

Data attributes in javascript

The data-* attributes is used to store custom data private to the page or application.

The data-* attributes gives us the ability to embed custom data attributes on all HTML elements.

To create a data attribute in HTML we just need to add a custom attribute to our HTML element that starts with data-.

The dataset property on an element will return a DOMStringMap in JavaScript which is essentially just an object that contains all the custom data attributes of an element. Our dataset looks like this.

```
{active: ""  
  firstName: "Kyle"  
  lastName: "Cook"}
```

in order to access an individual data attribute we just access it like a property on an object since dataset is just an object.

```
const div = document.getElementById("test-div")  
  
console.log(div.dataset.firstName)  
// Kyle  
console.log(div.dataset.lastName)  
// Cook
```

In order to create a new data attribute in JavaScript we just need to add a new property to the dataset object with a value.

```
const div = document.getElementById("test-div")  
  
div.dataset.test = "Hi"  
console.log(div.dataset.test)  
// Hi
```

The html element will be like this:

```
<div
  id="test-div"
  data-test="Hi"
  data-first-name="Kyle"
  data-last-name="Cook"
  data-active
></div>
```

To update the value of data attribute need to set the value of our dataset property to the new value and it will update the HTML for us.

```
const div = document.getElementById("test-div")

div.dataset.firstName = "Sally"
console.log(div.dataset.firstName)
// Sally
```

The html element will be

```
<div
  id="test-div"
  data-first-name="Sally"
  data-last-name="Cook"
  data-active
></div>
```

To delete an element we need to use the delete keyword to remove it completely from the object.

```
delete div.dataset.active
console.log(div.dataset.active)
// undefined
```

Html will be

```
<div id="test-div" data-first-name="Sally" data-last-name="Cook"></div>
```

String methods

1. JavaScript String Length

The length property returns the length of a string:

```
let text = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";  
let length = text.length;  
  
//26
```

2. JavaScript String charAt()

The charAt() method returns the character at a specified index (position) in a string:

```
let text = "HELLO WORLD";  
let char = text.charAt(0);  
  
// H
```

3. JavaScript String repeat()

The repeat() method returns a string with a number of copies of a string.

The repeat() method returns a new string.

The repeat() method does not change the original string.

```
let text = "Hello world!";  
let result = text.repeat(4);  
  
// Hello world!Hello world!Hello world!Hello world!
```