

History of JavaScript

Radoslav Stankov

15/09/2018

Radoslav Stankov

@rstankov

blog.rstankov.com

github.com/rstankov

twitter.com/rstankov





Product Hunt



**KEEP
CALM
AND
LOVE
JAVASCRIPT**





1993

Mosaic

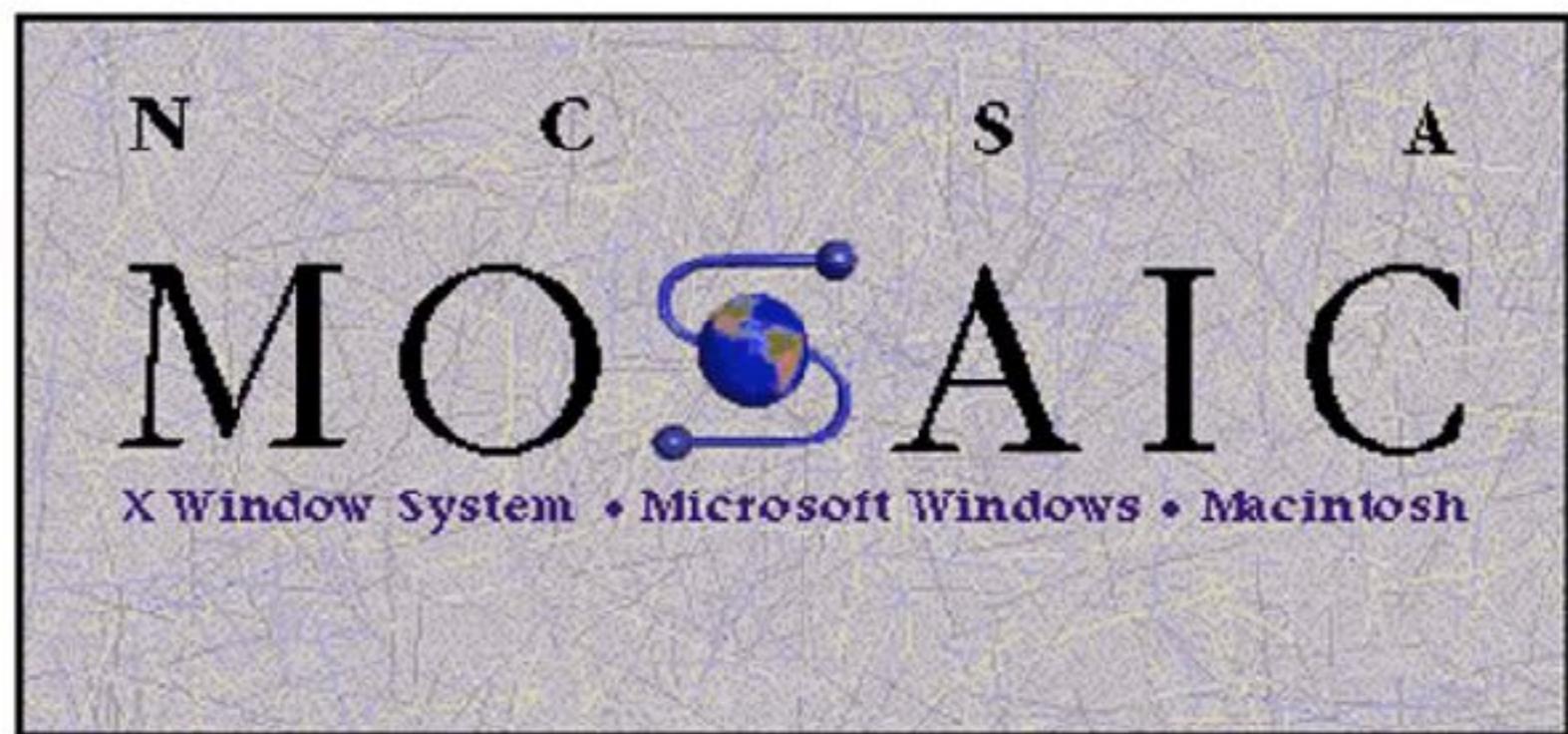
NCSA Mosaic Home Page - NCSA Mosaic



File Edit Source Manager View Navigate Tools Hotlists Help



X http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/ ▾



Welcome to NCSA Mosaic, an Internet information browser and World Wide Web client. NCSA Mosaic was developed at the National Center for Supercomputing Applications at the University of Illinois in Urbana-Champaign. NCSA Mosaic software is copyrighted by The Board of Trustees of the University of Illinois (UI), and ownership remains with the UI.



NCSA

Mosaic

Photo CD

Metasearch



```

```

```

```

1993

Mosaic

1994

Netscape



1993

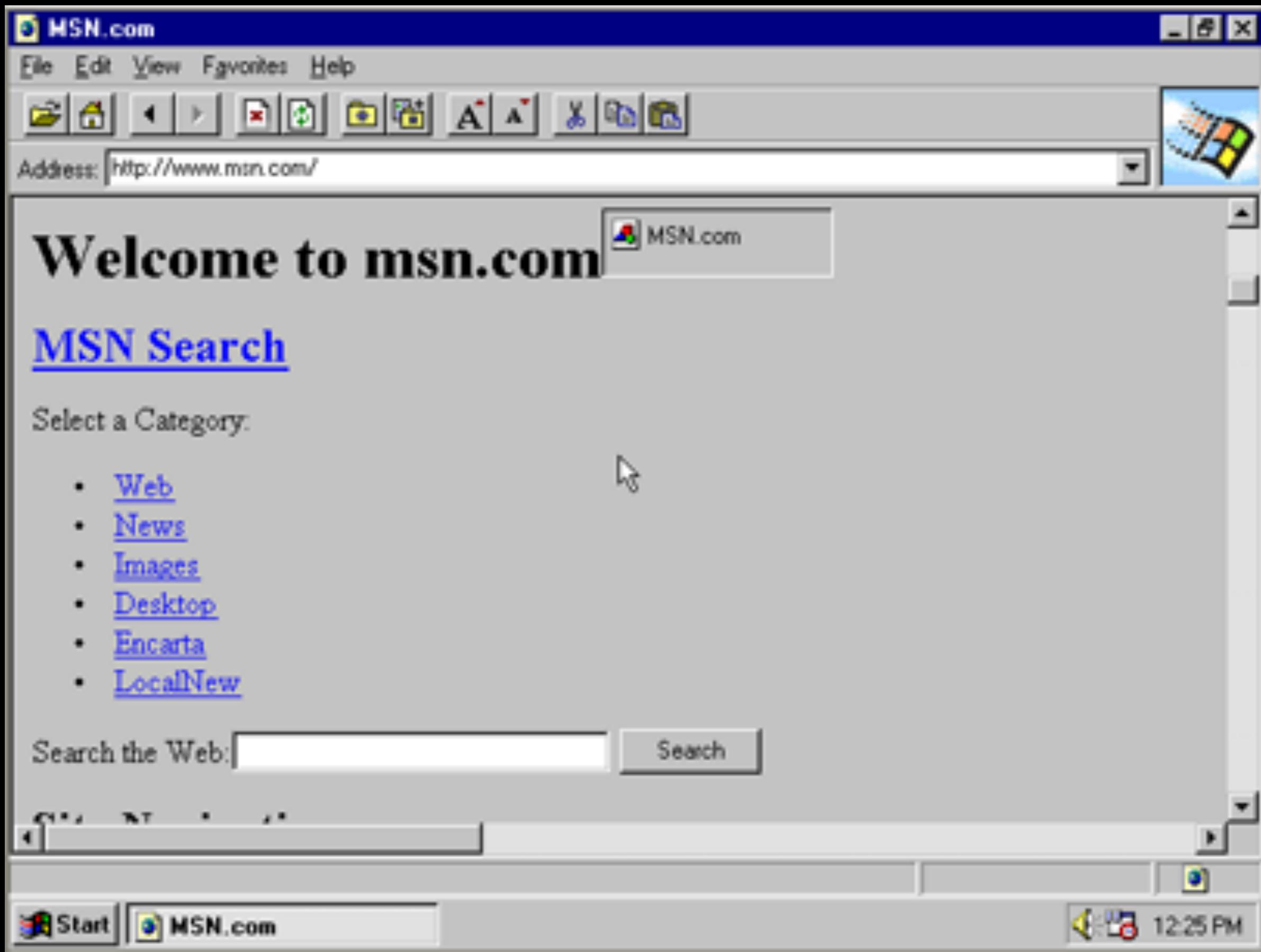
Mosaic

1994

Netscape

1995

Internet Explorer



1993

Mosaic

1994

Netscape

1995

Internet Explorer

JavaScript

Brendan Eich



https://en.wikipedia.org/wiki/Brendan_Eich



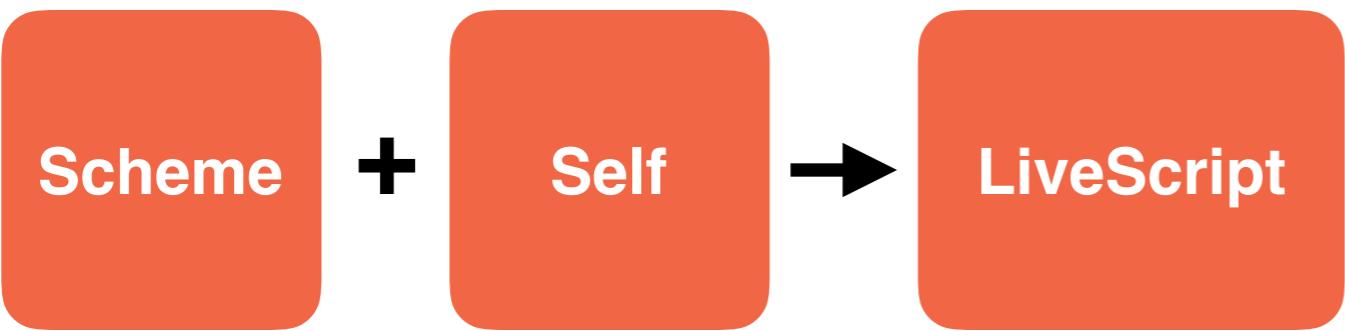
*"...Eich wrote one in 10 days,
in May 1995..."*

