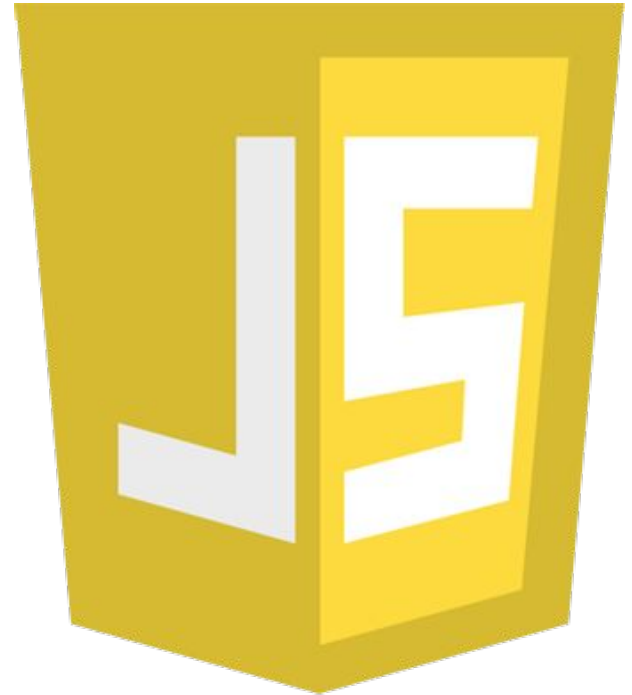




JavaScript

An Introduction &
Getting Started



Overview

- Programming Languages
- History of JavaScript
- Interpreted v.s. Compiled
- Introduction to data types



What is a programming language?

Natural Language	Formal Language
<p>A natural language is any language that has evolved through use and repetition without conscious planning.</p>	<p>A formal language is a created language. It comprises a set of instructions that produce different kinds of outputs.</p> <p>Programming languages are used in computer programming to implement algorithms.</p>

What is a programming language?

Two main components:

- Syntax
- Semantics

Syntax

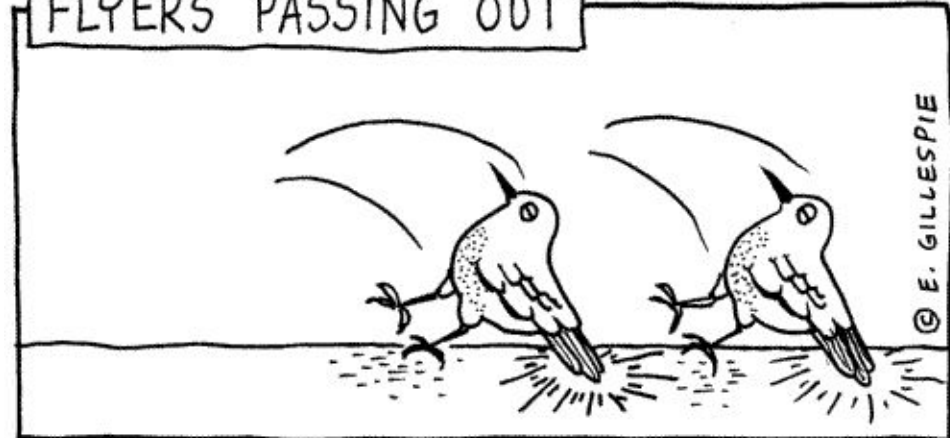
Rules & principles that structure the sentences of a language.

