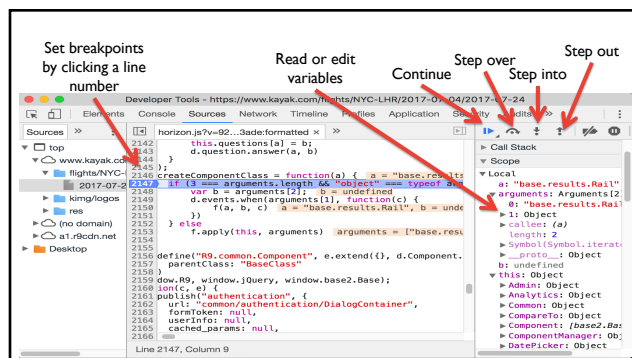
Debugging JavaScript

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Find all JavaScript source under Sources



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Examine traffic on the Network tab

Shows each resource requested, its HTTP method, result, type, and speed

| Name | Met... | Status | Type | Initiator | Size | T Timeline |
|--|--------|--------|-------------------|-----------------------------------|---------|------------|
| lidar.js | GET | 200 | text/javascript | 320_0_c3Q9aHrbC2hYTOxMjksNTc3L... | 21... | 2... |
| 320_0_c3Q9aHrbC2hYTOxMjksNTc3L... | GET | 200 | text/javascript | Other | 5.5... | 8... |
| imp.js?bt=1430498756836aah=1&w... | GET | 200 | application/ja... | Other | 5.9... | 11... |
| en.js | GET | 200 | application/x... | imp.js?bt=14304... | 861 B | 71... |
| beacon.js?c1=88c2=6820648&c3=16c... | GET | 200 | application/x... | imp.js?bt=14304... | 994 B | 6... |
| rfacNew.js | GET | 200 | application/x... | imp.js?bt=14304... | 22... | 11... |
| dfa7banner_flash_html_inpage_renderin... | GET | 200 | text/javascript | 320_0_c3Q9aHrbC2hYTOxMjksNTc3L... | (fro... | 0... |
| modernizr_2.8.3_ec185bb44fe5e6b74... | GET | 304 | text/javascript | 320_0_c3Q9aHrbC2hYTOxMjksNTc3L... | 0 B | 5... |
| lidar.js | GET | 304 | text/javascript | 320_0_c3Q9aHrbC2hYTOxMjksNTc3L... | 0 B | 31... |
| beacon.js?c1=88c2=6820648&c3=16c... | GET | 200 | application/x... | imp.js?bt=14304... | (fro... | 0... |
| en.js | GET | 200 | application/x... | imp.js?bt=14304... | (fro... | 0... |
| beacon.js | GET | 200 | application/x... | 2015-07-24.23 | 1.4... | 5... |

48 / 145 requests | 717 KB / 1.3 MB transferred | Finish: 9.37 s | DOMContentLoaded: 2.45 s | Load: 7.15 s

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