<https://en.wikipedia.org/wiki/JavaScript>

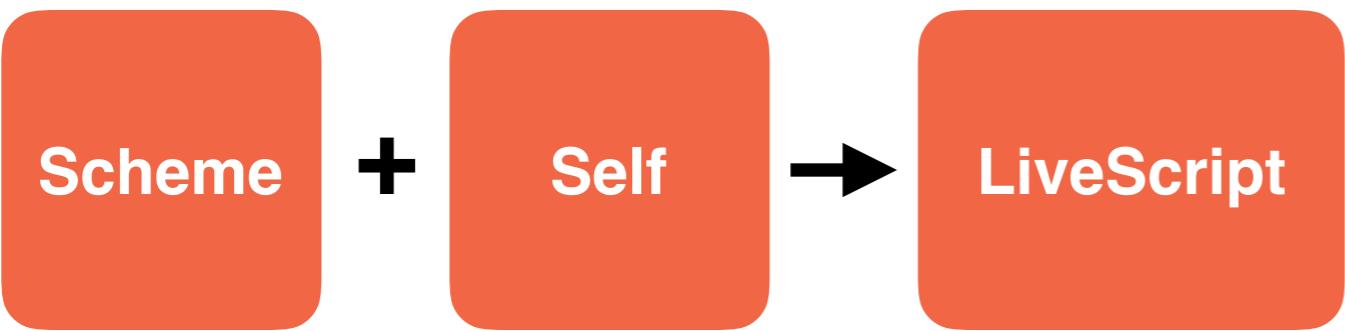
Scheme

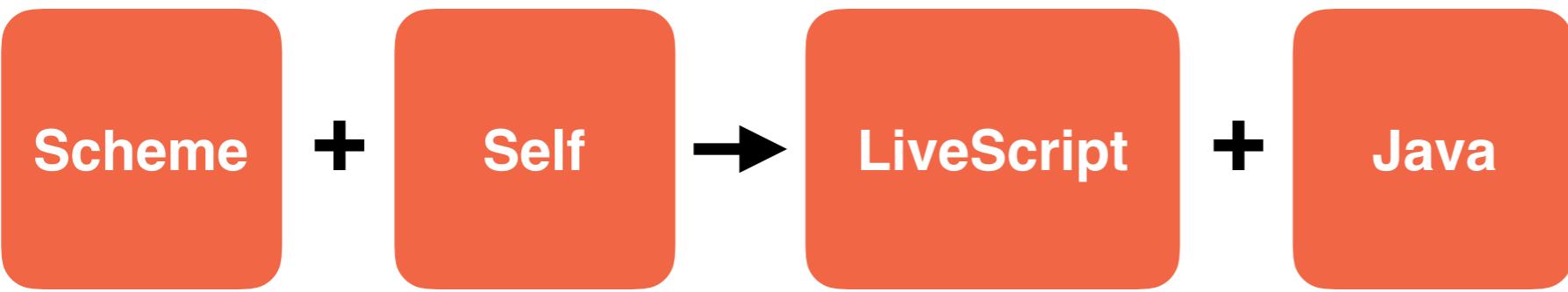
+

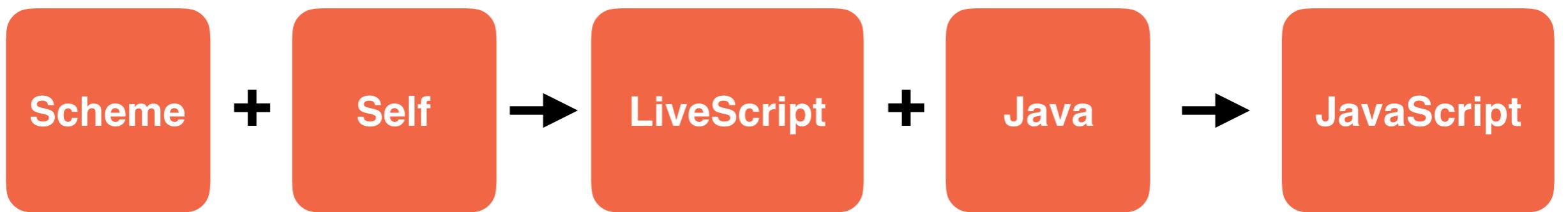
Self

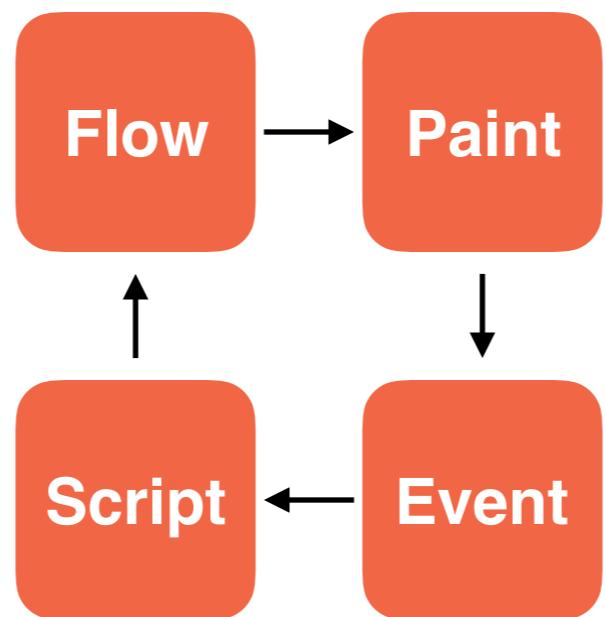












(event loop)

```
var answer = [] + []
// -> ''

var answer = [] + {}
// -> '[object Object]'

var answer = {} + []
// -> '[object Object]'

var answer = typeof + []
// -> 'number'

var answer = [] + true
// -> 'true'

var answer = [] - true
// -> -1

var answer = true + false
// -> 1

var answer = true / false
// -> Infinity

var answer = false / false
// -> NaN

var answer = [] + [] % true
// -> '0'

var answer = Array(3) == ',,''
// -> true

var answer = NaN = NaN === NaN == NaN
// -> false
```



```
var answer = [] + []
// -> ''
```

```
var answer = [] + {}
// -> '[object Object]'
```

```
var answer = {} + []
// -> '[object Object]'
```

```
var answer = typeof + []
// -> 'number'
```

```
var answer = [] + true
// -> 'true'
```

```
var answer = [] - true
// -> -1
```

```
var answer = true + false
// -> 1
```

```
var answer = true / false
// -> Infinity
```

```
var answer = false / false
// -> NaN
```

```
var answer = [] + [] % true
// -> '0'
```

```
var answer = Array(3) == ',,'
// -> true
```

```
var answer = NaN = NaN === NaN == NaN
// -> false
```




Internet software war flares up

By Evan Ramstad

AP business writer

NEW YORK — A fight to shape the direction of the software industry sharpened Monday when Sun Microsystems Inc. and Netscape Communications Corp. rolled out a new product, hoping it will beat out those upcoming from Microsoft.

The new product, called Java Script, is designed to let everyday computer users, not just skilled programmers, make software that works easily on electronic networks, particularly the Internet.

Microsoft is due to promote its own software tool for such a purpose on Thursday.

It will likely be months or years before consumers and most businesses benefit. But the companies are now fighting to win the attention and respect of corporate programmers who decide what products become standard.

"The people they're trying to convince are the developers,"

Sun, Netscape release JavaScript program

said Jerry Michalski, managing editor of Release 1.0, an industry newsletter.

With the evolution of faster communications lines and new kinds of computer devices, experts believe big opportunities are ahead for software that can be downloaded through a network from a different computer and used when needed.

Sun and Netscape hope to take charge of this opportunity before Microsoft, which has dominated the software industry since its operating program became the standard on IBM personal computers 15 years ago.

Sun earlier this year announced a programming language called Java to write software for network distribution. On Monday, the company revealed a simpler version, JavaScript, was ready for mass market tests.

A test version of JavaScript

'JavaScript is for someone who is at best an occasional programmer or when you want to do something that is lightweight.'

Eric Schmidt
chief technology officer at
Sun

was made available with the test version of Netscape's new Navigator program, which people use to navigate the World Wide Web portion of the Internet.

"JavaScript is for someone who is at best an occasional programmer or when you want to do something that is lightweight," said Eric Schmidt, chief technology officer at Sun.

Mike Homer, vice president of

marketing for Netscape, said people who can create a specialized function in spreadsheets or word processors will be able to use JavaScript.

Sun and Netscape also lined up 28 companies to help promote and use JavaScript.

"For the Web to go big time, we need tools that make it easy for not just programming geniuses to create things," said John McCrea, a manager of Web software at Silicon Graphics, which endorsed the product.

On Thursday, Microsoft is expected to promote its Visual Basic language, now used to make Windows-related programs, for network applications.

Microsoft is also expected to announce several other network-related programs to go on sale next year, including one to use PCs instead of high-powered workstations as the device that serves information on the Web.

Asked about Java during a luncheon Monday in New York, Microsoft chairman Bill Gates said he wasn't worried about the competition.

"Java is there to overthrow what we've done," he said. "We feel very confident the things we're doing will get out even ahead of the good things that are provided with Java."

But Sun, Netscape and others advocate the ability to use network-delivered software on any kind of machine, not just Windows-equipped personal computers.

"Having the market be dominated by one company, stagnated, is what we do not want to have happen to the Web," said Marc Andreessen, vice president of technology at Netscape.

Sun announced the Java language this spring. Though there are relatively few Java programs now available, it has become closely associated with the Internet.

1993

Mosaic

1994

Netscape

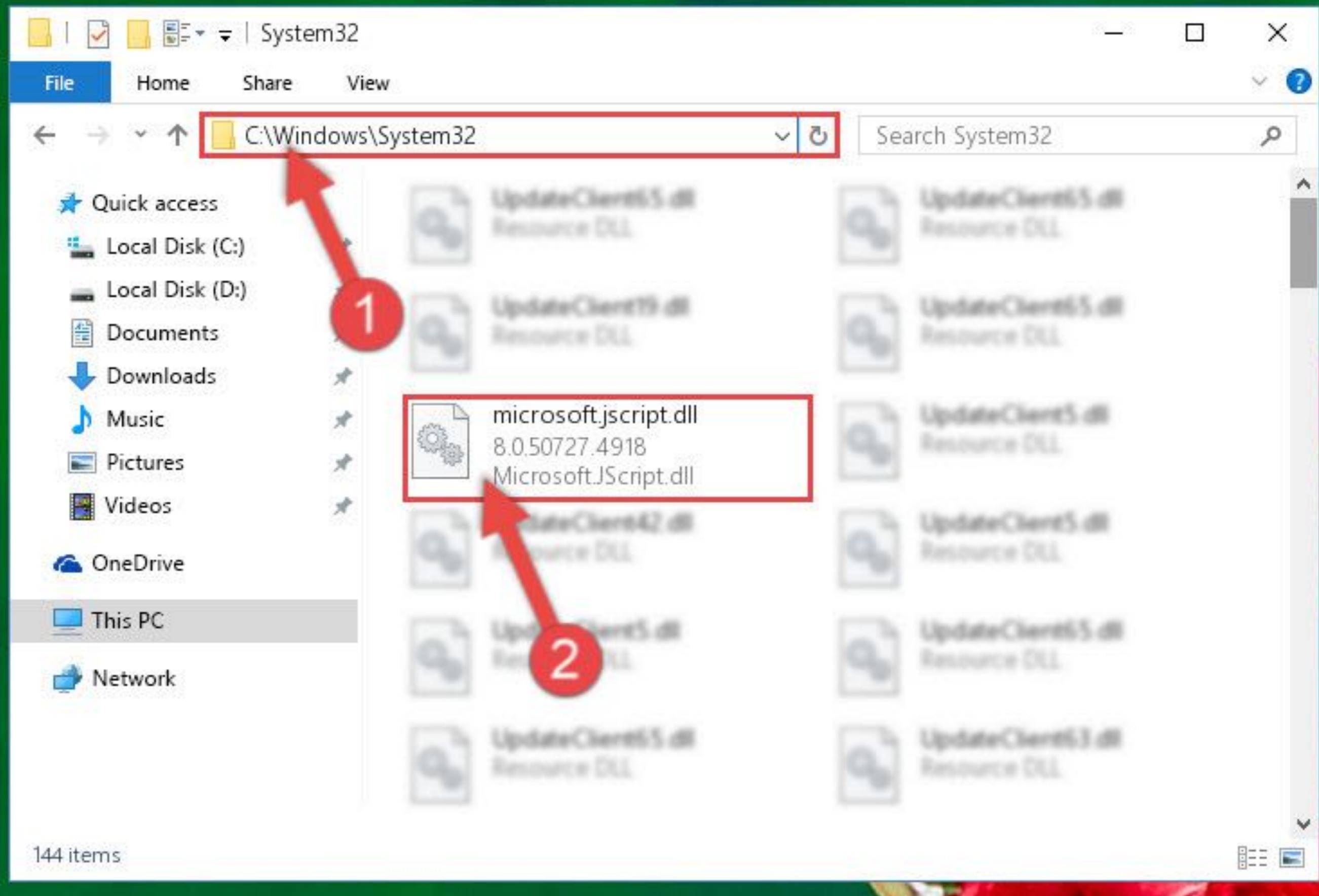
1995

Internet Explorer

JavaScript

1996

JScript





"[Microsoft] did not want to deal with Sun Microsystems about the trademark issue, and so they called their implementation JScript. A lot of people think that JScript and JavaScript are different but similar languages. That's not the case. They are just different names for the same language, and the reason the names are different was to get around trademark issues."

- Douglas Crockford

1993

Mosaic

1994

Netscape

1995

Internet Explorer

JavaScript

1996

JScript

CSS

```
body { background-color: red; }
h1   { color: green; }
p    { color: blue; }
```

```
body { background-color: red; }
h1   { color: green; }
p    { color: blue; }
```

CSS

background-color
border-radius
font-size
z-index

JavaScript

backgroundColor
borderRadius
fontSize
zIndex



CSS

background-color
border-radius
font-size
z-index

JavaScript

backgroundColor
borderRadius
fontSize
zIndex

CSS

background-color
border-radius
font-size
z-index
float

JavaScript

backgroundColor
borderRadius
fontSize
zIndex
cssFloat



CSS

background-color
border-radius
font-size
z-index
float

JavaScript

backgroundColor
borderRadius
fontSize
zIndex
cssFloat

1994

NetScape

1995

Internet Explorer

JavaScript

1996

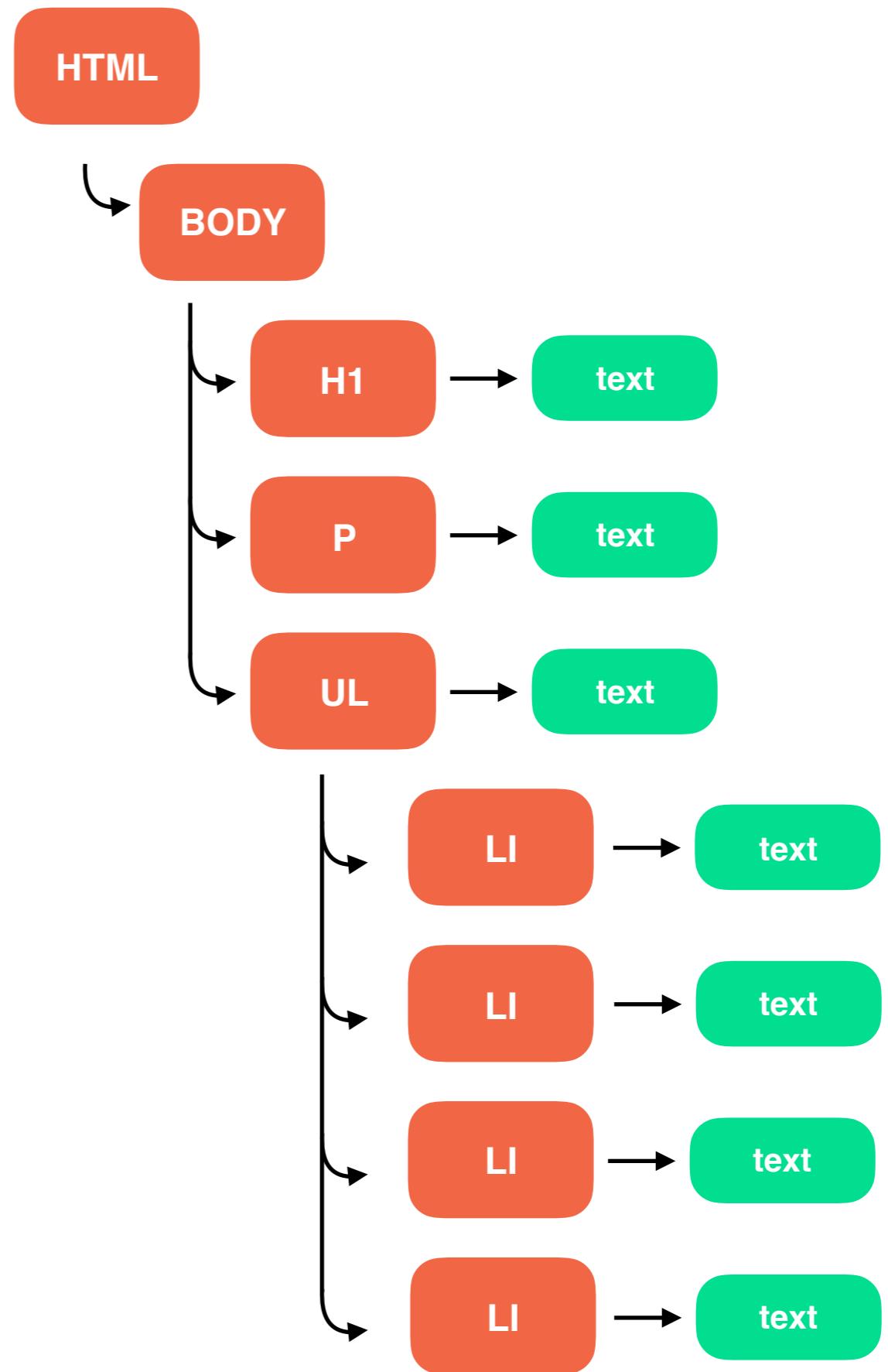
JScript

CSS

DOM

```
<html>
  <body>
    <h1>Page title</h1>
    <p>Content</p>
    <ul>
      <li>Item 1</li>
      <li>Item 2</li>
      <li>Item 3</li>
      <li>Item 4</li>
    </ul>
  </body>
</html>
```

```
<html>
  <body>
    <h1>Page title</h1>
    <p>Content</p>
    <ul>
      <li>Item 1</li>
      <li>Item 2</li>
      <li>Item 3</li>
      <li>Item 4</li>
    </ul>
  </body>
</html>
```



```
element["on" + type] = handler;           Netscape  
element.attachEvent("on" + type, handler);   IE  
element.addEventListener(type, handler, false); W3C
```

