007 TypeScript - for-in vs for-of

TypeScript Kata List – Blog Page

[TypeScript Kata List on GitHub](https://github.com/robertdunaway/katas-typescript)

# Duration

10 minutes

# Brief

Examining the difference between “for in” and “for of”.

### For More Information

BING/GOOGLE: “TypeScript for in of”

# Instructions

Get tutorial folder or the entire katas-typescript repo.

Open the [before/\*.sln] file and execute the kata.

Feel free to execute this kata multiple times because repetition creates motor memory.

# Github

* Before (start kata with this)
  + https://github.com/robertdunaway/katas-typescript/tree/master/007%20TypeScript%20-%20for-in%20vs%20for-of/before
* After
  + https://github.com/robertdunaway/katas-typescript/tree/master/007%20TypeScript%20-%20for-in%20vs%20for-of/after

# Kata

Create a list named “items” and add random values to it then output “items” to the console.

Create a “for…in” loop over the “items” list and ouput the results to the console.

Create a “for…of” loop over the “items” list and output the results to the console.

var items: string[] = ['Bob', 'and', 'Tom'];

console.log('items = ' + items);

// for in loop

for (let item in items) {

console.log('for in loop: ' + item);

}

// for of loop

for (let item of items) {

console.log('for of loop: ' + item);

}

NOTE: Notice “for…in” only works against the index of the list while “for…of” works against the value of each item in the list.

Create a few more arrays and loop over them. Try something other than a string array. Possibly take an array of numbers and add them in the loop. Consider the scope of variables as you do. IE: “let” is scoped to the block it’s defined in while “var” scopes to the function level.

# Next

Take a few minutes and imagine more examples.