



Introduction to JS

Sesiunea 16 - 14/06/2021





/Let's remember the whole picture\





FE programming

- Structure: HTML
- Presentation: CSS
- Logic and UX: JS





About JS

- Scripting languages for web pages
- Do not confuse with Java (different syntax, semantics and usages)
- Aim to program the behaviour of web pages
- JS is also used server side (Node.js)
- JS supports event-driven, functional and imperative programming styles
- It has API (application programming interfaces) for working with text, dates, regular expressions, standard data structures, DOM (document object model)
- Helps great coverage of the logic client-side (improving UX, response timing)

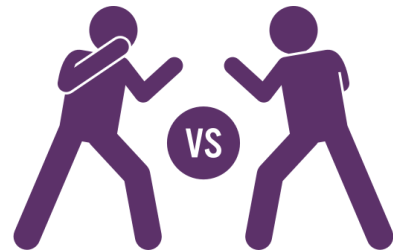
About JS

- Used to make web pages interactive
- It can insert dynamic text into HTML
- It can manipulate CSS
- BE integration



Java vs JS

- Java code must be compiled, JavaScript code is all-text
- Each language requires different plugins
- JS code is run on browser only, while Java creates applications that run in a virtual machine or browser
- Java is an OOP and JS is specifically an OOP scripting language





/Course Coverage\



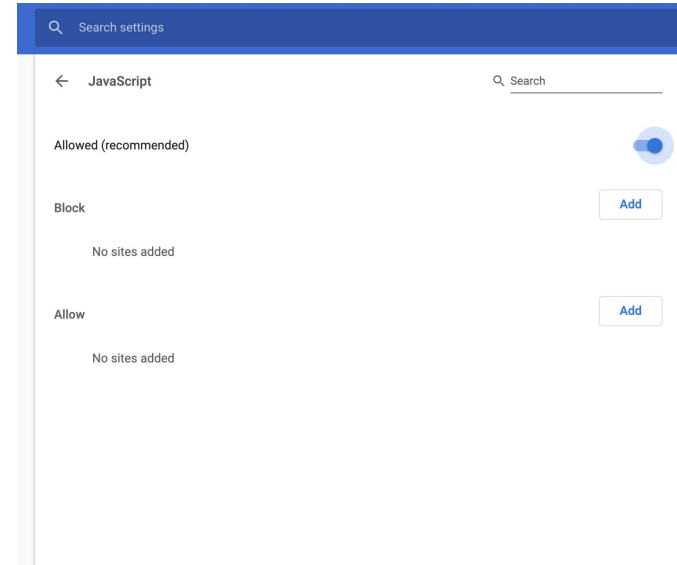
Course **coverage**

- Variables
- Types and operators
- Analyze decisions and loops
- Functions
- Objects
- Arrays
- DOM interactions
- Scope and hoisting
- Error handling



JS: types

- External script (also multiple)
- Internal script
- `<noscript>` - HTML to be inserted if a script type on the page is not supported or if scripting is turned off in the browser





/Keep Dev Tools at hand\



```
/console.log("Hello")\
```



/alert("Hello")\



JS: why use external script (-> resources)

- Reusable code
- Readability
- Page optimization
- Cleaner HTML code: markup separation
- SEO



JS: best practices

- `<script>` at the end of the HTML file (last child node of `<body>`)
- Formatting code (performed by js itself) - don't rely on that though
 - Tabs/indentation - to align similar and/or siblings
 - White space - it should **only** help the developer understand the code better
 - Empty rows - only if it helps clarify the code
- 'use strict'
- **Case sensitivity** (*replaceMainTitle* is not the same as *ReplaceMainTitle*)
- Commenting code (single&multiple line - detail complex logic)
- Detecting and fixing errors (Dev Tools -> Console)



/code\



/Assignment #9 (responsiveness #2)\





/Q&A\



Resources

- Disable JS in Chrome: <https://www.lifewire.com/disable-javascript-in-google-chrome-4103631>
- Toogle JS extension:
<https://chrome.google.com/webstore/detail/toggle-javascript/cidlcjdomndpeagkjpnefhlijffbnlo?hl=en>



Thank you

Next: JS - Variables&Constants (Friday, 18th of June)

