Jsforcats.

JAVA - compiled language 🡪 interpret the code and show errors before trying to run

Intrpret language 🡪 run,doesn not expect whats gonna be in the next line

VGTBV1. Data types:

1) string - any data within ‘ ‘ or „ „

2) number - any number like 2 or 2.34

3) boolean- true/ false

= assigment statement

We canmake every expression a string:

A = String(a)

CONSOLE

console.log(25 + 3.5);

+ - / \* lub % - reszta

Console.warn // console.error

Alert(‘Watch out!’);

COMMENTS

-one line: //

- multilines: /\* ….. \*/

VARIABLES

Var camelCase = “ola”;

camelCase = “other”;

console.log(‘My came case is:’ , camelCase); //OR// console.log(‘My camel case is:’ + camelCase + ‘some other stuff’);

2. CONTROL FLOW

Var question = true;

If (question) {

console.log(’I am ok’);

} else {

console.log(’I am not ok’);

}

//if we want to use ‘ or “ in our sentence we need to put / before that, f.ex. children/’s 🡪 to let the programme know it is not the end of the string.

-COMPARITON

Var question = 10;

If (question>5) {

Console.log(‘OK’);

Else if (question=5) {

Console.log(‘could be’);

} else {

Console.log(‘not ok’);

- EQUALS TO STRING VALUES:

Var question= full;

If (question===full) {

Console.log(‘ended not ok’);

} else {

Console.log(‘it\’s ok’);

}

GREAT:

Var question = prompt(‘what is the capital of france?’);

If (question === ‘Paris’) {

Console.log(‘You are right’);

} else{

Console.log (‘you are wrong’;)

}

LOGICAL OPERATORS:

&&- both must be tru

|| - either can be true

SWITCH INSTEAD OF MANY ELSE IF

Var name= ‘fruit’;

Switch (name) {

Case ‘strawberry’:

Console.log(‘1,5 zł’);

Break;

Case ‘banana’:

Console.log(‘4.5zł’);

Break;

Default:

Console.log(‘No item found’);

}

MATHS:

Var randomNumber= Math.Random() 🡪 from 0 to 1; if we want to have a random number between f.ex. 0 to 50 we need to multiply \*50 🡪

Var randomNumber= Math.random() \*50

Var randomNumber= Math.floor (Math.random() \* 50);

Console.log(‘randomNumber’);

// Or math.round(Marh.random())

3. FUNTIONS

function makePizza() {

console.log('Pizza\'s done. Let\'s eat!')

}

makePizza();

funtion sayingHello(name) {

console.log(‘Good morning’ + name);

}

sayHello(‘Johnny’); it’s a call

RETURN FUNCTION

Var twoTimes = function (number) {

Return number \* 2;

};

twoTimes (3); {

console.log(newNumber);

};

2. when we wanna check if the return number is equals to some conditions

var quarter = function (number) {

return number / 4;

}

if (quarter(12) % 3 === 0 ) {

console.log("The statement is true");

} else {

console.log("The statement is false");

}

3. Hours of sleep :

var sleepCheck = function (numHours) {

if (numHours>=8) {

return 'You\'re getting plenty of sleep! Maybe even too much!';

} else {

return 'Get some more shut eye!';

}

};

sleepCheck(10);

/! FUNCTION LISTS !\

1. compare

Var compare = function (one, two);

GLOBAL SCOPE/ FUNCTIONAL SCOPE

- global scope variables - they are accessible from every part of the programme; functional scope - only the function has access to the variable;

Var global= ‘This is public’;

Function itIsPrivate() {

Var dateOfBirth= ’1991’;

Var high= ‘162 cm’;

}

Console.log(‘This is the date of birth ‘ + dateOfBirth); 🡪 it will not work as we call functional scope from a console.log!

But we can call a funcion:

itIsPrivate(); 🡪 it is gonna work!

LISTS 🡪 ARAYS

Var favouriteFruits= [‘Mango’, ‘Strawberry’, ‘Granade’];

🡪 if we want to choose one of them:

Var newList= [‘Cat’, ‘Dog’, ‘Elephant’]

Var itemList= newList(1)

Console.log(‘Which is the biggest animal’ + itemList);

How to count the item?

Console.log(bucketList.lenght);

Or even in strings: console.log(‘HelloLucy’.length); 🡪 it will display the number of characters

How to display items in separate Lines!!:

Var bestSpots= [‘Salvador’, ‘Laos’, ‘Georgia’];

Console.log(bestSpots[0]);

Console.log(bestSpots[1]);

Console.log(bestSpots[2]);

DODAWANIE/ ODEJMOWANIE RZECZY Z KOŃCA LISTY:

Dodawanie:

Var newList= [‘one’, ‘two’];

newList.push(‘three’, ‘four’);

OR - odejmowanie:

newList.pop(‘two’);

CHECK MORE ARRAYS HERE: https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global\_Objects/Array !!