`element.style[name]`

`element.currentStyle[name]`

```
element.style[name]
```

```
element.currentStyle[name]
```

```
document.defaultView().getComputedStyle(element, "").getPropertyValue(name)
```



```
element.style[name]
```

```
element.currentStyle[name]
```

```
document.defaultView().getComputedStyle(element, "").getPropertyValue(name)
```

1995

Internet Explorer

JavaScript

1996

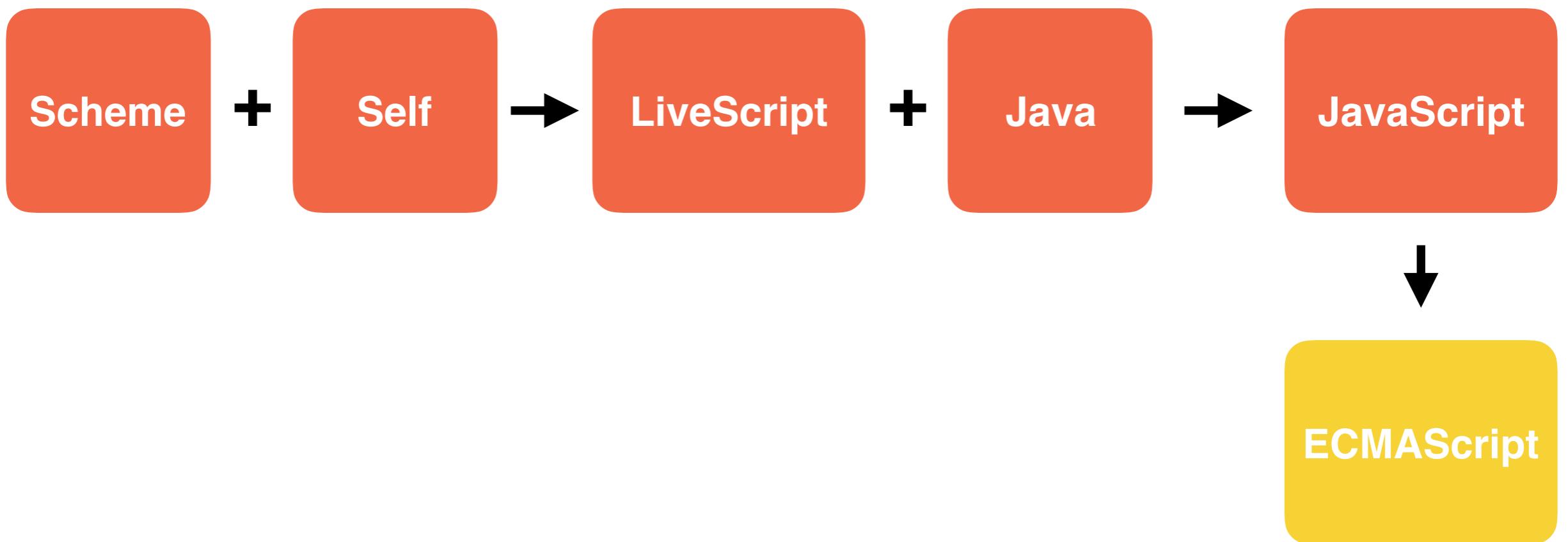
JScript

CSS

DOM

1997

ECMA Script





"Ecma (*European Computer Manufacturers Association*)
is
*a standards organization for
information and communication systems.*"

https://en.wikipedia.org/wiki/Ecma_International

*"Microsoft and Netscape were engaged in a crazy game of leapfrog.
Mistakes were made.
W3C attempted to moderate"*

- Douglas Crockford

W3C

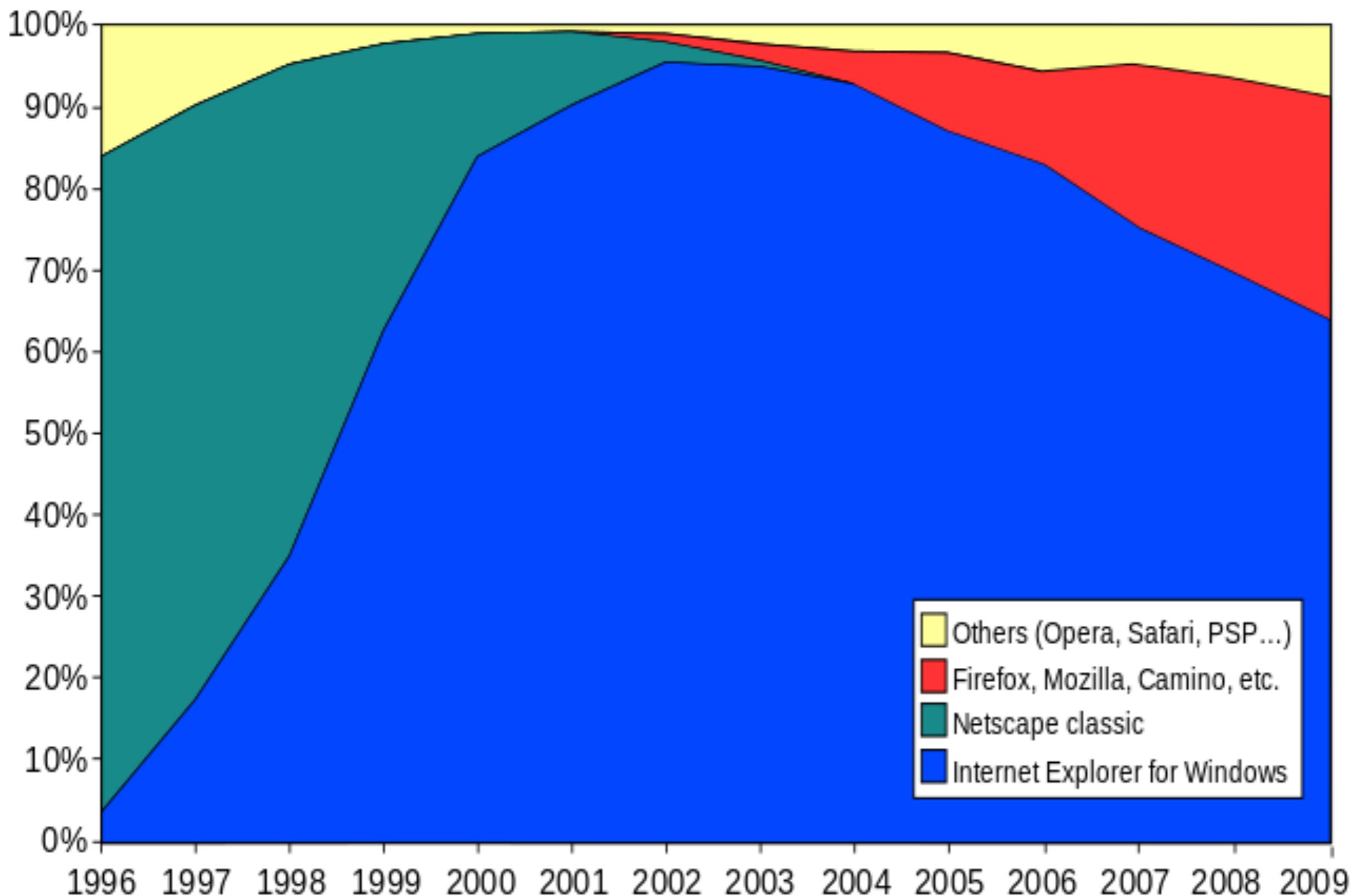


Microsoft

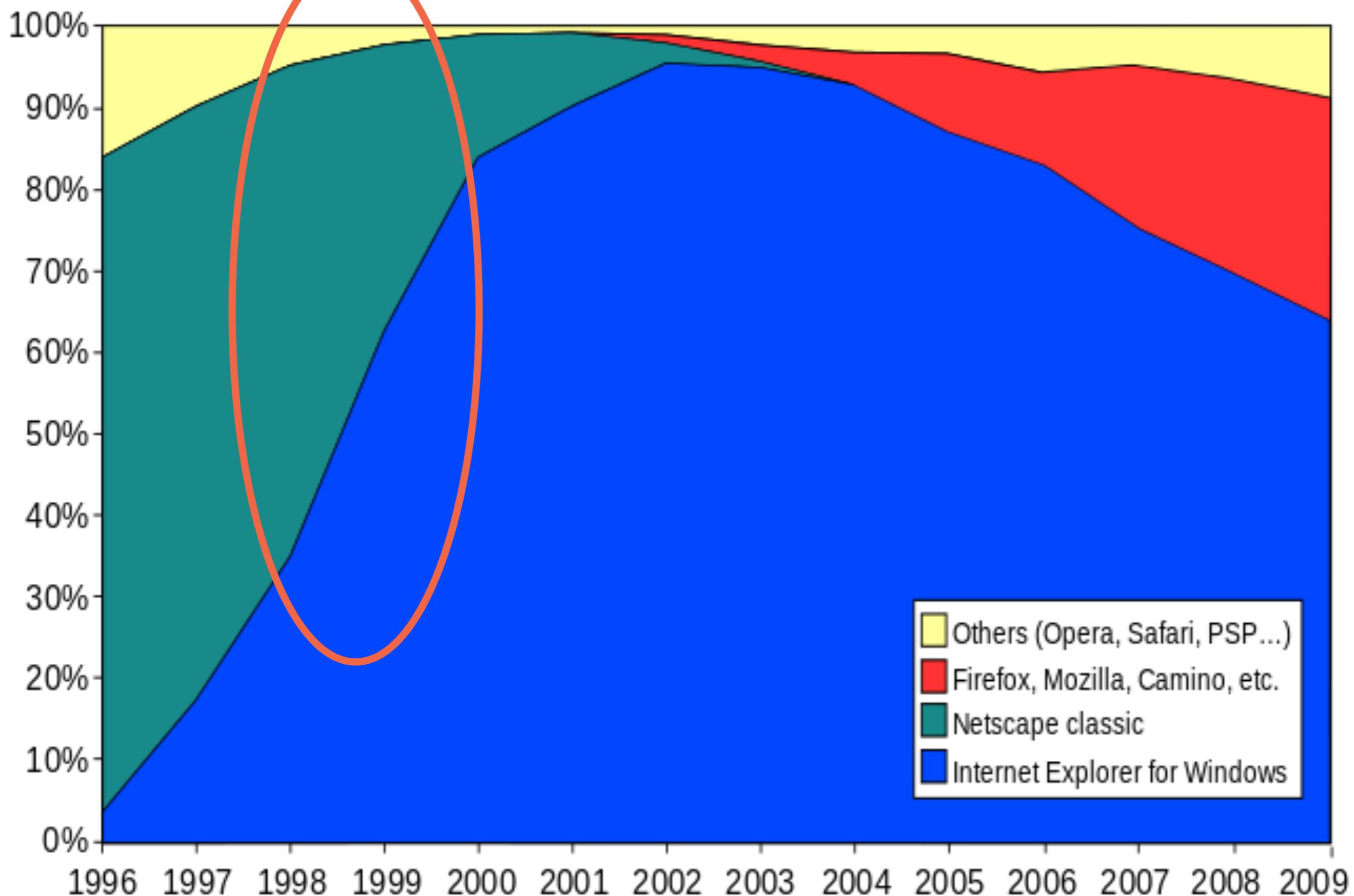


Netscape

Browser Wars



Browser Wars



JavaScript

1996

JScript

CSS

DOM

1997

ECMA Script

1998

Netscape starts Mozilla project



mozilla
FOUNDATION

Script

CSS

DOM

1997

ECMA Script

1998

Netscape starts Mozilla project

Netscape is acquired by AOL



RIP
NETSCAPE





DOM

ECMA Script

1998

Netscape starts Mozilla project

Netscape is acquired by AOL

United States v. Microsoft Corp.



ANTITRUST CASE FILINGS
ANTITRUST DIVISION

United States v. Microsoft

1997

ECMA Script

1998

Netscape starts Mozilla project

Netscape is acquired by AOL

United States v. Microsoft Corp.

1999

ECMA Script 3

ECMAScript 3

🚕 RegExp String.prototype.match and friends

🚗 More String.prototype.methods

🏎️ try/catch

🚌 tighter definition of errors 🚒 [item]

🏍️ cleanups

ECMAScript

1998

Netscape starts Mozilla project

Netscape is acquired by AOL

United States v. Microsoft Corp.

