



# INTRODUCING JAVASCRIPT

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*Asynchronicity is a tough word to spell...*

# JAVASCRIPT IS NOT JAVA

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*...but it's inspired by it...*



# BRENDAN EICH

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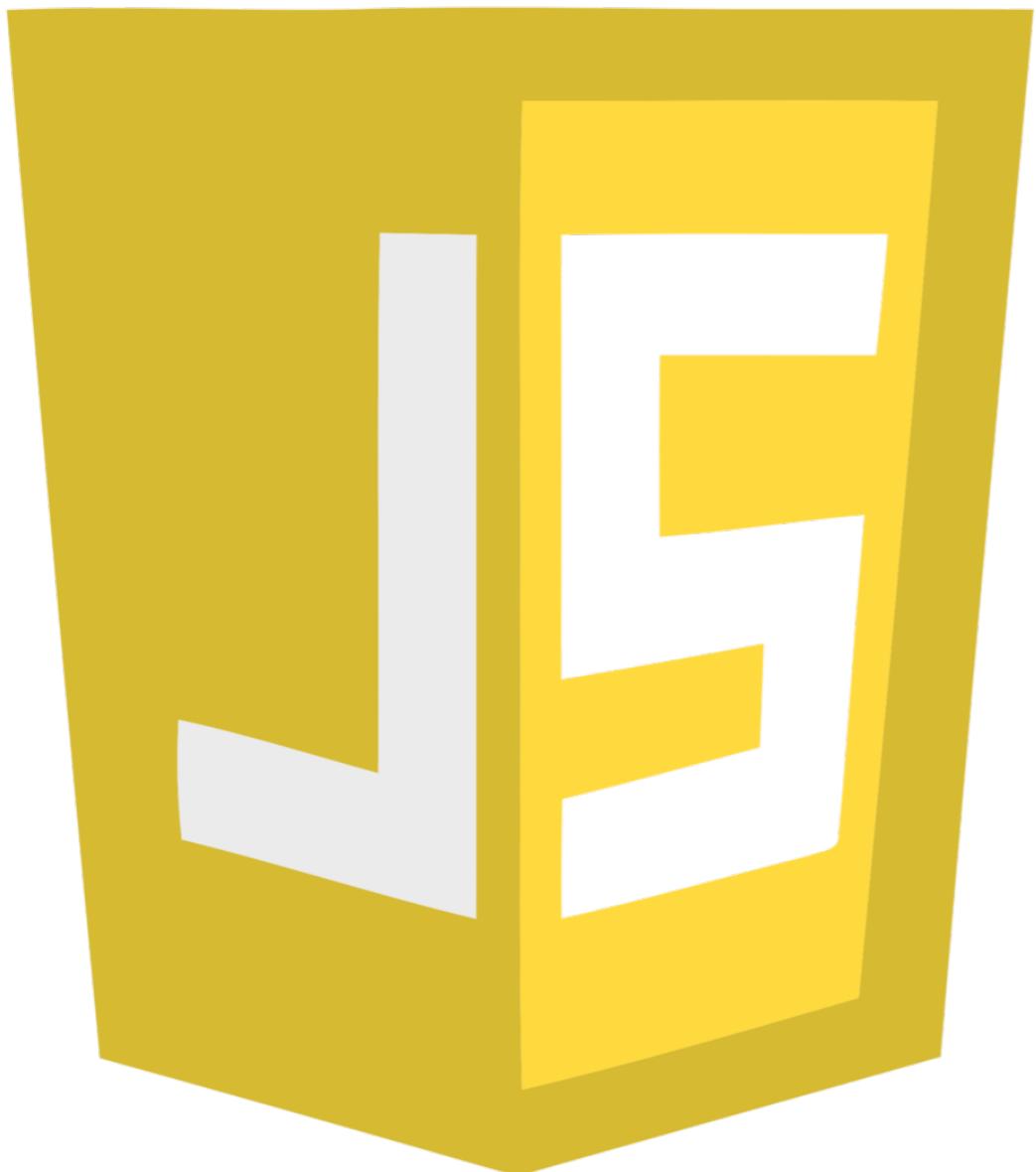
- Worked for Netscape
- Co-founded Mozilla
- Created JavaScript
  - Based it on the Java syntax
  - Wrote the prototype in 10 days
- Was originally called LiveScript

# JAVASCRIPT IS A LOOSE LANGUAGE

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*...it definitely gets around...*

# JavaScript



## LOOSELY TYPED

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- Casts automatically (sometimes)
  - `5 + "5" = "55"`
  - `5 * "5" = 25`
  - `5 == "5" = true`
- Variables, properties, parameters, functions, and methods do not have to be data typed
- TypeScript is preprocessing language that provides static typing (as well as classes and interfaces) to JavaScript

