

Curs Javascript – pentru adulți

Modulul 1 – 10 sedinte

Curriculum

Part 1: Introduction

Web vs Internet
A brief history of Javascript
Javascript and the browsers
A brief introduction to the Javascript engine
Variables: declaration and initialization
Variable: primitive types and scopes, memory address, dynamic typing
typeof keyword
Global variables and local variables
Statements
Functions using function declaration (function statement)
conditional statements: if
Control flow: functions are calling other functions
Global environment and the global execution context, „this” and “window” object
Function level execution contexts, function invocation and the execution stack
the stack and the executions contexts
The bit, the byte, Base 2, 64 bits (8 octets) for a numerical variable
literals
using powers of 10 to create literal numbers: 1e3, 2.7e-3
Base 16
Assignment operator
Execution context
Lexical environment and the scope chain

Part 2: Control flow and operators

Control flow: Block statements, conditional statements
Loops and iteration: the For statements
Lexical environment,
Global and local variables
Hoisting
Arithmetic operators
Assignment operator
Coercion
Comparison operators
Grouping operator
String operator
Default values and falsy values
Ternary operator
Logical operators
Operator precedence and associativity

Part 3: The Object

The Object: attributes and methods

“this” keyword in an object

“in” operator

Enumerating object properties (for ... in loops), looping object attributes

Indexing properties of objects

when the object's method returns a value

String object and String methods

functions are objects

Part 4: The Array

The Array object, length attribute and push() method

when the number of the function's parameters differ from the number of the arguments when calling that function

in operator - looping array elements

arrays are objects, methods: sort()

Part 5: Web API

HTML markup language and a brief history of the web

the DOM (Document Object Model)

Manipulating documents

Window object

The DOM and the mapping between HTML elements and the javascript DOM Elements

node element, sibling, parent, child, descendant

Document object and some of its methods:

querySelector(), getElementById(), createElement(), appendChild()

Element object, Element object types and some of their attributes

onclick attribute of a DOM Element and onclick events

debugging in the Developer's tools

console.dir() to output the javascript Element object in the console

this variable to reference Element objects

changing paragraphs' innerHTML attribute according to user's input in textfield

changing some of the styling of the page, such as the background color according to user's input

changing the src attribute of an img to load different images according to user's interaction

various values of HTML input tag's type attribute

Populate a table with the attributes of an object

Populate a table with the elements of an array object

The user inputs data and on a button's click a new object is created in the memory and a new row is inserted into the table

Forms and submitting forms