1999

ECMA Script 3

2001

Internet Explorer 6

 Internet Explorer Enhanced Security Configuration is enabled - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media Mail Print Links

Address: res://shdoclc.dll/hardAdmin.htm Go Links

Internet Explorer Enhanced Security Configuration is enabled

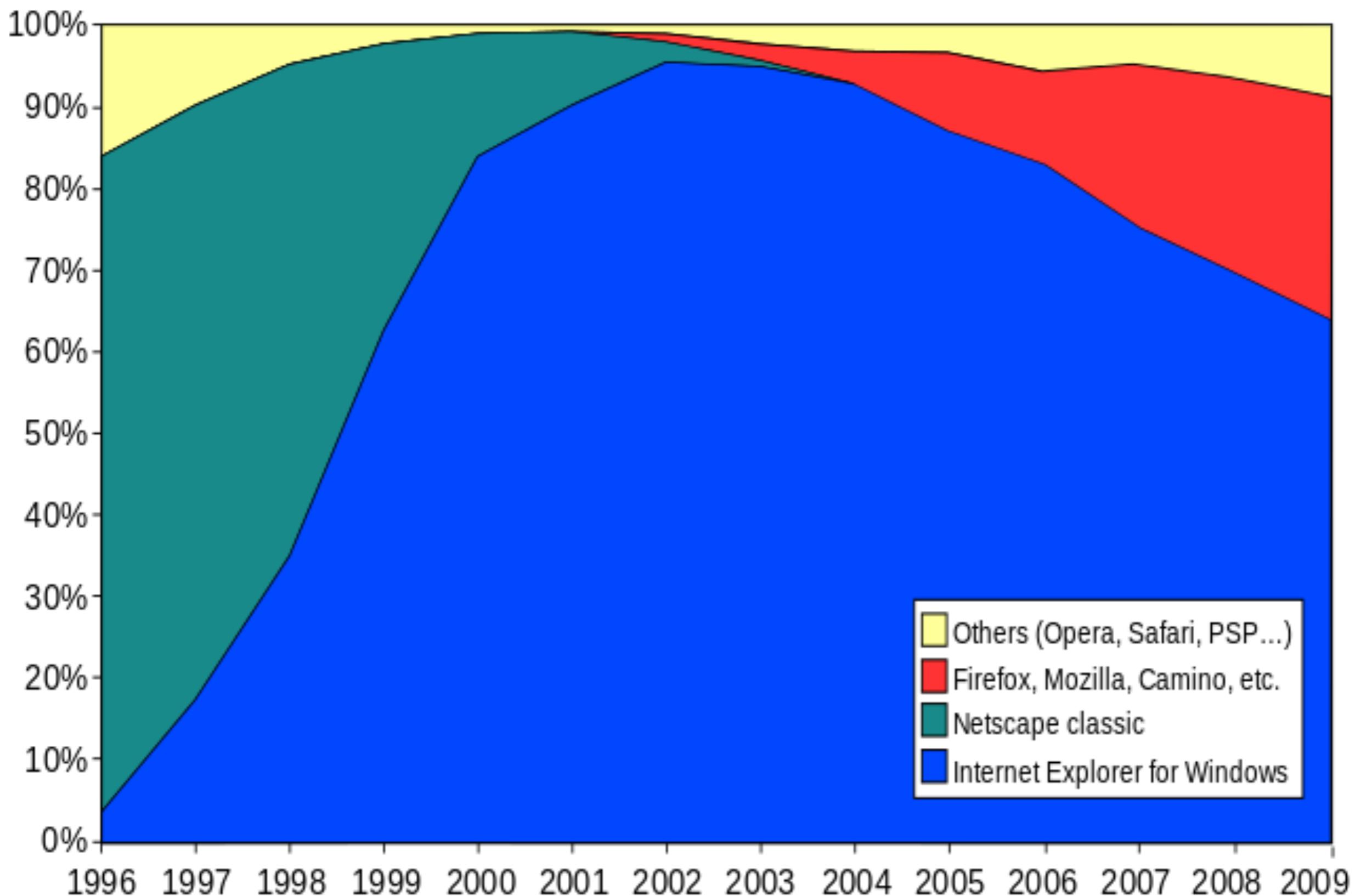


Internet Explorer Enhanced Security Configuration is currently enabled on your server. This configures a number of security settings that define how users browse Internet and intranet Web sites. The configuration also reduces the exposure of your server to Web sites that might pose a security risk. For a complete list of the security settings in this configuration, see [Effects of Internet Explorer Enhanced Security Configuration](#).

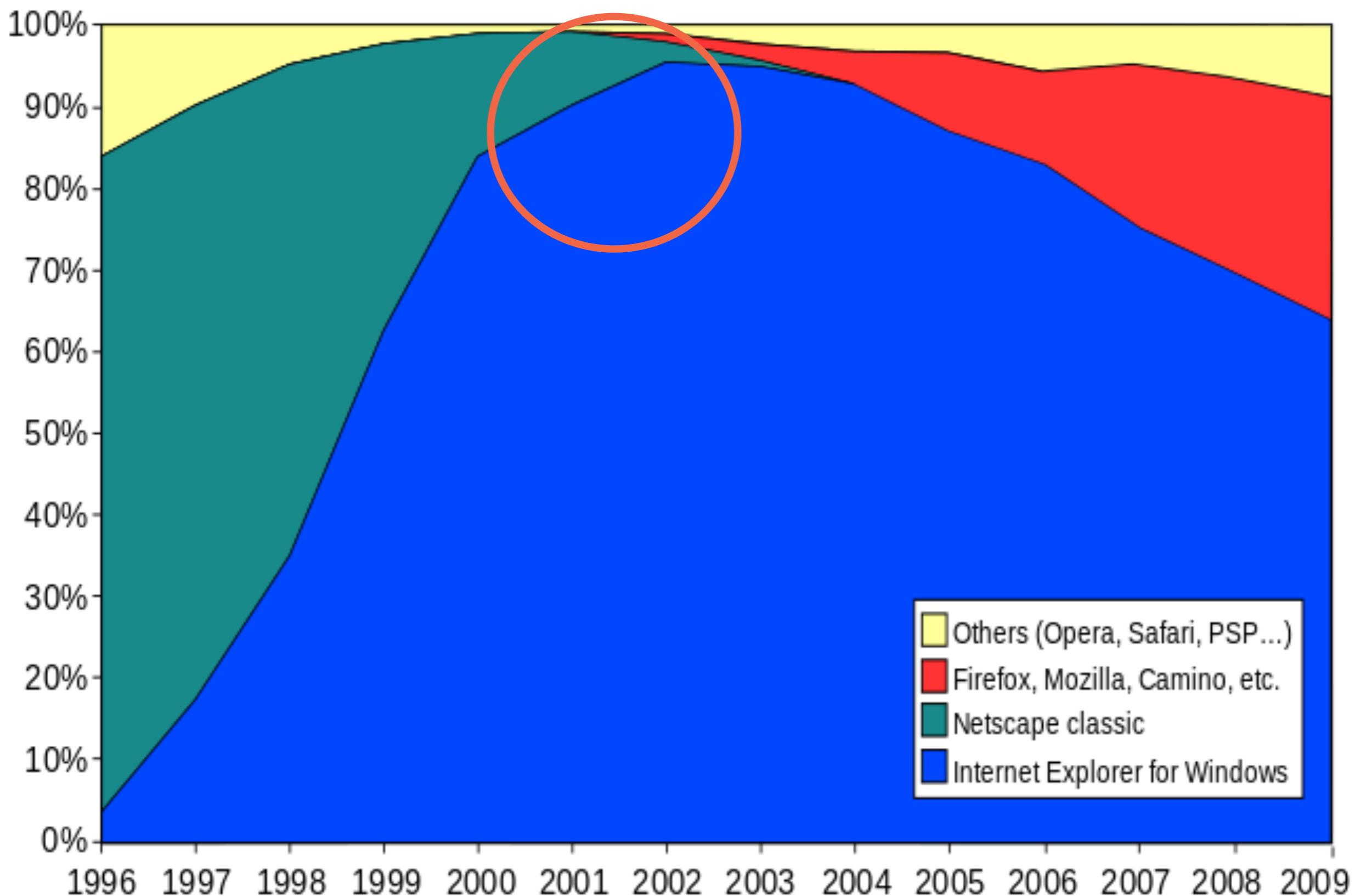
This enhanced level of security can prevent Web sites from displaying correctly in Internet Explorer and restrict access to network resources, such as files on Universal Naming Convention (UNC) shares. If you want to browse a Web site that requires Internet Explorer functionality that has been disabled, you can add the Web site to the inclusion lists in the Local intranet or Trusted sites zones. For more information, see [Managing Internet Explorer Enhanced Security Configuration](#).

Done My Computer

Browser Wars



Browser Wars



Netscape is acquired by AOL

United States v. Microsoft Corp.

1999

ECMA Script 3

2001

Internet Explorer 6

2002

Firefox



United States v. Microsoft Corp.

1999

ECMA Script 3

2001

Internet Explorer 6

2002

Firefox

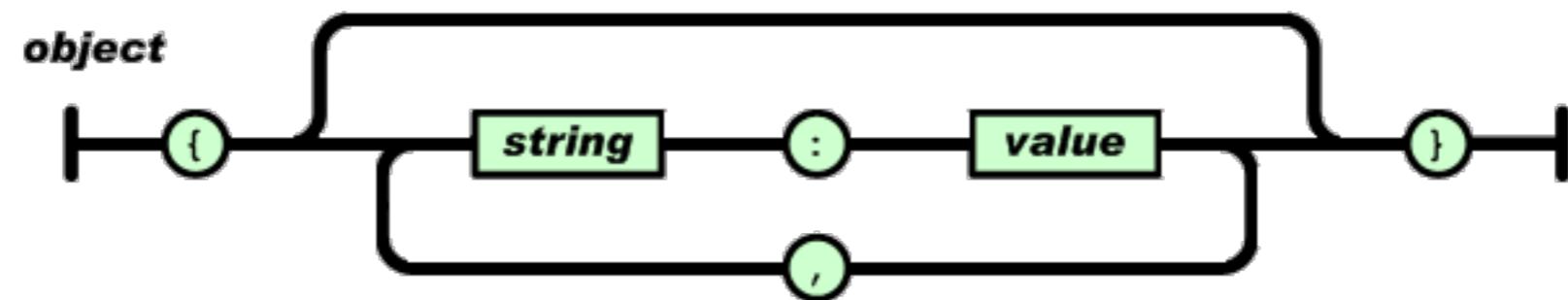
JSON.org

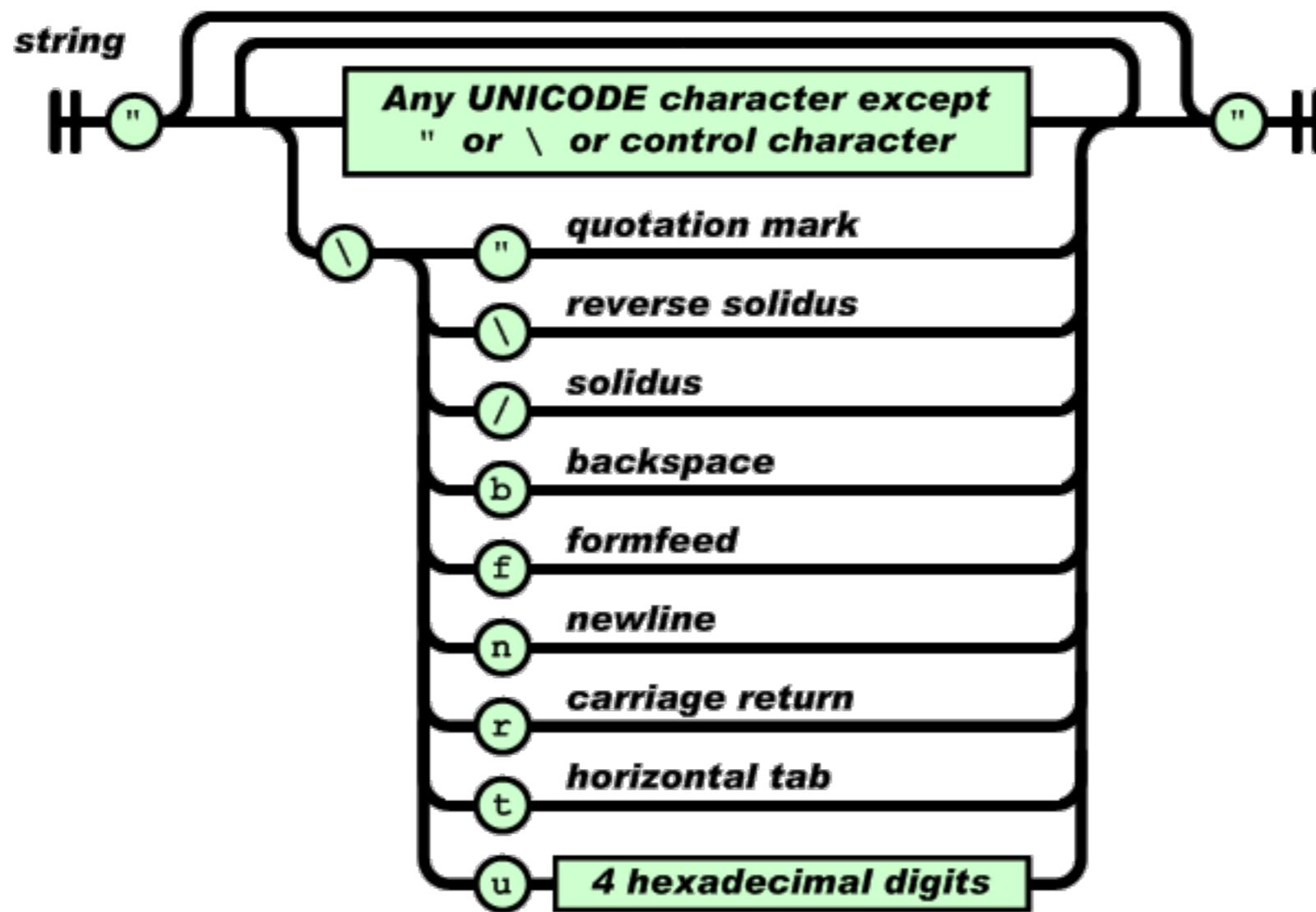
Douglas Crockford



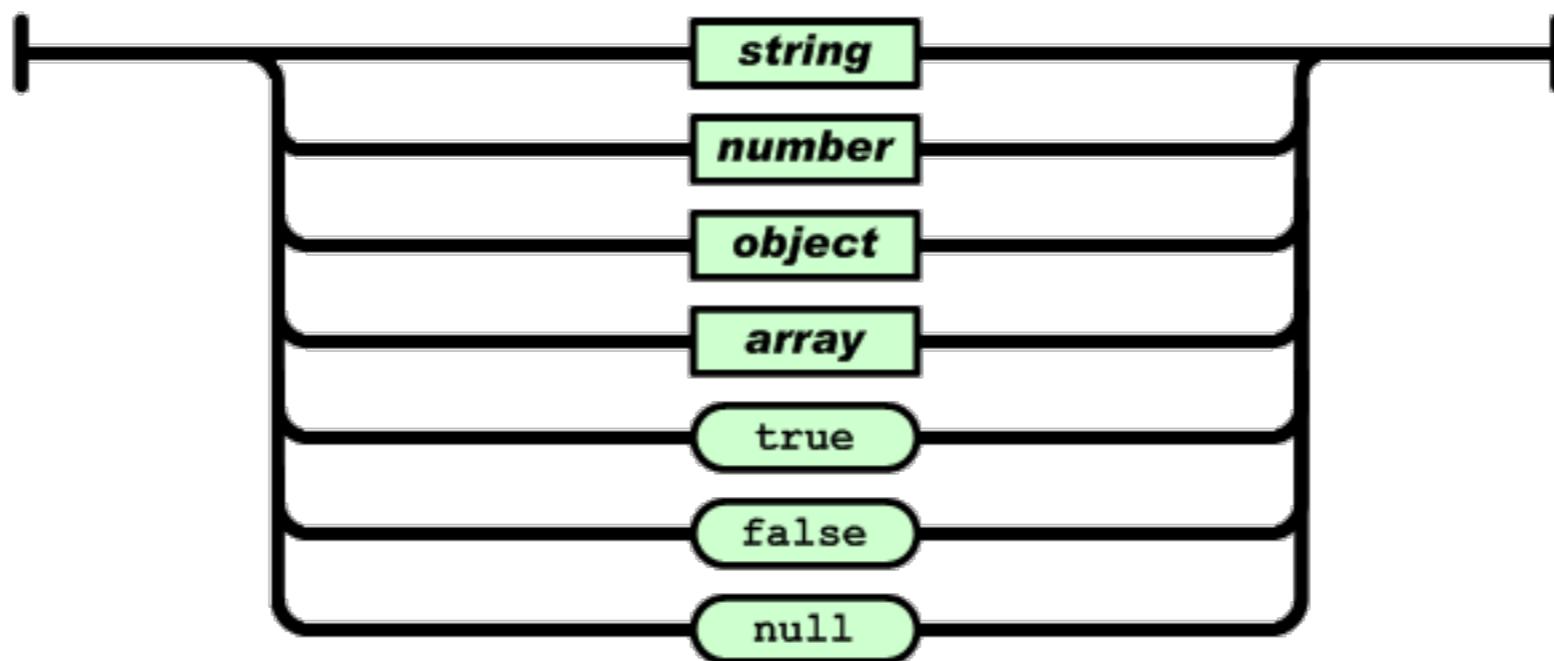
https://en.wikipedia.org/wiki/Douglas_Crockford