LOOPS

- for loops / while loops

1) for loops 🡪 wyliczenie

three conditions, start, stop, and iterate

Counting 1🡪 10

Var fruit= [‘apple’, ‘banana’ ,’orange’];

For (var i =0; i < fruit.length; i++) {

Console.log(fruit[i]); }

Counting 10🡪1

Var fruit= [‘Mango’, ‘Apple’, ‘Orange’];

For (var=fruit.length -1; i >= 0; i--) {

Console.log(fruit[i]);}

OR - if we want to increment not only one (i++) we could code: (i+=3) = for incrementation=3 point. Decreasing by (i -=3)

LENGTH!!!!!

var myPlaces = ['Bahia', 'Vietnam', 'Georgia'];

var friendPlaces = ['New York', 'Paris', 'Bahia'];

for (var i=0; i< myPlaces.length; i++) {

console.log('My places: ' + myPlaces[i]);

}

for (var i = 0; i < myPlaces.length; i++) {

console.log(myPlaces[i]);

for (var j = 0; j < friendPlaces.length; j++) {

console.log(friendPlaces[j]);

if (myPlaces[i] === friendPlaces[j]) {

console.log('Match: ' + myPlaces[i]);

}

}

}

-----

var myPlaces = ['Bahia', 'Vietnam', 'Georgia'];

var friendPlaces = ['New York', 'Paris', 'Bahia'];

for (var i=0; i< myPlaces.length; i++) {

console.log(myPlaces[i]);

for (var j=0; j< friendPlaces.length; j++) {

console.log(friendPlaces[j]);

if (myPlaces[i]===friendPlaces[j]) {

console.log('Match: ' + myPlaces[i]);

}

}

}

WHILE LOOP

var cards=['Diamond', 'Spade', 'Heart', 'Club'];

var currentCard=('Heart');

while (currentCard!=='Spade') {

console.log(currentCard);

var randomNumber=

Math.floor(Math.random() \*3);

currentCard = cards[randomNumber];

}

console.log('we found a spade');

ELSE/IF COMPLEX

var randomNumber= 0;

if(randomNumber%3 === 0 && randomNumber !== 0) {

if(randomNumber%3 === 0 && randomNumber%5 === 0 && randomNumber !== 0) {

alert('fizzbuzz');

} else {

alert('thats the case');

}

} else if(randomNumber%5 === 0 && randomNumber !== 0) {

alert("buzz");

} else if(randomNumber%5 === 0 && randomNumber%3 === 0) {

alert('fizzbuzz');

} else {

console.log(randomNumber);

}

SWITCH

var question = prompt('Do you know your astrological sign?');  
if(question==='yes') { {  
  console.log('That is great');   
   }   
                      var sign= prompt('Enter your astrological sign').toLowerCase();  
                  console.log('Reading your future...');  
switch(sign) {  
  case 'Gemini':  
    console.log('You\'re gonna have a great day!');  
    break;  
  case 'Leo':  
    console.log('Struggling with some issues, but nothing serious');  
    break;  
  case 'Pisces':  
    console.log('A lot of hard work in the next 2 days');  
    break;  
  case 'Virgo':  
    console.log('You will succeed in this new challenge');  
    break;  
  default:  
    console.log('Please enter a valid astrological sign');  
    break;  
}  
                   
} else if(sign== 'no') {  
  console.log('How is that even possible? Check it right away');  
} else {  
  console.log('Enter a valid answer');  
}

GAME

alert('Ola! Agora voce entra na roda pra jogar capoeira.');

var principio = prompt('Como voce quer comencar? Banguela ou Sao Bento Grande?');

if (principio === 'Banguela'){ {

alert('Muito bom! Voce empeza como deveria');

} alert('Gosta de jogo?');

var randomNumber = Math.floor(Math.random());

if (randomNumber === 0) {

alert('Nao, com esta menina nao gosto nada');

} else {

alert('Sim, muito');

} }

else if(principio === 'Sao Bento Grande') { {

alert('Voce gosta do jogo forte!');

} alert('Quer empecar com martelo?');

var randomNumber = Math.floor(Math.random()\*2);

if (randomNumber === 0) {

alert('Nao foi uma decision mutio boa, mas ha sobrevivido');

} else if(randomNumber === 1) {

alert('O seu jogo acabou muito mal');

} else {

alert('Bom! Venceu!');

}

} else {

alert('Decida de novo');

}

LOOPS:

