

String.prototype.substring()

Summary: in this tutorial, you'll learn how to use the JavaScript `substring()` method to extract a substring from a string.

Introduction to the JavaScript `substring()` method

The `substring()` method returns the part of the `string` from the start index (`startIndex`) up to and excluding the end index (`endIndex`):

```
str.substring(startIndex [, endIndex])
```

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```
.substring(0,4) → 'Java'
```

The `substring()` method accepts two parameters: `startIndex` and `endIndex` :

- The `startIndex` specifies the index of the first character to include in the returned string.
- The `endIndex` determines the first character to exclude from the returned substring. In other words, the returned substring doesn't include the character at the `endIndex` .

If you omit the `endIndex` , the `substring()` returns the substring to the end of the string.

If `startIndex` equals `endIndex` , the `substring()` method returns an empty string.

If `startIndex` is greater than the `endIndex` , the `substring()` swaps their roles: the `startIndex` becomes the `endIndex` and vice versa.

If either `startIndex` or `endIndex` is less than zero or greater than the `string.length` , the `substring()` considers it as zero (0) or `string.length` respectively.

If any parameter is `NaN`, the `substring()` treats it as if it were zero (0).

JavaScript substring() examples

Let's take some examples of using the JavaScript `substring()` method.

1) Extracting a substring from the beginning of the string example

The following example uses the `substring` method to extract a substring starting from the beginning of the string:

```
let str = 'JavaScript Substring';
let substring = str.substring(0,10);

console.log(substring);
```

Output:

```
JavaScript
```

2) Extracting a substring to the end of the string example

The following example uses the `substring()` to extract a substring from the index 11 to the end of the string:

```
let str = 'JavaScript Substring';
let substring = str.substring(11);

console.log(substring);
```

Output:

```
Substring
```

3) Extracting the domain from the email example

The following example uses the `substring()` with the `indexOf()` to extract the domain from the email:

```
let email = 'john.doe@gmail.com';  
let domain = email.substring(email.indexOf('@') + 1);  
  
console.log(domain); // gmail.com
```

How it works:

- First, the `indexOf()` returns the position of the `@` character.
- Then the `substring` returns the domain that starts from the index of `@` plus 1 to the end of the string.

Summary

- The JavaScript `substring()` method returns the substring from the start index up to and excluding the end index.