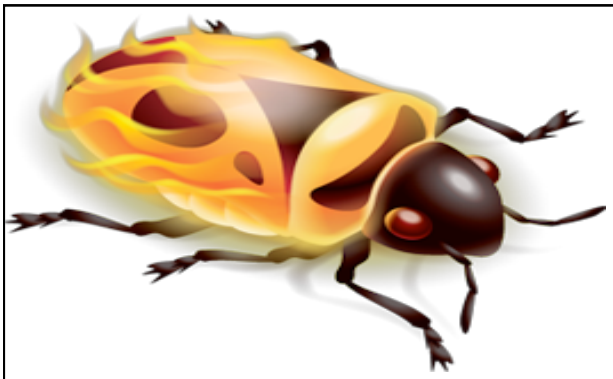
JavaScript Debugging

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

JavaScript runs in the browser so it must be debugged in the browser



Firebug was the trailblazer for debuggers

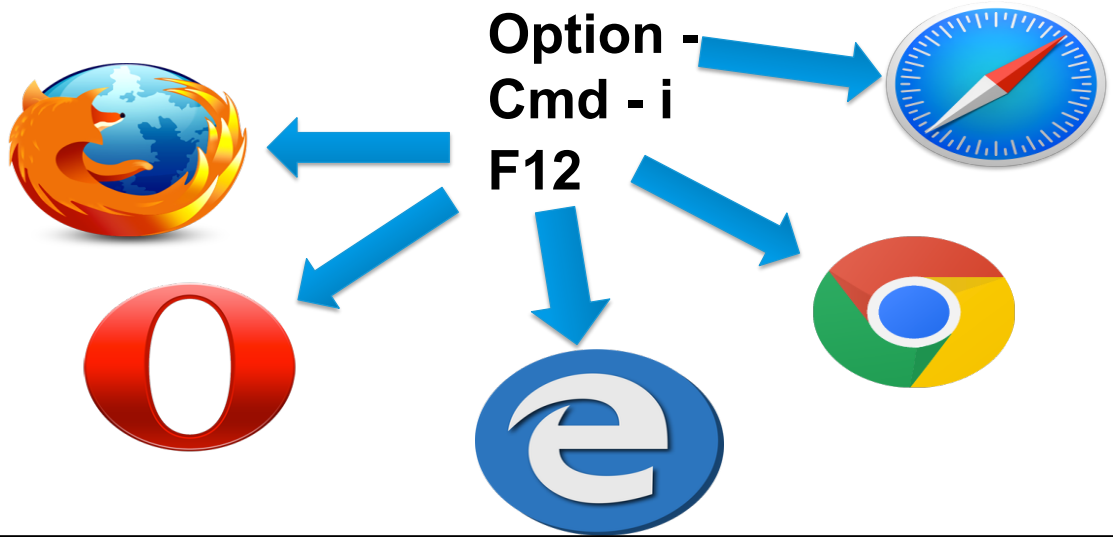
It's the original Firefox add-on

Needed to be installed

But now merged with built-in Firefox tools

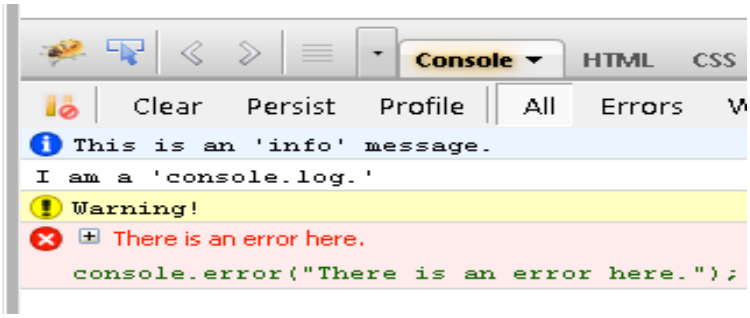
But all browsers have debuggers baked in

- No need for installs and extra packages



We can send messages to the console

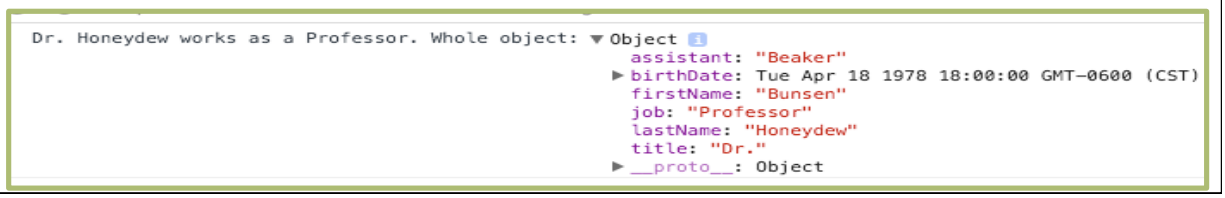
```
console.info("This is an 'info' message.");
console.log("I am a 'console.log.'");
console.warn("Warning!");
console.error("There is an error here.")
```