1) for loops

STWORZYC LISTE 1-100, W KTOREJ LICZBY PODZIELNE PRZEZ 3 WILL BE DISPLAYED AS FIZZ, PRZEZ 5 AS BUZZ AND PRZEZ 3 I 5 - FIZZBUZZ  
for (var i =1; i <101; i++)   
if (i%3 === 0) { {  
  console.log('Fizz');  
} if (i%3 === 0 && i%5 === 0) {  
  console.log('Fizzbuzz');  
}  
               }  
  else if(i%5 === 0) {  
  console.log('Buzz');  
}  else {  
  console.log(i);  
}

2. Do while/ while (we use it when we don’t exactly how many times the condition will equal true)

---------------------------DO WHILE ------------------------

var i = 0;

do {

console.log(i);

i++;

}

while(i<11);

-----------------------------WHILE--------------------------

while(i<11) {

console.log(i);

i++

}

WTF?????

var sad = confirm('Would you like to begin the session?');

while (sad) {

console.log('A joke');

}

var yes= confirm ('Would you like to continue?');

if (yes) {

var response = prompt('Tell me about your problems');

if (response) {

console.log('Everything is gonna be ok')

sad = false;

}

} else {

sad =false;

}

3. Looping something 3times:

var count = 0;

var loop = function(){

while(count <3 ){

console.log('I\'m looping!');

count++;

}

};

loop();

VARIABLES / FUNCTIONS

1. var name = ('Frank');

console.log('Oh hello ' + name);

var name2 = ('Helene');

console.log('Oh hello ' + name2);

var name3 = ('Johnny');

console.log('Oh hello ' + name3);

2. function: name - parameter; Frank- argument

function sayHello(name) {

console.log('oh hello ' + name);

}

sayHello('Frank');

FUNCTIONS:

1. calculating the area

function calculateArea(side1, side2) {

console.log(side1 \* side2);

}

ARRAYS: to store mixed data (string&numbers)  
1.

var friends = ['Frank', 'Laura', 'Johny', 'Mary', 'Alice'];

function greetFriends() {

for(i=0; i<friends.length; i++) {

console.log('Oh hello ' + friends[i]);

}

}

greetFriends(0);

var places = ['Bahia', 'New York', 'Vietnam'];

function wantGo() {

for (i=0; i<places.length; i++) {

console.log(' I wanna go to ' + places[i]);

}

}

wantGo();

How to connect HTML wth JS:

HTML: <div class=’style’>

JS: var styleset = document.getElementsByClassName(‘style’);

jQUERY:

function main() {

var $skillset = $('.skillset') jQuery selector

}

jQuery selector- you can connect to it function HIDE(to hide) or fadeIN(to delay the appearance of some elements in miliseconds)

function main() {

$('.skillset').hide();

$('.skillset').fadeIn(1000);

SCHEME:

$(‘.somethingWhichRefersToHTML’).XX();

Click - showing something: function showing will show every element of the class from HTML, not only the one you clicked on

$('.projects-button').on('click', function(){

$('.projects').show();

} );

Function TOGGLE- it will show just the element you clicked on

$('.projects').toggle();

If we want to change the appearance of the active(selected) element we need to use a class created before in CSS for active. (for all)

$('.projects-button').toggleClass('active');

$(this).toggleClass(‘active); 🡪 inside the function click on

ZADANIA:

For every n form 0 to 100 count the occurrence of 1

function countOnes(n) {

var counter = 0;

for (var i = 0; i <= n; i++) {

iStr = i.toString();

for(var j = 0; j < iStr.length; j++) {

if(iStr[j] === "1") {

counter++

}

}

}

rerturn counter

}

QUESTIONS:

- what is the difference between

Var greetings = function (name) {

Console.log(‘Hello, ‘ + name) ;

}

Greetings(‘Ondrej’);

AND

Function greetings(name) {

Console.log(‘Hello, ‘ + name);

}

Greetings(‘Ondrej’);

LOOKING FOR A NAME IN THE TEXT --

How to check if the whole name is correct without rewrtining the same code for each letter???\_--------------------------------

var text = 'Zwracam się Lucy uprzejmie do Was z zapytaniem o fajne, ciekawe firmy z branży IT, Lucy które istnieją w Waszym mieście. Koleżanka rozgląda się za pracą,Lucy bo';

var myName = 'Lucy';

hits= [];

for (var i =0; i< text.length; i ++) {

if (text[i] === 'L') {

for (var j = i; j <= (myName.length); j++) {

hits.push(text[j]);

}

}

};

if (hits === false) {

console.log('Your name was not foun');

} else {

console.log(hits);

};

CHECK THIS OUT!:

for (var i = 0; i <= 25; i++) {

if (i%2 === 0) {

console.log('Those were your pair years' + [i]);

} else {

console.log('Those were odd years' + [i]);

}

};

var luckyNumber = Math.floor(Math.random()\*2);

while (i%2 === 0) {

console.log('pair ' + [i]);

i++;

}

Why the while loop is correct but displaying 26 intesad of randomNumer(1-2)?