

Title: How does for..of work?

Answer:

For...Of Loop

The `for...in` statement is useful for iterating over object properties, but to iterate over iterable objects like arrays and strings, we can use the `for...of` statement. The `for...of` statement is a newer feature as of ECMAScript 6 (<http://es6-features.org/>). ECMAScript (or ES) is a scripting-language specification created to standardize JavaScript.

In this example of a `for...of` loop, we will create an array and print each item in the array to the console.

sharks.js

```
// Initialize array of shark species
let sharks = [ "great white", "tiger", "hammerhead" ];

// Print out each type of shark
for (let shark of sharks) {
    console.log(shark);
}
```

We'll receive the following as output from the `for...of` statement.

```
Output
great white
tiger
hammerhead
```

It is also possible to print out the index associated with the index elements using the `entries()` method.

sharks.js

```
...
// Loop through both index and element
for (let [index, shark] of sharks.entries()) {
    console.log(index, shark);
}
```

```
Output
0 'great white'
1 'tiger'
2 'hammerhead'
```

A string can be iterated through in the same way as an array.

sharkString.js

```
// Assign string to a variable  
let sharkString = "sharks";  
  
// Iterate through each index in the string  
for (let shark of sharkString) {  
    console.log(shark);  
}
```

Output

s
h
a
r
k
s

In this case, we looped through each character in the string, printing them in sequential order.

For a more detailed account of the differences between `for...in` and `for...of`, read about `for...of` loops on the Mozilla Developer Network (<https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/for...of>).

Tags: arrays, javascript, loops, strings