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

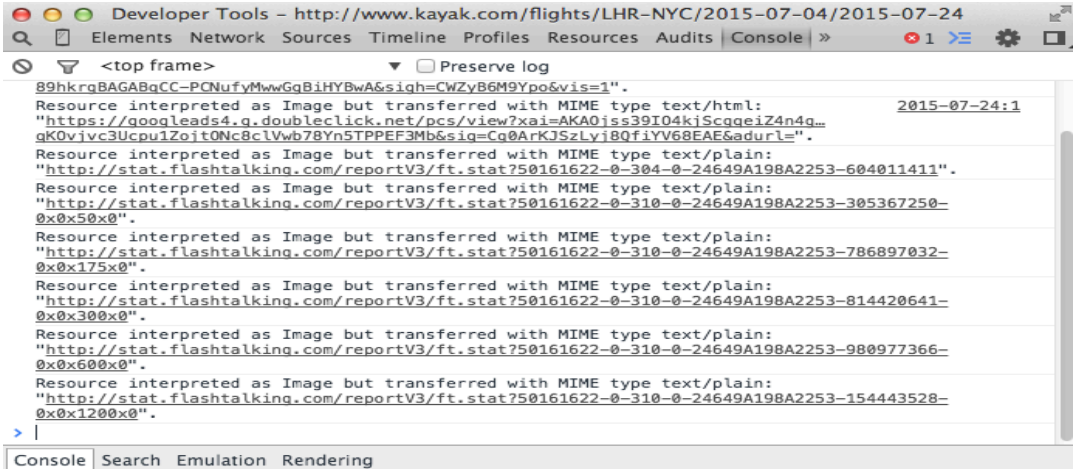
- %s - string
- %f - floating point number
- %d or %i - integer
- %o - Expandable DOM object
- %O - Expandable JavaScript object

console.log can format



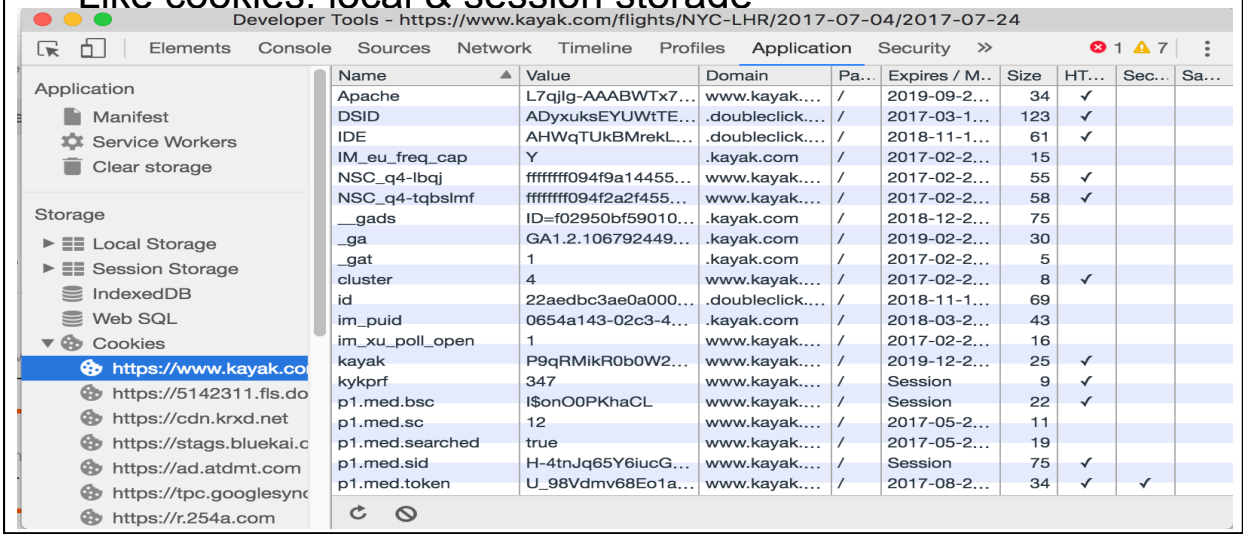
All Browsers Tools Work Pretty Much Alike

