

NAME:- DIVYANG BAGLA
PANEL:- D (D-2)
ROLL NO:- PD-32

T.Y. BTech CSE

PAGE NO.:



WTL

ASSIGNMENT No. - 4

AIM:- Write a client-side script with Javascript to access and manipulate document object model (DOM) objects in an HTML web page. Develop a dynamic web page using JS and DOM.

OBJECTIVES:-

- 1) To learn basic functionality of DOM objects.
- 2) To understand how to retrieve and manipulate DOM objects in HTML web page.

THEORY:-

1) HTML Document Object Model:-

→ The DOM is a programming API for HTML & XML documents. It defines the logical structure of documents and way a document is accessed and manipulated. With DOM, programmers can create and build documents, navigate their structure, and add, modify, or delete elements & content.

2) DOM methods, properties:-

The programming interface is the properties and methods of each object.

A property is a value that you can get or set.

A method is an actⁿ you can do.

3) Javascript event handlers:-

HTML DOM event allows javascript to register different handlers on elements in an HTML document. Events are normally used in combination with functions and the funⁿ will not be executed before event occurs.

- 4) Linking external Javascript file to HTML file.
The `src` attribute specifies the use of external script file. If you want to run the same JS on several pages in a website you should create an external JS file instead of writing the same script over and over again.

FAQ'S

- Q1 How do you access an element of DOM knowing `id = "abc"`?
- ```
document.getElementById("abc");
```
- Q2 Provide a simple code for accessing DOM element having `class = "Blue"`?
- ```
document.getElementsByClassName("blue")
```
- Q3 How to access all the `<P>` elements using DOM method?
- ```
document.getElementsByTagName('P');
```
- Q4 Give an example of how to modify an attribute value using DOM?

```
Click Me
```

```
let link = document.querySelector('a');
link.setAttribute('href', 'index.html');
```

- Q5 How to modify the CSS properties using HTML DOM?
- The CSS properties of elements can be modified by `style` property and then the style you want to modify.
- eg:- `element.style.color = "red";`





Q. Give an example code of adding & removing a node from DOM tree?

Eg:-

```

 Buy groceries
 feed the cat
 Do laundry

```

```
const todo = document.querySelector('ul');
const newtodo = document.createElement('li');
newtodo.textContent = 'Do homework';
todo.appendChild(newtodo);
todo.firstElementChild.remove();
```

PLATFORM/LANGUAGE USED:-

Windows/Ubuntu, Web browsers (Google chrome/Mozilla Firefox), HTML code editor (Notepad/Adobe Dreamweaver).

CONCLUSION:-

Hence in this way we have implemented a program with HTML and Javascript to access and manipulate DOM objects in an HTML page.