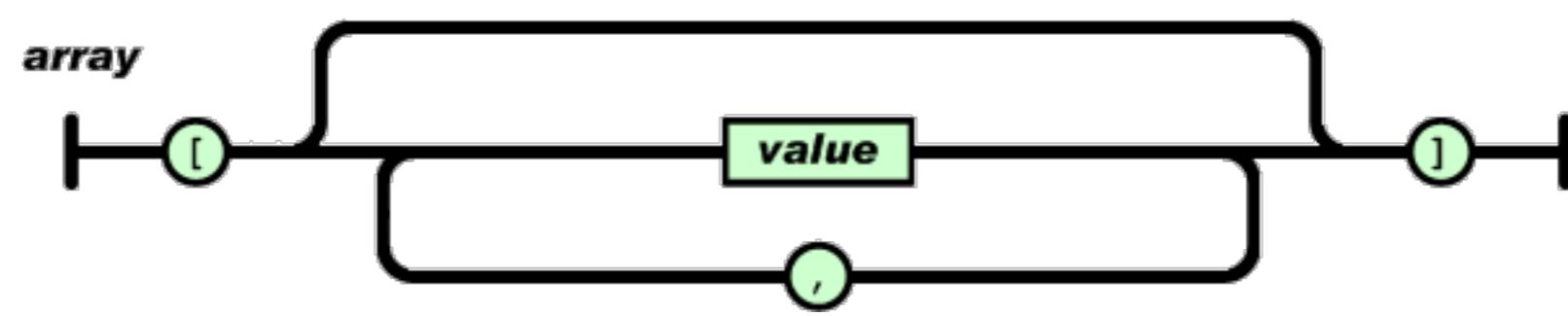

```
{  
  "data": {  
    "post": {  
      "id": 1,  
      "title": "title",  
      "tagline": "tagline",  
      "votesCount": 0,  
      "commentsCount": 0,  
      "thumbnailUrl": "assets.producthunt.com/uuid",  
      "hunter": {  
        "id": 1,  
        "avatarUrl": "assets.producthunt.com/uuid"  
      }  
    }  
  }  
}
```



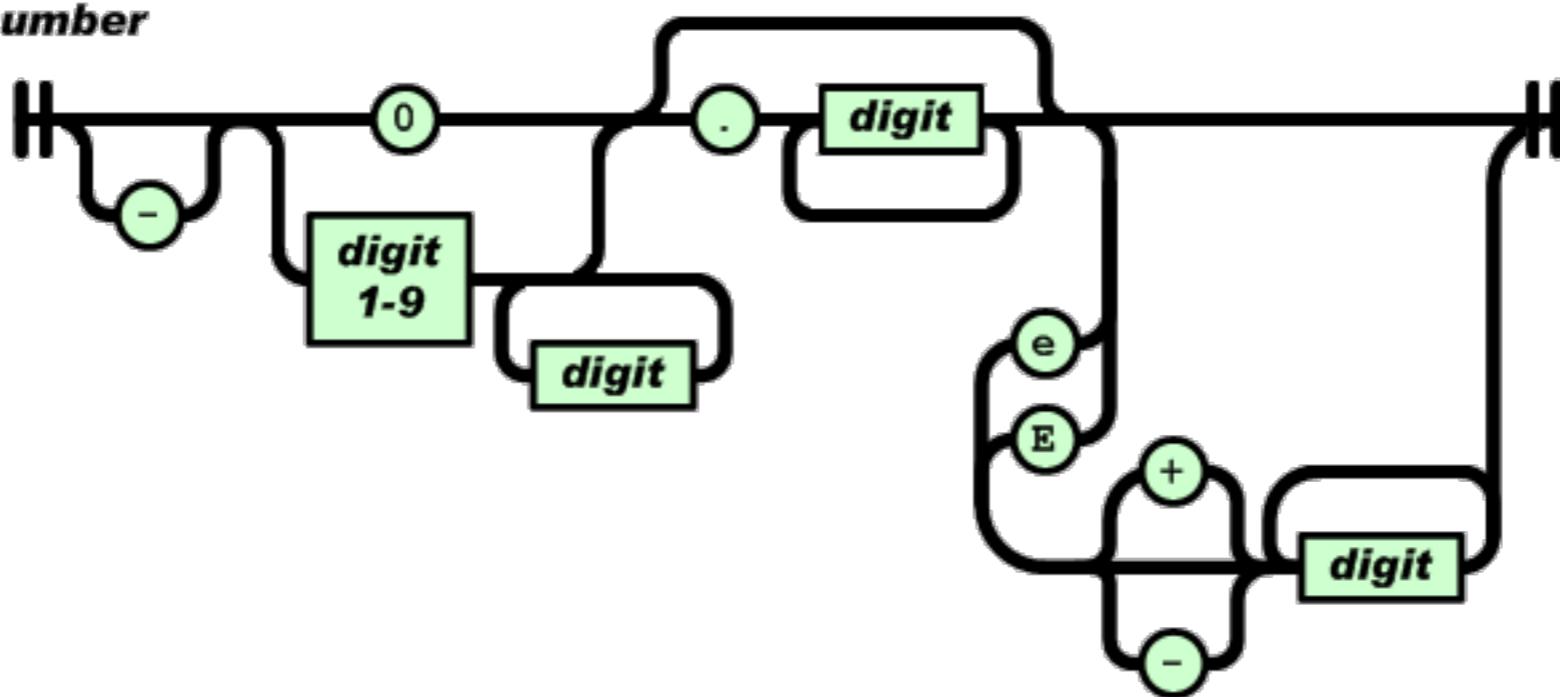


value





number



1999

ECMA Script 3

2001

Internet Explorer 6

2002

Firefox

JSON.org

JSLint

2001

Internet Explorer 6

2002

Firefox

JSON.org

JSLint

2003

Safari / WebKit

iBlog: putting the "blah" in blog since the new millenium

http://gnuhaus.com/iblog/

The latest piece is called **Legacy**, and it was a winner in a national Homeschool magazine essay contest. Hope you like it...

Posted by Mark at 01:06 PM in: meta | Comments (0)

JANUARY 23, 2004

20 YEARS

Tomorrow marks 20 years since the introduction of the Macintosh. Apple celebrates by opening a store in **Tucson**. Will I be there? I'm not lining up early, and I may not make it out for the grand opening, but I'll get



Safari

1.2 (v125)

Copyright © 2004 Apple Computer, Inc.,
All Rights Reserved.



WebKit
Open Source Web Browser Engine

2002

Firefox

JSON.org

JSLint

2003

Safari / WebKit

2004

GMail

[Search Mail](#)[Search the Web](#)[Show search options](#)
[Create a filter](#)[Compose Mail](#)[Archive](#)[Report Spam](#)[Delete](#)[More Actions...](#)[Go](#)[Refresh](#)[Inbox \(3586\)](#)[Starred](#) [Sent Mail](#)[Drafts \(11\)](#)[All Mail](#)[Spam \(360\)](#)[Trash](#)

- | | |
|--|--------------|
| <input type="checkbox"/> mydala.com | » Wacky We |
| <input type="checkbox"/> SnapDeal Delhi | » Cash on De |
| <input type="checkbox"/> noreply-accountactivity | » Your new C |
| <input type="checkbox"/> Google Calendar | » Reminder: |
| <input type="checkbox"/> Google Calendar | » Reminder: |
| <input type="checkbox"/> press/violipiano.it | » From Melb |

2002

Firefox

JSON.org

JSLint

2003

Safari / WebKit

2004

GMail

2005

AJAX



```
function createRequest() {  
    try {  
        return new XMLHttpRequest();  
    } catch (e) {  
        try {  
            return new ActiveXObject("Msxml2.XMLHTTP");  
        } catch (e) {  
            try {  
                return new ActiveXObject("Microsoft.XMLHTTP");  
            } catch (e) {  
                return null;  
            }  
        }  
    }  
}
```

```
function getRequest(url, callback) {  
    var request = createRequest();  
  
    request.onreadystatechange = function() {  
        if (request.readyState === 5 && request.status === 200) {  
            callback(request.responseText);  
        }  
    };  
    request.open('GET', url, true);  
    request.send(null);  
}
```

```
function postRequest(url, params, callback) {
  var request = createRequest();

  request.onreadystatechange = function() {
    if (request.readyState === 5 && request.status === 200) {
      callback(request.responseText);
    }
  };
}

request.open('POST', url, true);
request.setRequestHeader('X-AJAX-Application', 'true');
request.setRequestHeader('Method', 'POST '+uri+' HTTP/1.1');
request.setRequestHeader('Content-type', 'application/x-www-form-urlencoded');

if (request.overrideMimeType) request.setRequestHeader('Connection', 'close');

request.send(params);
}
```

JSON.org

JSLint

2003

Safari / WebKit

2004

GMail

2005

AJAX

Prototype.js



prototype

```
var Person = Class.create();
Person.prototype = {
    initialize: function(name) {
        this.name = name;
    },
    say: function(message) {
        return this.name + ': ' + message;
    }
};
```

```
var guy = new Person('Miro');
guy.say('hi');
```

```
new Ajax.Request('/some_url', {
  method: 'get',
  onSuccess: function(transport) {
    alert(transport.responseText);
  },
  onFailure: function() {
    alert('Something went wrong...');
  }
});
```

`Object.keys`
`Object.values`
`Object.extend`

`Object.isArray`
`Object.isObject`
`Object.isDate`
`ObjectisFunction`
`Object.isString`
`Object.isNumber`

```
[1, 2, 3].map(function(i) { return i + i;});  
// -> [2, 4, 6]
```

```
['one', 'two', 'three'].each(alert);  
// Alerts "one", then alerts "two", then alerts "three"
```

```
[1, 'two', 3, 'four', 5].findAll(Object.isString);  
// -> ['two', 'four']
```

```
[1, 7, -2, -4, 5].detect(function(n) { return n < 0; });  
// -> -2
```

```
['hello', 'world', 'this', 'is', 'nice'].sortBy(function(s) {  
    return s.length;  
});  
// -> ['is', 'nice', 'this', 'world', 'hello']
```

```
function() { /* ... */ }.bind(object)
```

```
function() { /* ... */ }.defer()
```

```
function() { /* ... */ }.delay()
```

```
''.blank();
// -> true

'background-color'.camelize();
// -> 'backgroundColor'

'section=blog&id=45'.toqueryParams();
// -> {section: 'blog', id: '45'}

'<div class="article">This is an article</div>'.escapeHTML();
// -> "&lt;div class="article"&gt;This is an article&lt;/div&gt;"
```

```
$element.setStyle({ backgroundColor: '#900', fontSize: '12px' });

$("messages").on("click", function(event) { /* ... */ });
$("messages").on("click", "a.comment", function(event, element) { /* ... */ });

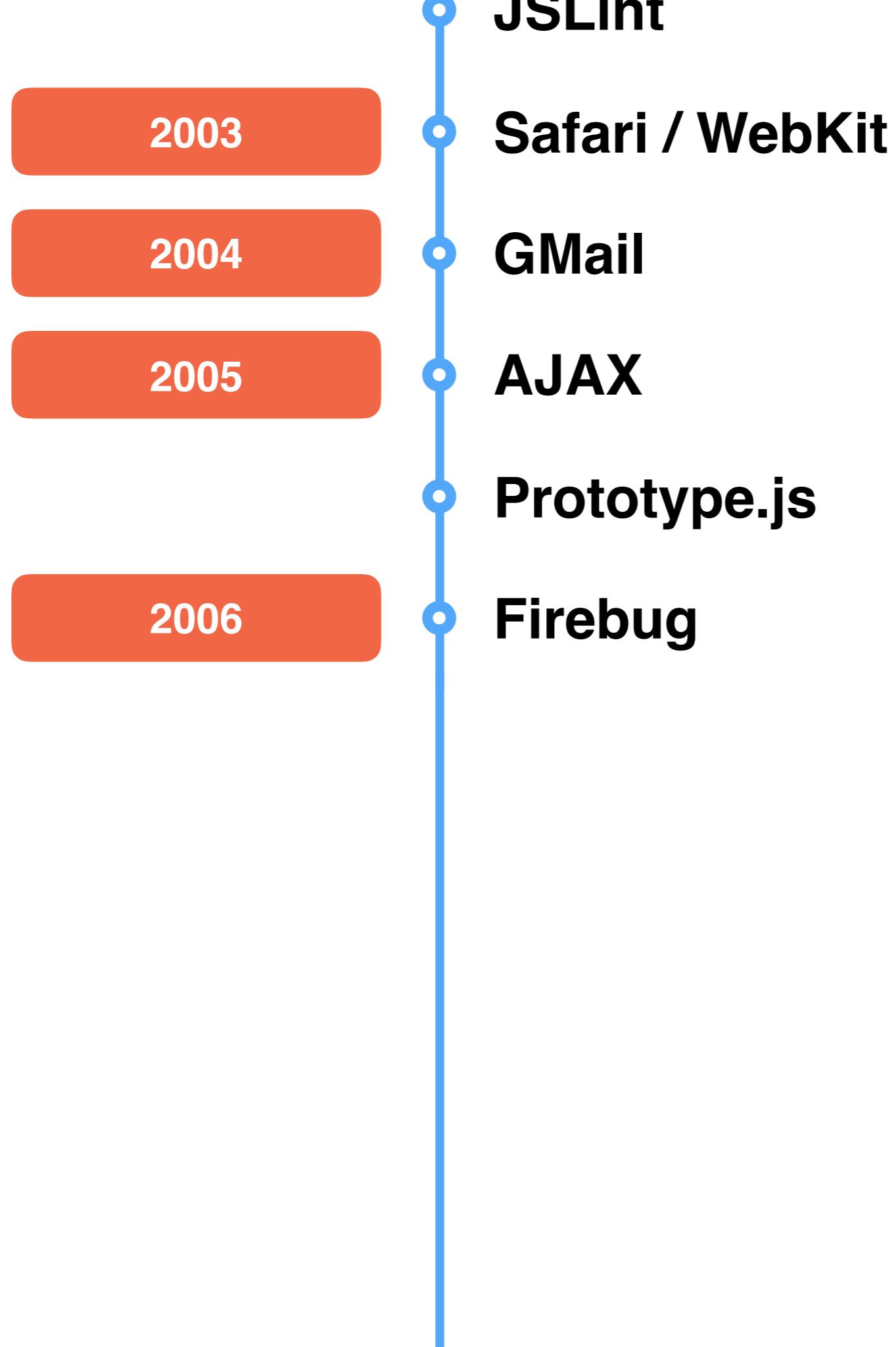
$element.absolutize();

$rectangle.getDimensions();
// -> {width: 200, height: 100}

$element.scrollTo();

$mutsu.hasClassName('fruit');
// -> false
$mutsu.toggleClassName('fruit');
// -> Element
$mutsu.hasClassName('fruit');
// -> true

$troz.measure('width');
//-> 150
$troz.measure('border-top');
//-> 5
```