# JAVASCRIPT CAN BE WRITTEN IN THE BROWSER

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*...but they all have different engines...*

# CHROME V8

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- Written in C++
- Powers NodeJS and MongoDB  
(changed in Ver. 3.2)
- Existed since 2008
- Compiles directly to machine code making it stupid fast

# FIREFOX SPIDERMONKEY

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- Written in C & C++
- The first JavaScript engine
- Powers GNOME desktop
- Powers MongoDB (as of version 3.2)

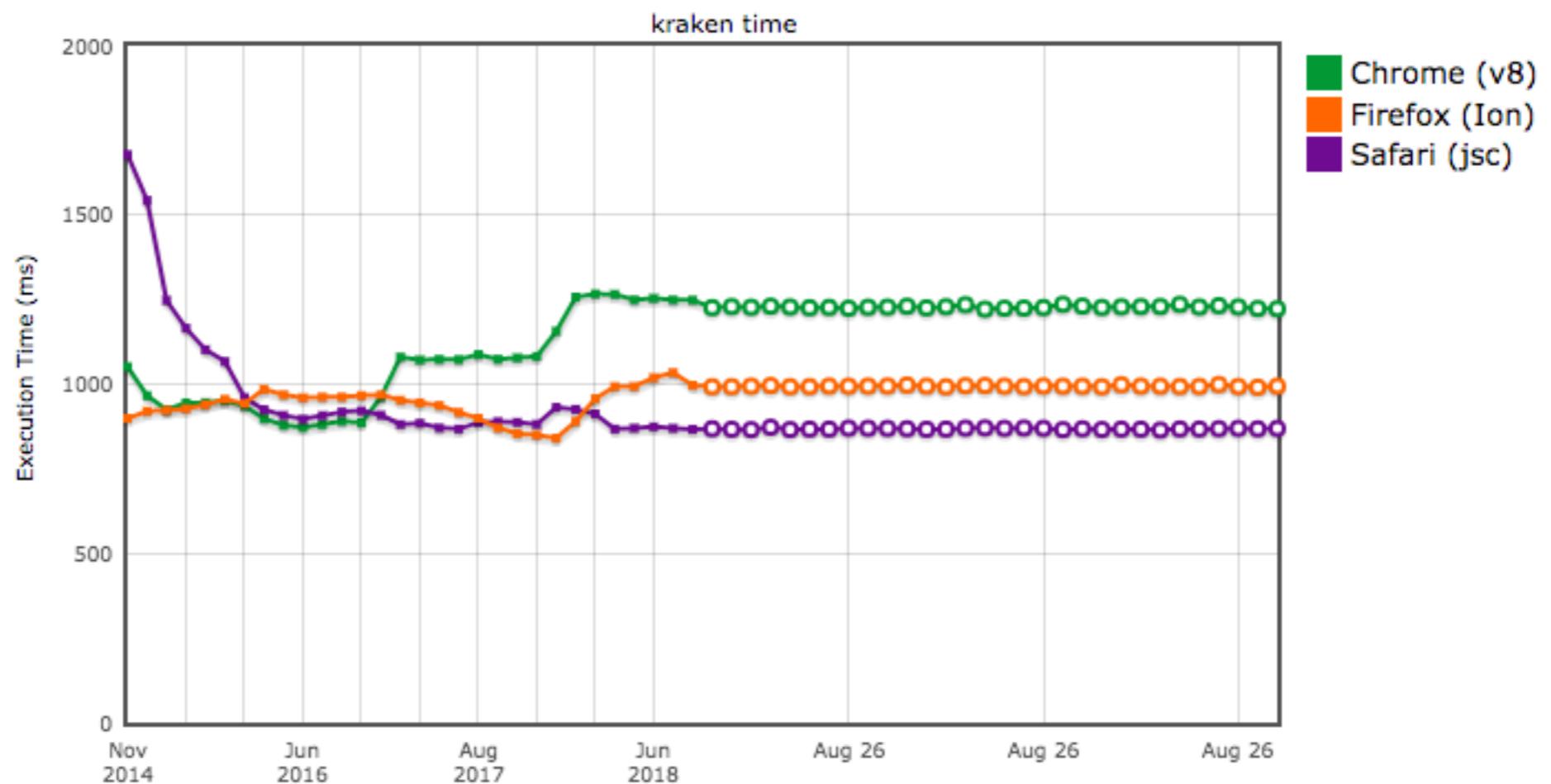
## SAFARI NITRO (JAVASCRIPTCORE)

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- Written by Apple for MacOS applications
- Currently compiles directly into native machine code