- Let's see how Chrome works differently. This'll give us clues as to how the others work



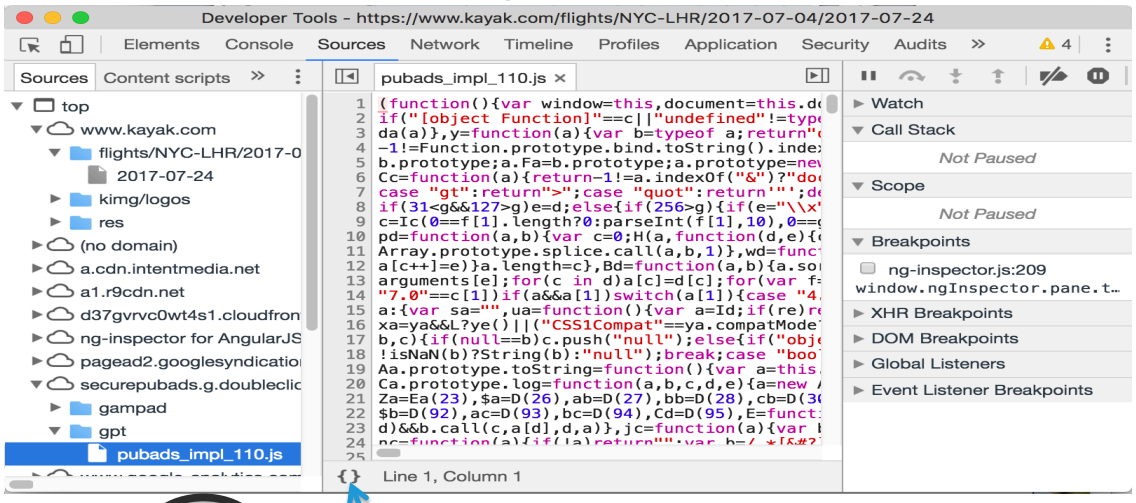
Application shows memory storage

Like cookies, local & session storage

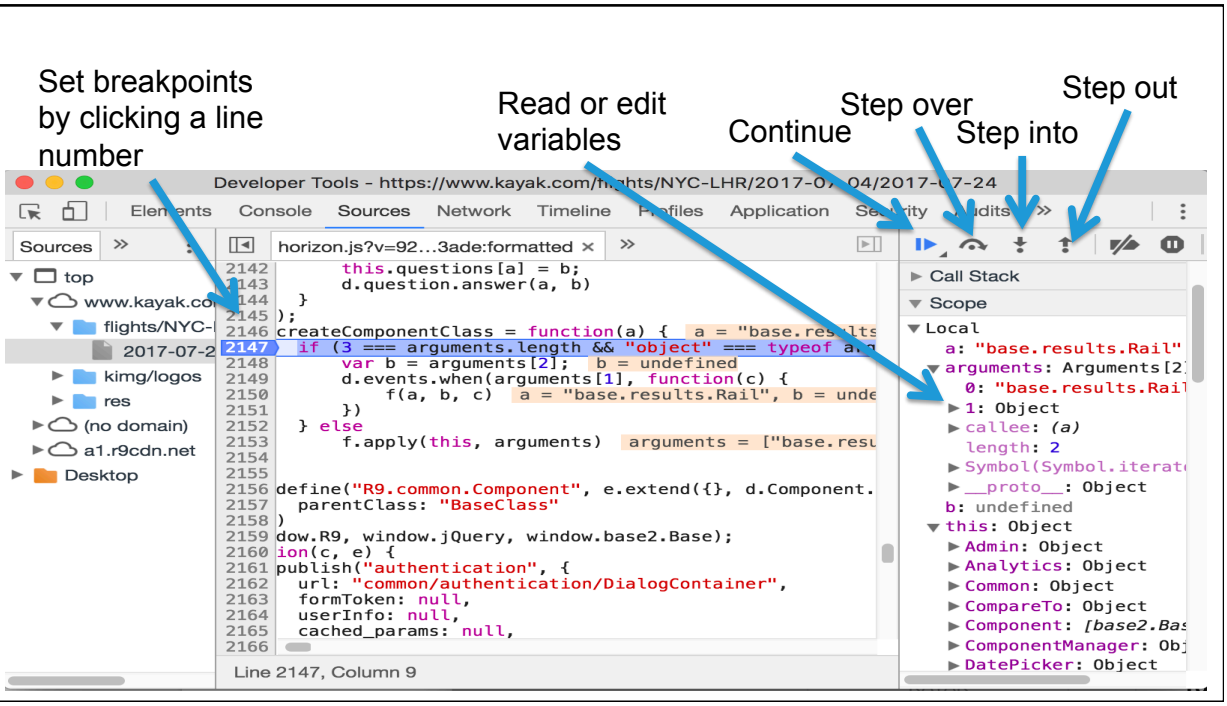


Debugging JavaScript

Find all JavaScript source under Sources

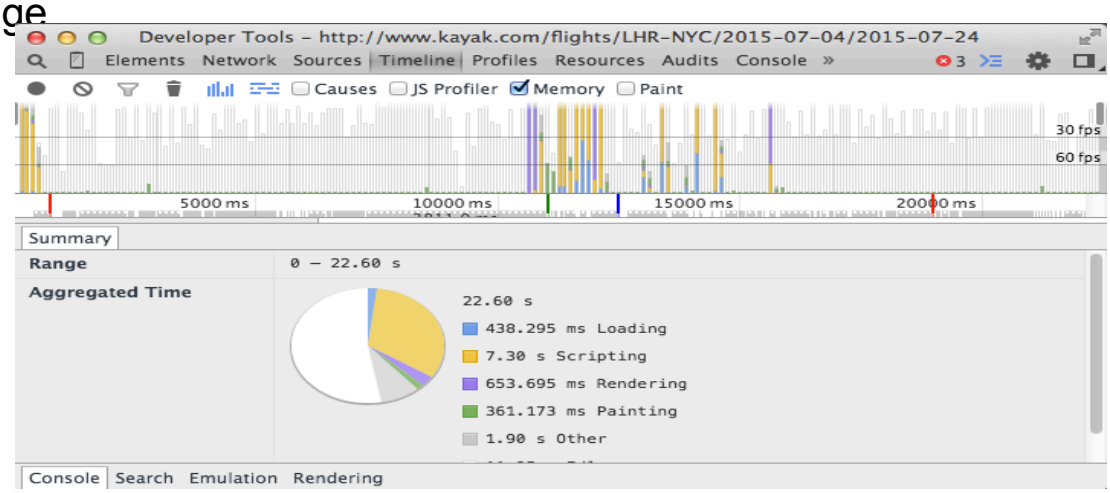