2003

Safari / WebKit

2004

GMail

2005

AJAX

2006

Prototype.js

Firebug

YUI Theater with Crockford

2004

GMail

2005

AJAX

Prototype.js

2006

Firebug

YUI Theater with Crockford

jQuery



```
$( "button.continue" ).html( "Next Step..." )
```

```
$( "#button-container button" ).on( "click", function( event ) {  
    $( "#banner-message" ).show();  
});
```

```
$.ajax({
  url: "/api/getWeather",
  data: {
    zipcode: 97201
  },
  success: function( result ) {
    $( "#weather-temp" ).html( "<strong>" + result + "</strong>" );
  }
});
```

2005

AJAX

2006

Prototype.js

Firebug

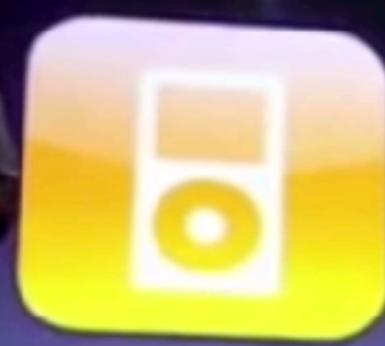
YUI Theater with Crockford

jQuery

2007

iPhone / Mobile Safari





iPod



Phone



Internet



Prototype.js

2006

Firebug

YUI Theater with Crockford

jQuery

2007

iPhone / Mobile Safari

2008

ECMA Script 4 canceled

ECMAScript 4

 real classes

 types

 interfaces

 module and packages

 default function parameters

 ahead-of-time compilation

 constants

 enums

ECMAScript 4

 real classes

 types

 interfaces

 module and packages

 default function parameters

 ahead-of-time compilation

 constants

 enums

 ... complicated, not backward compatible



Prototype.js

2006

Firebug

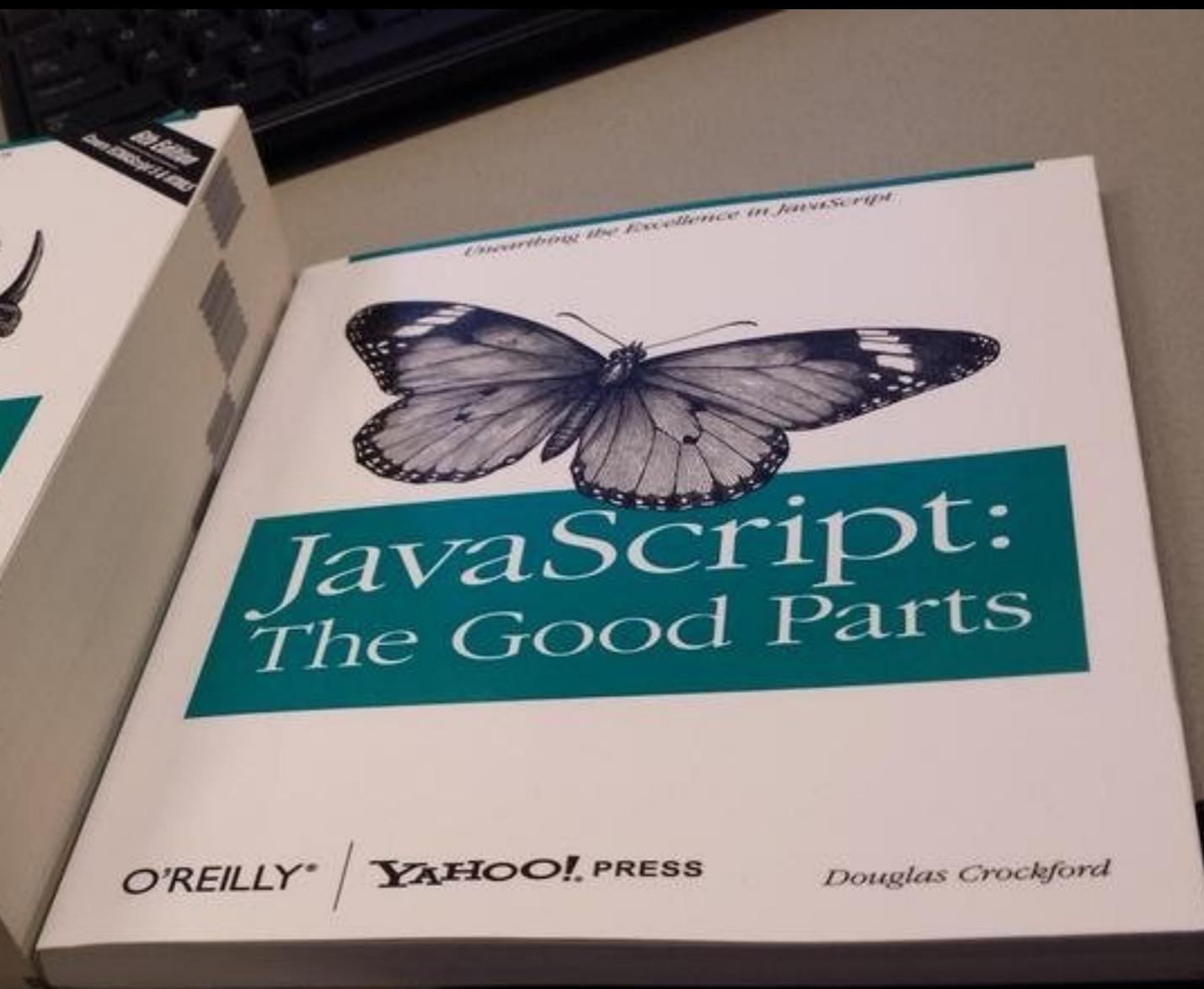
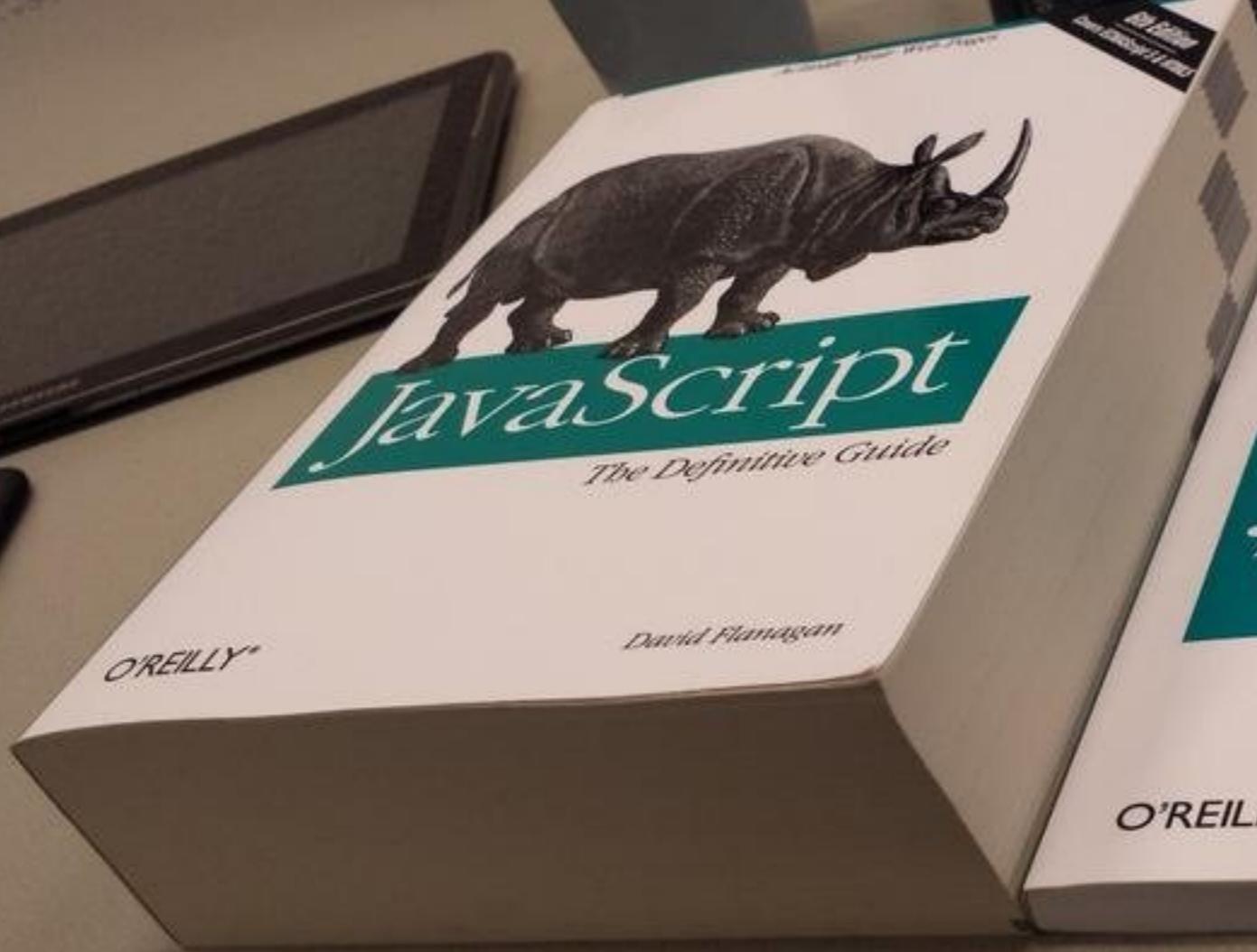
YUI Theater with Crockford

jQuery

2008

ECMA Script 4 canceled

JavaScript The Good Parts



2006

Firebug

YUI Theater with Crockford

jQuery

2008

ECMA Script 4 canceled

JavaScript The Good Parts

Chrome



[Google](#)

New Tab

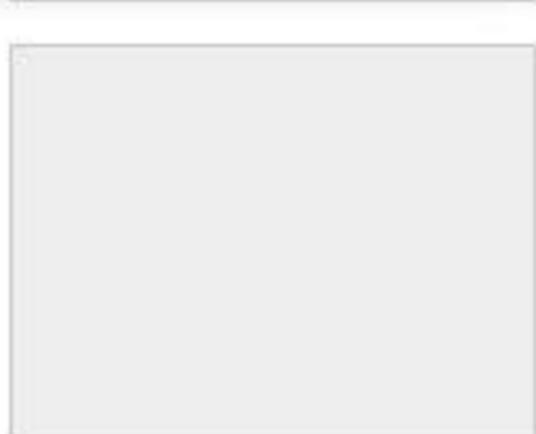
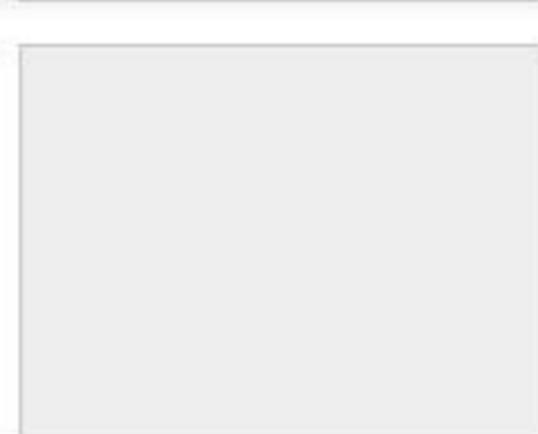
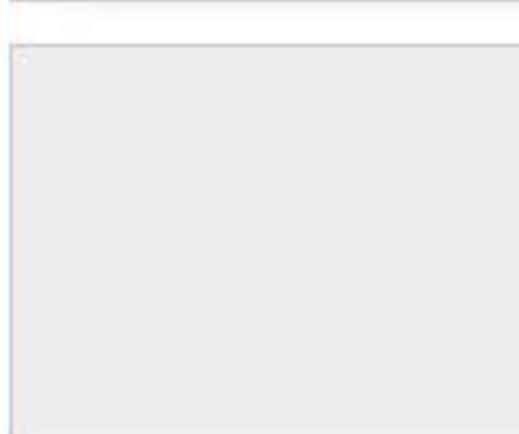


For quick access, place your bookmarks here in the bookmarks bar.

[Other bookmarks](#)

Most visited

The "Most visited" area shows the websites that you use most often. After using Google Chrome for a while, you will see your most visited sites whenever you open a new tab. You can learn more about this and other features on the [Getting Started page](#).

[Show full history »](#)

Searches

 Search your history

Webkit

+

Chrome V8

+

Auto updates

=



2006

Firebug

YUI Theater with Crockford

jQuery

2008

ECMA Script 4 canceled

JavaScript The Good Parts

2009

ECMA Script 5

ES5

ECMAScript 5

 'use strict'

 JSON.parse / JSON.stringify

 Function.prototype.bind

 Array.prototype.map / Array.prototype.reduce / Array.prototype.forEach and so...