# ...BUT WHICH ONE IS FASTER???



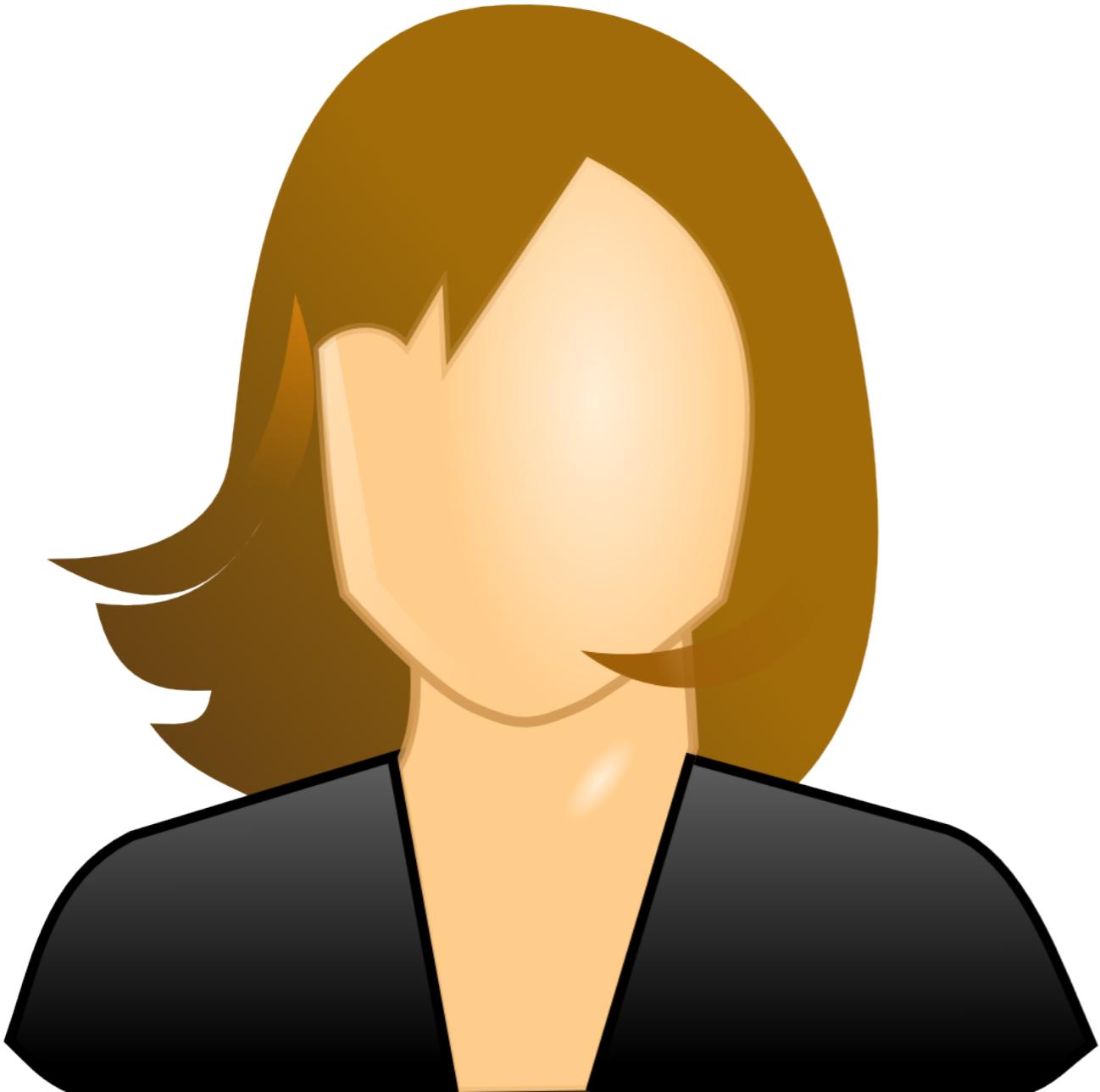
**IN THE END, IT DOESN'T  
MATTER**

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*...love 'em or hate 'em, the user is important...*

# THE ALMIGHTY USER

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- Defines accessibility
- Establishes audience
- Declares popularity
- Determines usability
- Controls environment

# JAVASCRIPT IS GIVES US CLIENT-SIDE POWERS

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*...dunt dd duh...*

# **STORE INFORMATION**

**UNRELIABLY MAINTAIN  
STATE**

# **MANIPULATE THE DOM (DOCUMENT OBJECT MODEL)**

# RESPOND TO USER EVENTS

# USER BROWSER APIs

# USER 3RD PARTY APIs

**JAVASCRIPT IS AN INTERPRETIVE  
SINGLE THREADED, EVENT-BASED,  
ASYNCHRONOUS, NON-BLOCKING,  
CALLBACK DRIVEN LANGUAGE**

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*...[https://vimeo.com/96425312...](https://vimeo.com/96425312)*