Verkefni 3 Fylki og Objects (6%)

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1. Hvað er template literals (ES2015)? Komdu með kóðasýnidæmi ásamt skýringum. (0.5%)

Strengir með innbyggðum expressions

var name = "Jón";

console.log(`hello ${name}.`);

//` skilgreinir strenginn sem template literal

//$ segir að það eigi að nota breytuna sem kemur á eftir

//{name} er nafnið á breytunni

2. Hver er munurinn á for, forEach, for-in og for-of lykkjum? Útskýrðu. (0.5%)

for - fer í gegnum kóða í ákveðin mörg skipti

forEach fer í gegnum fylki án teljara, ekki hægt að stoppa

for-in – fer í gegnum lista og skilar key listans sem er númer hvers items ef ekkert er sett

for-of – fer í gegnum lista og skilar gildi úr listanum

3. Fylkjaaðferðir. Svarðu spurningum í lið 17 (e. quiz) í Arrays á Udacity https://classroom.udacity.com/courses/ud803 (0.75%)

reverse(), sort(), shift() & splice(), join()

4. .forEach() Leystu lið 20 í Arrays á Udacity https://classroom.udacity.com/courses/ud803 (0.5%)

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\* Use the existing `test` variable and write a `forEach` loop

\* that adds 100 to each number that is divisible by 3.

\*

\* Things to note:

\* - you must use an `if` statement to verify code is divisible by 3

\* - you can use `console.log` to verify the `test` variable when you're finished looping

\*/

var test = [12, 929, 11, 3, 199, 1000, 7, 1, 24, 37, 4,

19, 300, 3775, 299, 36, 209, 148, 169, 299,

6, 109, 20, 58, 139, 59, 3, 1, 139

];

// Write your code here

test.forEach(function(item){

if (item%3 === 0){

item += 100;

}

});

5. Hvað gerir .map() fylkjaaðferðin? Leystu lið 22 í Arrays á Udacity (0.5%)https://classroom.udacity.com/courses/ud803

Býr til nýtt til fylki úr gömlu fylki.

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\* Programming Quiz: I Got Bills (6-9)

\*

\* Use the .map() method to take the bills array below and create a second array

\* of numbers called totals. The totals array should contains each amount from the

\* bills array but with a 15% tip added. Log the totals array to the console.

\*

\* For example, the first two entries in the totals array would be:

\*

\* [57.76, 21.99, ... ]

\*

\* Things to note:

\* - each entry in the totals array must be a number

\* - each number must have an accuracy of two decimal points

\*/

var bills = [50.23, 19.12, 34.01,

100.11, 12.15, 9.90, 29.11, 12.99,

10.00, 99.22, 102.20, 100.10, 6.77, 2.22

];

var totals = bills.map(function(bill) {

bill = bill \* 1.15;

bill = Number(bill.toFixed(2));

console.log(bill)

return bill;

});

6. Fylki í fylki (2d fylki) Leystu lið 25 í Arrays á Udacity https://classroom.udacity.com/courses/ud803 (0.5%)

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\* Programming Quiz: Nested Numbers (6-10)

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\* - The `numbers` variable is an array of arrays.

\* - Use a nested `for` loop to cycle through `numbers`.

\* - Convert each even number to the string "even"

\* - Convert each odd number to the string "odd"

\*/

var numbers = [

[243, 12, 23, 12, 45, 45, 78, 66, 223, 3],

[34, 2, 1, 553, 23, 4, 66, 23, 4, 55],

[67, 56, 45, 553, 44, 55, 5, 428, 452, 3],

[12, 31, 55, 445, 79, 44, 674, 224, 4, 21],

[4, 2, 3, 52, 13, 51, 44, 1, 67, 5],

[5, 65, 4, 5, 5, 6, 5, 43, 23, 4424],

[74, 532, 6, 7, 35, 17, 89, 43, 43, 66],

[53, 6, 89, 10, 23, 52, 111, 44, 109, 80],

[67, 6, 53, 537, 2, 168, 16, 2, 1, 8],

[76, 7, 9, 6, 3, 73, 77, 100, 56, 100]

];

// your code goes here

for (var row = 0; row < numbers.length; row++) {

for (var column = 0; column < numbers[row].length; column++) {

if (numbers[row][column]%2 === 0)

numbers[row][column]="even";

else

numbers[row][column]="odd";

}

}

7. Leystu lið 8 í Objects á Udacity https://classroom.udacity.com/courses/ud803 (0.5%)

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\* Programming Quiz: Menu Items (7-2)

\*/

// your code goes here

var breakfast = {

name: "The Lumberjack",

price: 9.95,

ingredientes: ["eggs", "sausage", "toast", "hashbrowns", "pancakes"],

};

8. Leystu lið 9 í Objects á Udacity https://classroom.udacity.com/courses/ud803(0.5%)

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\* Programming Quiz: Bank Accounts 1 (7-3)

\*/

var savingsAccount = {

balance: 1000,

interestRatePercent: 1,

deposit: function addMoney(amount) {

if (amount > 0) {

savingsAccount.balance += amount;

}

},

withdraw: function removeMoney(amount) {

var verifyBalance = savingsAccount.balance - amount;

if (amount > 0 && verifyBalance >= 0) {

savingsAccount.balance -= amount;

}

},

// your code goes here

printAccountSummary: function printAccountSummary() {

return ("Welcome!\nYour balance is currently $" + savingsAccount.balance +

" and your interest rate is " +savingsAccount.interestRatePercent+"%.");

},

};

console.log(savingsAccount.printAccountSummary());

9. Leystu lið 12 í Objects á Udacity https://classroom.udacity.com/courses/ud803(0.75%)

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\* Programming Quiz: Donuts Revisited (7-6)

\*/

var donuts = [

{ type: "Jelly", cost: 1.22 },

{ type: "Chocolate", cost: 2.45 },

{ type: "Cider", cost: 1.59 },

{ type: "Boston Cream", cost: 5.99 }

];

// your code goes here

donuts.forEach(function(donuts) {

console.log(donuts.type + " donuts cost $" + donuts.cost + " each");

});

10. Búðu til og notaðu smið (e. function constructor) til að búa til tvær mismunandi pizzur (objects). Pizzan þarf að hafa; verð, stærð (large, medium, size) og álegg (ostur, skinka, pepperoni, ananas). Dæmi: Stór Magherita (ostur, oregano) kr. 2195. (1%)

function Pizza(name, size, price, ingredientes) {

this.name = name;

this.size = size;

this.price = price;

this. ingredientes = ingredientes;

}

var pizza1 = new Pizza("Hawaii","medium",2725, ["ostur", "skinka", "pepperoni", "ananas"])

var pizza2 = new Pizza("Stór Magherita","large",2125, ["ostur", "oregano"])