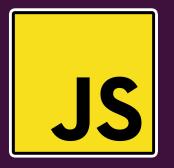


#### What is JavaScript?



A programming language that can be executed by browsers.

The only programming language browsers can execute!

HTML

CSS

JavaScript

Define structure and semantics

Style the elements and page content

Change the page dynamically (without loading a different HTML file), do "behind the scenes" calculations and work & much more!



#### JavaScript Applications & Use-Cases

Update displayed data behind the scenes (e.g. weather data, stocks data, chat messages, ...)

Display or use a timer

Validate user input and show error message + attach error styles to elements

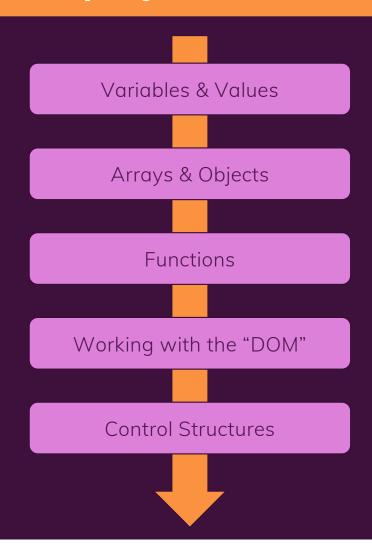
Display & manage complex overlays

Re-order, hide / show or remove elements on the screen (e.g. drag-anddrop list)

Keep (parts of) websites working, even if the internet connection is lost



## **Core JavaScript Syntax & Features**





### What is "Syntax"?

# It's the "Grammar" of a Programming Language

Certain rules, you must adhere to *(otherwise, your code won't work and you'll get an error)* 



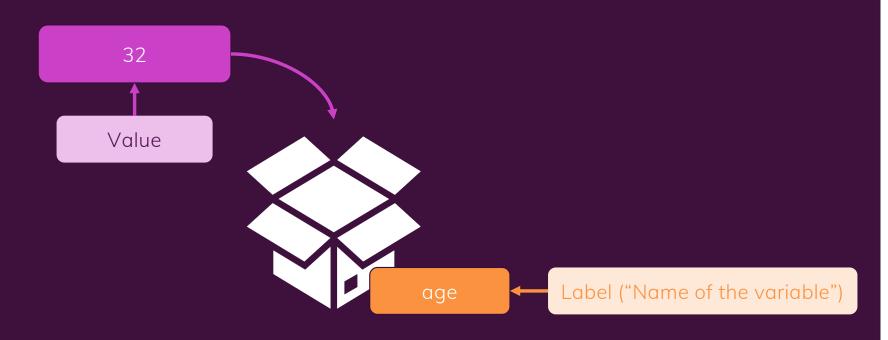
## **Understanding Values**



There are more available values: Booleans, objects, arrays, ..



## **Understanding Variables**



Variables are "labeled data containers"