

Element Interface

Web Technologies



Lecture by
Dr Elahe Kani-Zabihi

```
<!doctype html>
<html>
  <head>
    <title>
      Web Technologies
    </title>
    <style>
      p {
        color: blue;
      }
    </style>
    <script>
      console.log("client-side");
    </script>
  </head>
  <body>
    <p>
      Welcome!
    </p>
  </body>
</html>
```


What we will cover

- **Methods of the element Interface**
- **DOM HTML specification properties**
- **classList methods**

Methods of the Element Interface

- **hasAttribute** (*name*)
- **getAttribute** (*name*)
- **setAttribute** (*name, value*)
- **removeAttribute** (*name*)

getAttribute() Example

```
<a href="www.city.ac.uk"> City University </a>
```

```
<script>
```

```
  const link = document.querySelector("a");
```

```
  const hrefValue = link.getAttribute("href");  
  console.log(hrefValue);
```

```
</script>
```

setAttribute() Example

```
<img id="anImage" alt="This is an image" src="">
```

```
<script>
```

```
    const imageLink =  
document.getElementById("anImage");  
    const imageUrl = "https://city.ac.uk/logo.jpg";
```

```
    imageLink.setAttribute("src", imageUrl);
```

```
</script>
```

DOM HTML Specification Properties

- All elements
 - id
 - title
 - className
 - tagName
- <a>
 - href
 - src
 - alt
- input
 - disabled

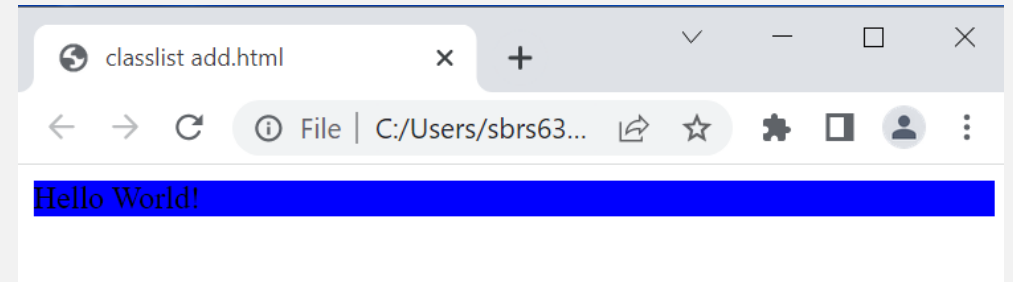
1. Alert (imageElement.**src**);
2. Const target = \$("#first_link").**href**
3. \$("p").**className** = "paragraph";
4. \$("#btnPlay").**disabled** = true;

classList Methods

- **contains (*className*)**
- **add (*className*)**
- **remove (*className*)**
- **replace (*oldName*, *newname*)**
- **toggle (*className*)**

add() Method Example

```
<head>
  <style>
    .colour {background-color: blue;}
  </style>
</head>
<body>
  <p id="changeColour">Hello World!</p>
  <script>
    const chCo = document.getElementById ("changeColour");
    chCo.classList.add ("colour");
  </script>
</body>
```



toggle() Method Example

```
<body>
  <p id="changeColour">Hello World!</p>
  <button onclick = "applyColour()"> Colour </button>
  <script>
    function applyColour() {
      const chCo = document.getElementById("changeColour");
      chCo.classList.toggle("colour");
    }
  </script>
</body>
```

Hello World!

Colour

Hello World!

Colour

Hello World!

Colour

replace() Method Example

```
<head><style>
    .oldColour {background-color:blue;}
    .newColour {background-color: pink;}</style>
</head>
<body>
    <p id="changeColour" class="oldColour">Hello World!</p>
    <button onclick = "applyColour()"> Colour </button>
    <script>
        function applyColour(){
            const chCo = document.getElementById("changeColour");
            chCo.classList.replace("oldColour", "newColour");}
    </script>
</body>
```

Hello World!

Colour

Hello World!

Colour

Try It Yourself

In this activity you can practice using the classList methods. So,

1. Use the code given in slides 9-11 to use the add (), toggle () and replace () methods.