Click "pretty print" to de-minify the code.



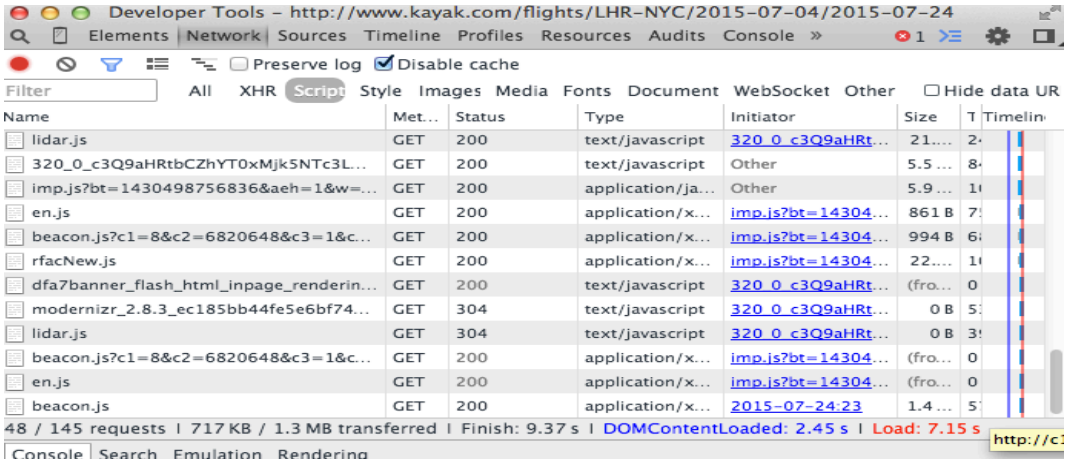
Timeline and Profiles are for performance

They allow watching the speed and memory usage of your page



Examine traffic on the Network tab

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



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