FUN WITH SYNTAX

PASSING OUT FLYERS

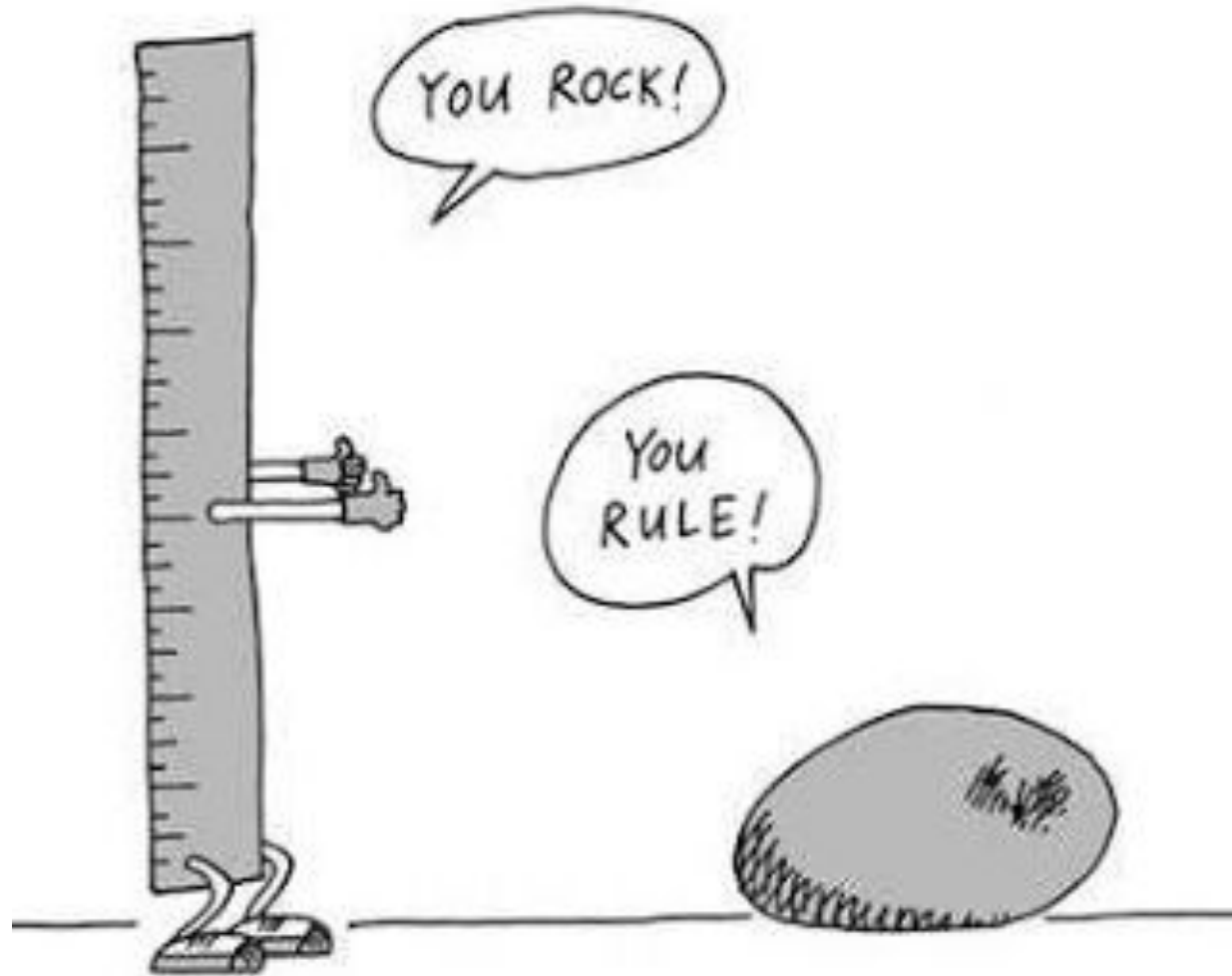


FLYERS PASSING OUT



Semantics

Meaning!



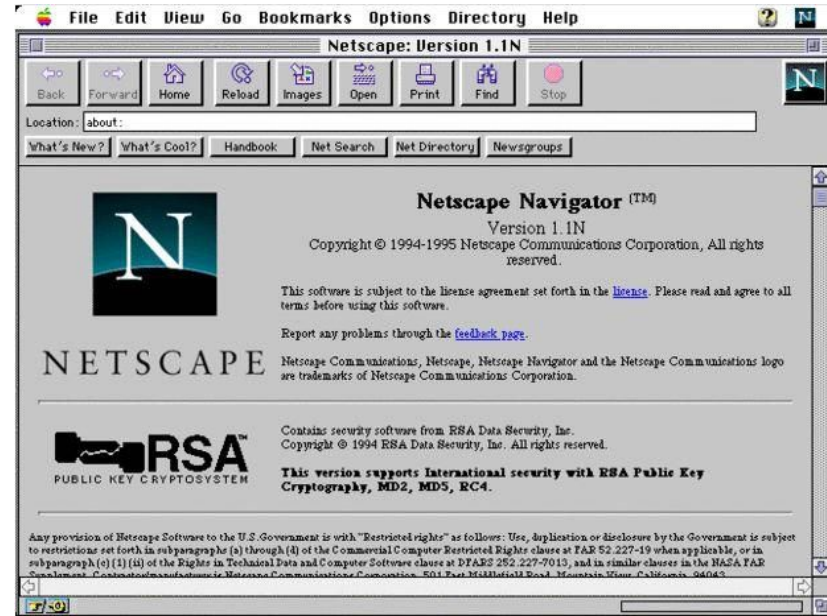
JavaScript: A Brief History

We can use JavaScript to update and change both HTML and CSS. Moreover, we can calculate, manipulate and validate data using JavaScript.



JavaScript: A Brief History

JavaScript was created by Brendan Eich in 1995 while working at Netscape Communications. JavaScript was initially made for the Netscape browser.



JavaScript: A Brief History



When Netscape's main competitor, Microsoft, started becoming popular, Netscape began the standardisation of JavaScript to avoid Microsoft gaining control of the JavaScript language. Netscape also began a partnership with Sun.

JavaScript: A Brief History



Microsoft's internet explorer dominated the market.

Before Netscape went down, they set a standard which would guide JavaScript, named ECMAScript. This guides scripting language specifications. It dictates rules and conventions which everyone agrees upon.

JavaScript: A Brief History



Ecma International: an organization that creates standards for technologies.

ECMA-262: a standard (a specification) published by ECMA International.

ECMAScript is a scripting-language standardized by Ecma International in ECMA-262.

It's all in the name



Why is JavaScript called JavaScript?
Does it have something in common with Java???

A Note on Marketing

Java was created in 1990, and in 1995 there was a lot of hype around the programming language.

JavaScript got its name because the creator and a partnering company wanted JavaScript to benefit from the Java hype. The name is only a marketing ploy. JavaScript has nothing to do with Java!

JavaScript is as related to Java as
Carnival is to Car.

Kyle Simpson



Compiled Vs Interpreted Languages

Since machines only work in binary, the program must be translated for the machine - this is the job of interpreters and compilers.

Compiled Language	Interpreted Language
<p>With a compiled language, your code is converted into machine code. The machine code is run every time you run your program.</p> <p>The code is processed before the code is run.</p>	<p>An interpreted language has an interpreter which parses your code and executes it.</p> <p>The code is processed and ran at the same time.</p>