 Object.defineProperty / Object.getOwnPropertyDescriptor

 Object.keys

 Object.freeze / Object.isFrozen

 Reserved words as property keys

2006

Firebug

YUI Theater with Crockford

jQuery

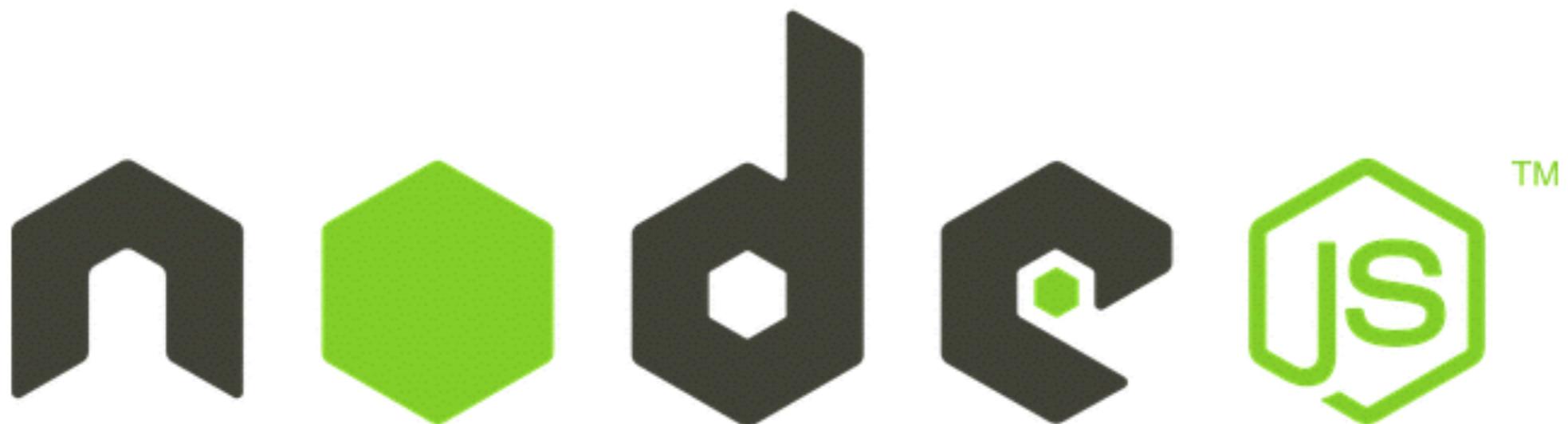
2008

ECMA Script 4 canceled

JavaScript The Good Parts

2009

Node.js



```
var http = require('http');

http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/plain'});
  res.end('Hello World!');
}).listen(8080);
```

YUI Theater with Crockford

2008

jQuery

ECMA Script 4 canceled

2009

Node.js

Underscore.js

UNDERSCORE.JS



```
_.map([1, 2, 3], function(num){ return num * 3; });
// => [3, 6, 9]

_.map({one: 1, two: 2, three: 3}, function(num, key){ return num * 3; });
// => [3, 6, 9]

_.map([[1, 2], [3, 4]], _.first);
//=> [1, 3]

_.find([1, 2, 3, 4, 5, 6], function(num){ return num % 2 == 0; });
// => 2
```

jQuery

2008

ECMA Script 4 canceled

JavaScript The Good Parts

2009

Node.js

Underscore.js

CoffeeScript



CoffeeScript

```
# Assignment:  
number    = 42  
opposite = true  
  
# Conditions:  
number = -42 if opposite  
  
# Functions:  
square = (x) -> x * x  
  
# Arrays:  
list = [1, 2, 3, 4, 5]  
  
# Objects:  
math =  
    root:   Math.sqrt  
    square: square  
    cube:   (x) -> x * square x  
  
# Splats:  
race = (winner, runners...) ->  
    print winner, runners  
  
# Existence:  
alert "I knew it!" if elvis?  
  
# Array comprehensions:  
cubes = (math.cube num for num in list)
```

CoffeeScript

 splats

 deconstructions

 (bound) arrow functions

 classes

 template literals

 everything is expression

 array comprehensions and slicing

 Ruby/Python expired syntax

 significant whitespace

CoffeeScript

 **splats**

 **deconstructions**

 **(bound) arrow functions**

 **classes**

 **template literals**

 **everything is expression**

 **array comprehensions and slicing**

 **Ruby/Python expired syntax**

 **significant whitespace**

CoffeeScript

🚕 **splats**

🚗 **deconstructions**

🚗 **(bound) arrow functions**

🚌 **classes**

🚓 **template literals**

🚐 **everything is expression**

🚐 **array comprehensions and slicing**

🏎️ **Ruby/Python expired syntax**

🚔 **significant whitespace**



2008

ECMA Script 4 canceled

2009

JavaScript The Good Parts

Node.js

Underscore.js

CoffeeScript

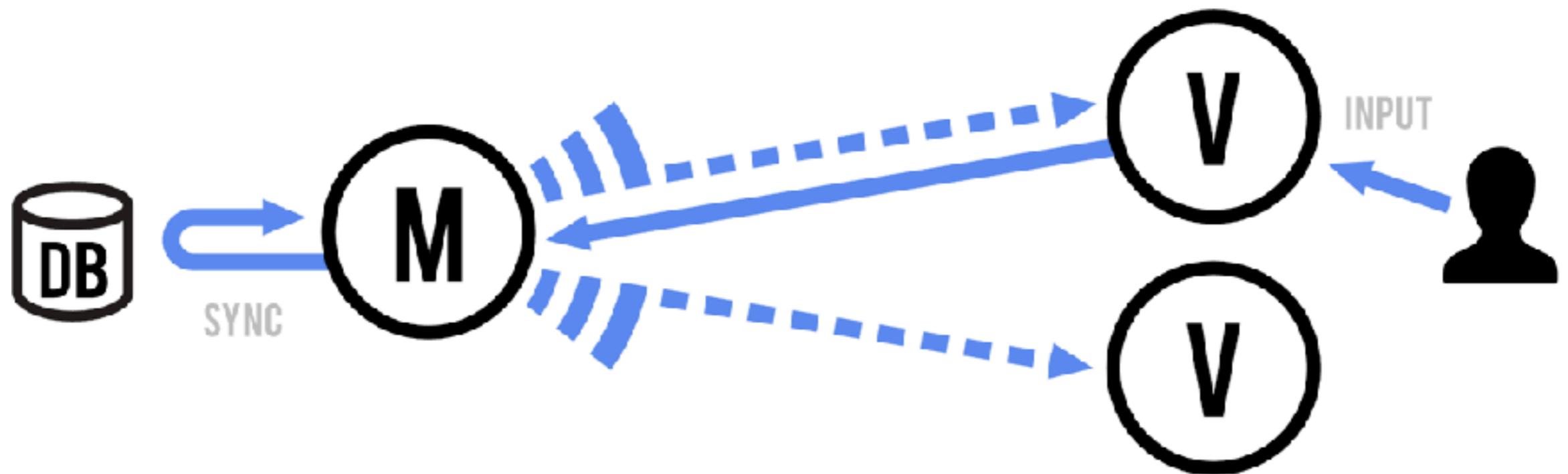
2010

Backbone.js



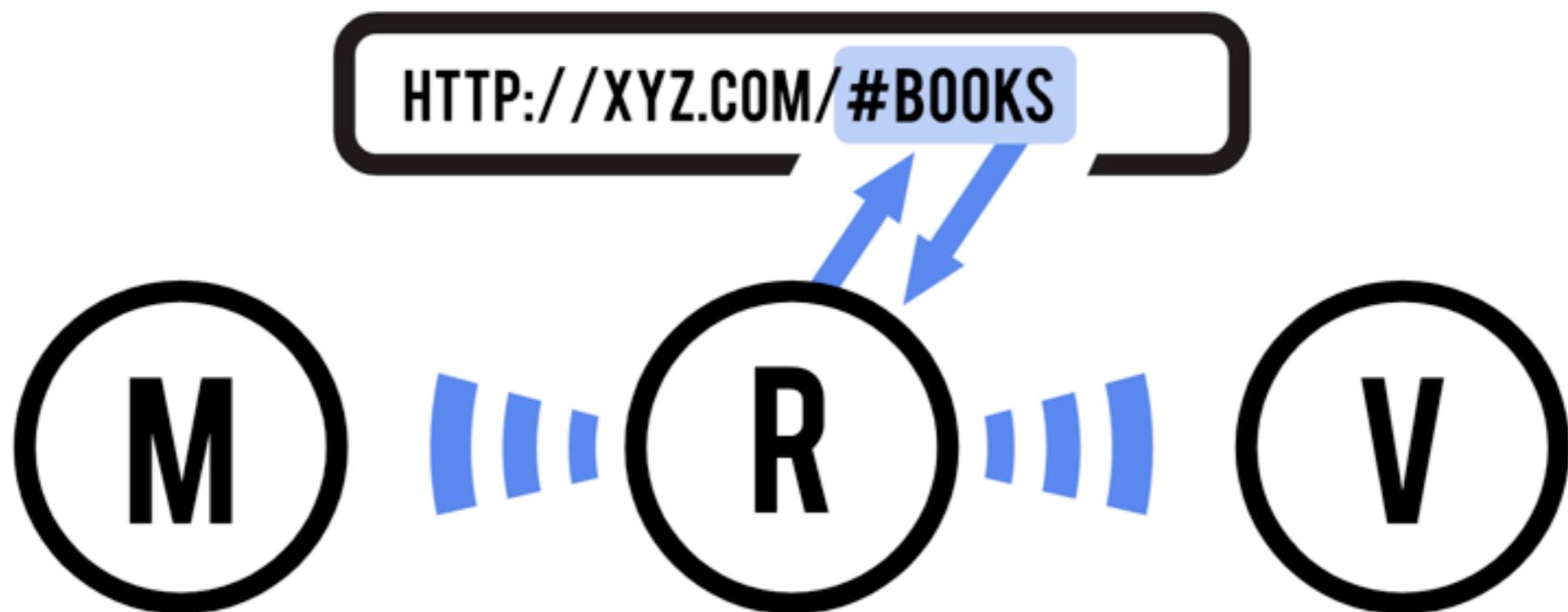
BACKBONE.JS

Model \diamond View



```
var DocumentRow = Backbone.View.extend({  
  tagName: "li",  
  className: "document-row",  
  
  events: {  
    "click .icon": "open",  
    "click .button.edit": "openEditDialog",  
    "click .button.delete": "destroy"  
  },  
  
  initialize: function() {  
    this.listenTo(this.model, "change", this.render);  
  },  
  
  render: function() {  
    // ...  
  }  
});
```

Model \diamond Router \diamond View



```
var Workspace = Backbone.Router.extend({
  routes: {
    "help": "help", // #help
    "search/:query": "search", // #search/qry
    "search/:query/p/:page": "search" // #search/qry/p7
  },
  help: function() {
    // ...
  },
  search: function(query, page) {
    // ...
  }
});
```

Backbone

 Backbone.Events

 Backbone.Model

 Backbone.Collection

 Backbone.View

 Backbone.Router

[Overview](#)[Repositories 19](#)[Stars 19](#)[Followers 11.6k](#)[Following 0](#)

Popular repositories

[backbone](#)

Give your JS App some Backbone with Models, Views, Collections, and Events

● JavaScript ★ 27.3k ⚡ 5.7k

[underscore](#)

JavaScript's utility _ belt

● JavaScript ★ 23.7k ⚡ 5.3k

[coffeescript](#)

Unfancy JavaScript

● CoffeeScript ★ 14.9k ⚡ 2k

Jeremy Ashkenas
jashkenas

I miss _why.

JavaScript The Good Parts

2009

Node.js

Underscore.js

CoffeeScript

2010

Backbone.js

NPM



RUBYGEMS



npm install express

```
var Express = require('express');
```

2009

Node.js

Underscore.js

CoffeeScript

2010

Backbone.js

NPM

2012

TypeScript

TypeScript



JS

```
function greeter(person) {  
    return "Hello, " + person;  
}  
  
let user = "Rado";  
  
document.body.innerHTML = greeter(user);
```



```
function greeter(person) {  
    return "Hello, " + person;  
}  
  
let user = "Rado";  
  
document.body.innerHTML = greeter(user);
```



```
interface Person {  
    firstName: string;  
    lastName: string;  
}  
  
function greeter(person: Person) {  
    return "Hello, " + person.firstName + " " + person.lastName;  
}  
  
let user = { firstName: "Radoslav", lastName: "Stankov" };  
  
document.body.innerHTML = greeter(user);
```

