



DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING

Title: Implementation of JavaScript HTML DOM

WEB PROGRAMMING LAB
CSE 302



GREEN UNIVERSITY OF BANGLADESH

1 Objective(s)

- To gather the basic working knowledge of JavaScript.
- To implement JavaScript HTML DOM.

2 Problem analysis

The HTML DOM is a standard object model and programming interface for HTML. For defining HTML elements as objects, the properties of all HTML elements, the methods to access all HTML elements and the events for all HTML elements we need HTML DOM. Here DOM is used to change the value of the text field and to change some CSS property like background color or text color.

3 Implementation in JavaScript

```
1 <!DOCTYPE html>
2 <html>
3   <body>
4     Name:<input type="text" id="mytext" value ="abcd">
5
6     <p>click the button to change the value of text field</p>
7     <button onclick=myfunction1()> try it </button>
8
9     <p id="demo">JS DOM</p>
10    <p>click the button to change color of p tag</p>
11    <button onclick="myfunction2()">try it to change tag color</button>
12
13    <ul>
14      <li>Coffee</li>
15      <li>Tea</li>
16      <li>Milk</li>
17    </ul>
18
19    button onclick="myFunction3()">Try it</button>
20
21    <p id="demo2"></p>
22    <script>
23      function myfunction1() {
24        document.getElementById("mytext").value="wxyz";
25      }
26
27      document.getElementById("demo").innerHTML="html element change";
28
29      function myfunction2() {
30        var x=document.getElementsByTagName("p");
31
32        for(var i=0;i<x.length;i++){
33          x[i].style.color="red";
34        }
35      }
36
37      function myFunction3() {
38        var x = document.getElementsByTagName("LI");
39        document.getElementById("demo").innerHTML = x[0].innerHTML;
40      }
41    </script>
42
```

```
43  
44     </body>  
45 </html>
```

4 Input/Output

Output of the program is given below.

<p>Name: <input type="text" value="abcd"/></p> <p>click the button to change the value of text field</p> <p><input type="button" value="try it"/></p> <p>html element change</p> <p>click the button to change color of p tag</p> <p><input type="button" value="try it to change tag color"/></p>	<p>Name: <input type="text" value="wxyz"/></p> <p>click the button to change the value of text field</p> <p><input type="button" value="try it"/></p> <p>html element change</p> <p>click the button to change color of p tag</p> <p><input type="button" value="try it to change tag color"/></p>
<p>Name: <input type="text" value="wxyz"/></p> <p>click the button to change the value of text field</p> <p><input type="button" value="try it"/></p> <p>html element change</p> <p>click the button to change color of p tag</p> <p><input type="button" value="try it to change tag color"/></p>	<p>An unordered list:</p> <ul style="list-style-type: none">• Coffee• Tea• Milk <p>Click the button to display the innerHTML of the second li element (index 1).</p> <p><input type="button" value="Try it"/></p> <p>Coffee</p>

Figure 1: HTML DOM

5 Discussion & Conclusion

Based on the focused objective(s) to understand about HTML DOM, the additional lab exercise made me more confident towards the fulfilment of the objectives(s).

6 Lab Task (Please implement yourself and show the output to the instructor)

1. Implement a JavaScript program to count and display the items of a dropdown list, in an alert window.
2. Implement a JavaScript program to change the attribute value of image tag.

6.1 Problem analysis

By using JavaScript DOM method like `getElementById()`, `getElementsBytagname()`, `getElementByClass()` you can access and change various HTML attribute, HTML events and CSS style.

7 Lab Exercise (Submit as a report)

- Implement a JavaScript function to get the values of First and Last name of the following form.
- Implement Write a JavaScript program to count and display the items of a dropdown list, in an alert window.

8 Policy

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