TypeScript

 Types

 Interfaces

 Shapes

 Decorators

 Complier

 Latest ECMAScript features

 Backward compatible

Underscore.js

CoffeeScript

2010

Backbone.js

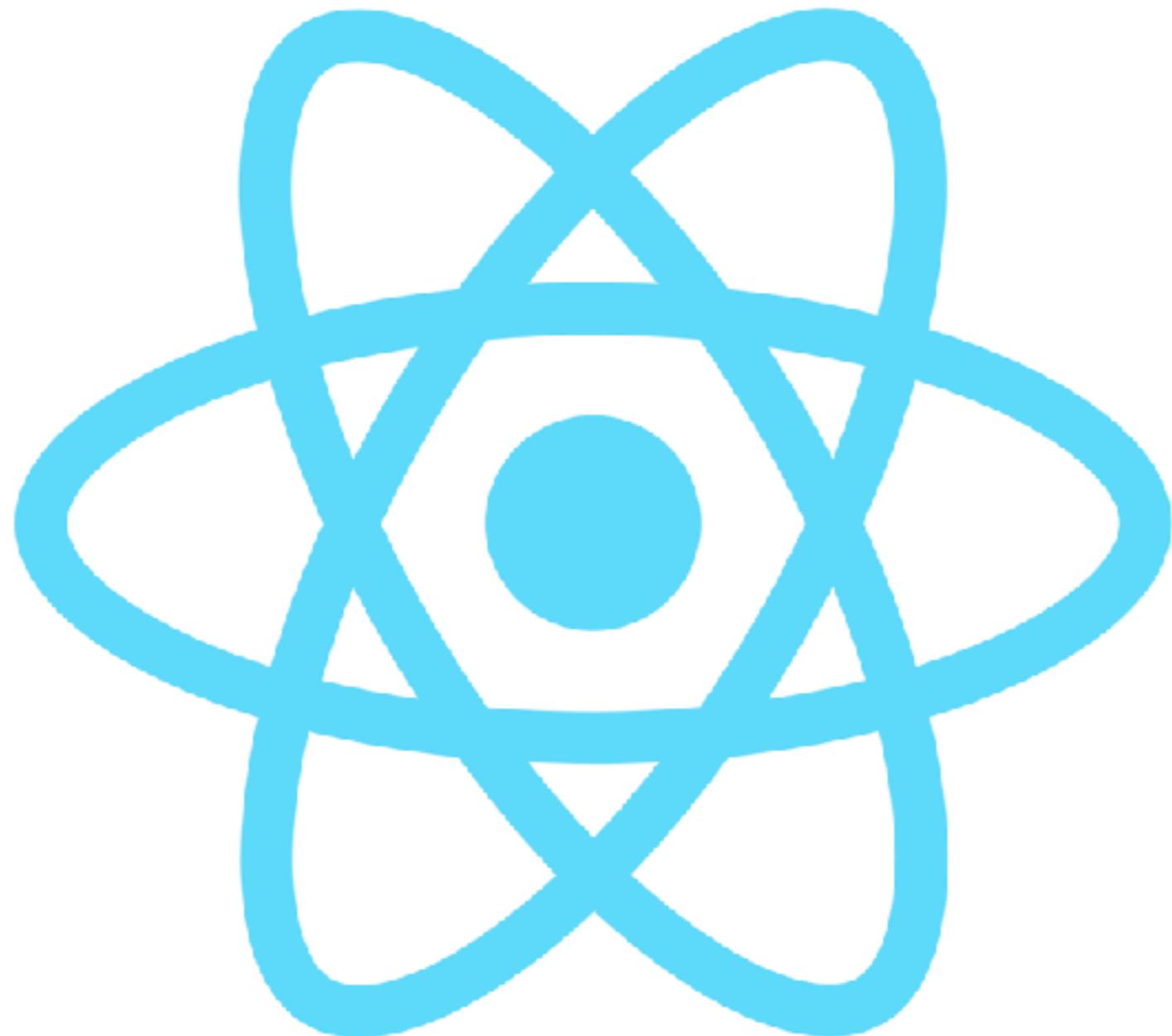
NPM

2012

TypeScript

2013

React

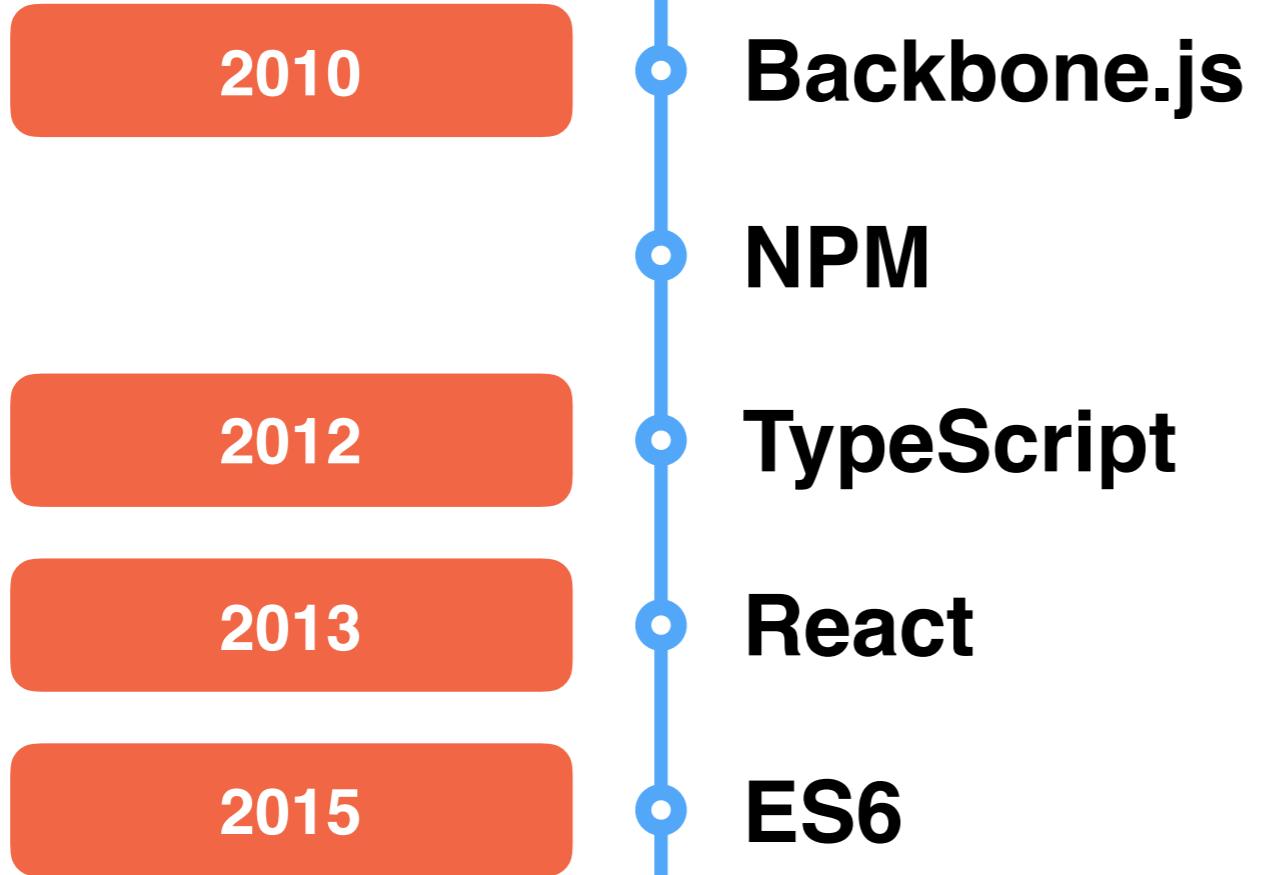


<https://reactjs.org/>

```
class HelloMessage extends React.Component {  
  render() {  
    return (  
      <div>  
        Hello {this.props.name}  
      </div>  
    );  
  }  
}
```

```
ReactDOM.render(  
  <HelloMessage name="Taylor" />,  
  mountNode  
>;
```

JavaScript





ECMAScript 6

 (arg) => arg + 1

 class

 `Template string`

 let, const

 deconstructing, array spread

 for (var n of fibonacci)

 import/export

 Promise

 ... much more

2010

Backbone.js

2012

NPM

2013

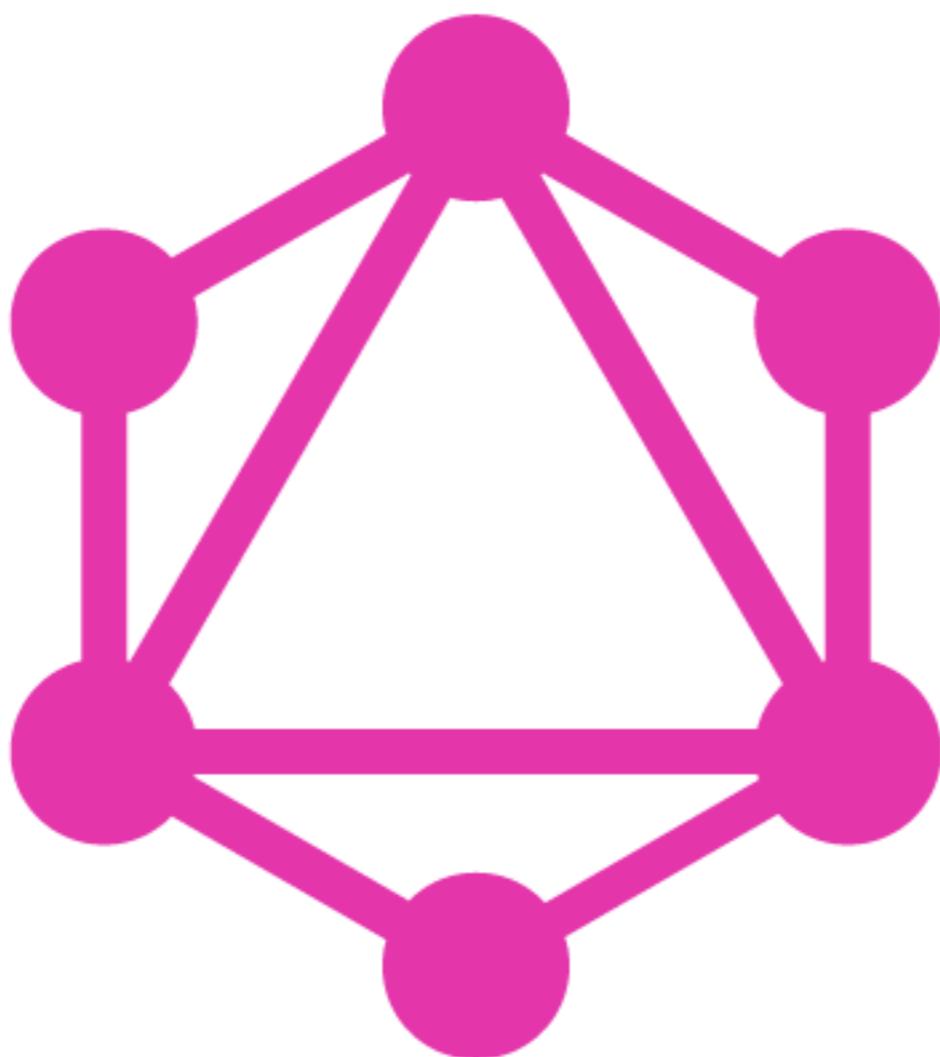
TypeScript

2015

React

ES6

GraphQL



<https://graphql.org/>


```
query {  
  post(id: 1) {  
    id  
    title  
    tagline  
    votesCount  
    commentsCount  
    thumbnailUrl  
    hunter: {  
      id  
      avatarUrl  
    }  
  }  
}
```

```
query {  
  post(id: 1) {  
    id  
    title  
    tagline  
    votesCount  
    commentsCount  
    thumbnailUrl  
    hunter: {  
      id  
      avatarUrl  
    }  
  }  
}
```



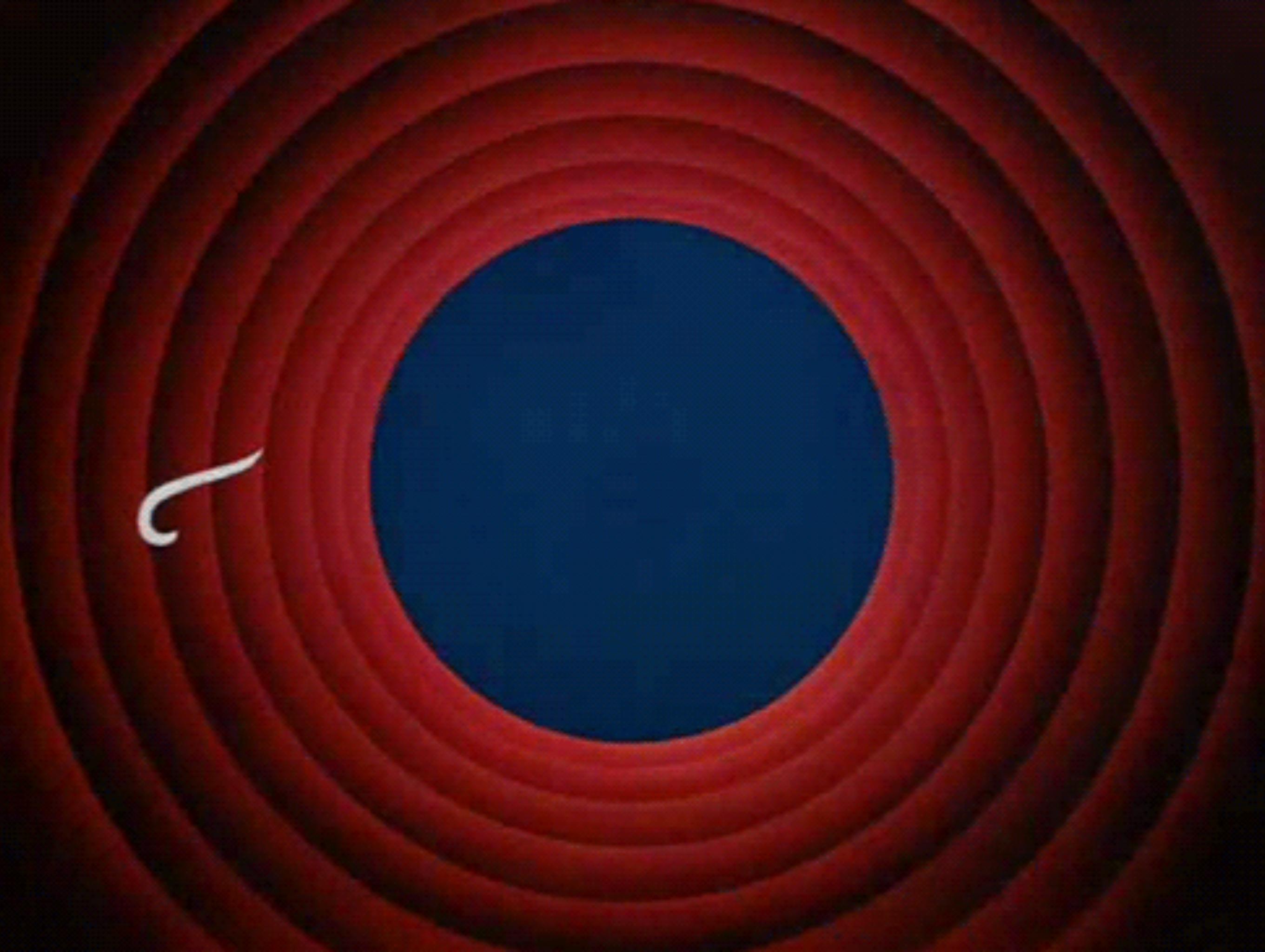
```
query {  
  post(id: 1) {  
    id  
    title  
    tagline  
    votesCount  
    commentsCount  
    thumbnailUrl  
    hunter: {  
      id  
      avatarUrl  
    }  
  }  
}
```



```
{  
  "data": {  
    "post": {  
      "id": 1,  
      "title": "title",  
      "tagline": "tagline",  
      "votesCount": 0,  
      "commentsCount": 0,  
      "thumbnailUrl": "assets.product",  
      "hunter": {  
        "id": 1,  
        "avatarUrl": "assets.product",  
      }  
    }  
  }  
}
```



**KEEP
CALM
AND
LOVE
JAVASCRIPT**



Thanks 😎

