

Practical No 5

Aim : JavaScript Browser Object

1. JavaScript Document Object Model

HTML :

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="style.css">
  <title>Basic Of DOM Manipulation</title>
</head>

<body>
  <div class="nav">
    <h1>Basic Of DOM Manipulation</h1>
  </div>

  <div>
    <p class="demoClass">Selecting Element Using DOM By Class Name</p>
  </div>

  <div>
    <p id="demoID">Selecting Element Using DOM By ID</p>
  </div>

  <div>
    <button class="button">Click To See New Paragraph</button>
    <button class="button buttonHover">Click To See Hover Effect</button>
  </div>

  <script src="script.js"></script>
</body>

</html>
```

CSS :

```
* {
  margin: 0;
  padding: 0;
}

body {
  background: aliceblue;
  color: blueviolet;
}
```

```
.nav {  
  background: rgb(43, 226, 119);  
  padding: 1rem 2rem;  
}
```

```
h1 {  
  text-align: center;  
}
```

```
.button {  
  margin: 8px 16px;  
  padding: 8px 16px;  
  font: bold 14px sans-serif;  
  color: aliceblue;  
  background: blueviolet;  
  border: none;  
  border-radius: 4px;  
}
```

```
div {  
  margin-bottom: 1rem;  
}
```

JavaScript :

```
// Printing In JavaScript  
console.log("Hello World");
```

```
// Selecting An Element Through DOM By Class Name  
let demoClass = document.getElementsByClassName("demoClass")[0];  
console.log(demoClass);  
console.log(demoClass.innerHTML);
```

```
// Selecting An Element Through DOM By ID  
let demoID = document.getElementById("demoID");  
console.log(demoID);  
console.log(demoID.innerHTML);
```

```
// By Using Query Selector  
let demoQuery = document.querySelector(".demoClass");  
console.log(demoQuery);  
console.log(demoQuery.innerHTML);
```

```
// Handling Click Event  
let button = document.querySelector("button");  
button.addEventListener("click", function () {  
  let newParagraph = document.createElement("p");  
  newParagraph.innerHTML = "This Is New Paragraph By Click";  
  document.body.appendChild(newParagraph);  
});
```

```
// Handling Hover Event  
let buttonHover = document.querySelector(".buttonHover");  
buttonHover.addEventListener("mouseover", function () {  
  let newParagraph = document.createElement("p");
```

```
newParagraph.innerHTML = "This Is New Paragraph By Hover";  
document.body.appendChild(newParagraph);  
});
```

Basic Of DOM Manipulation

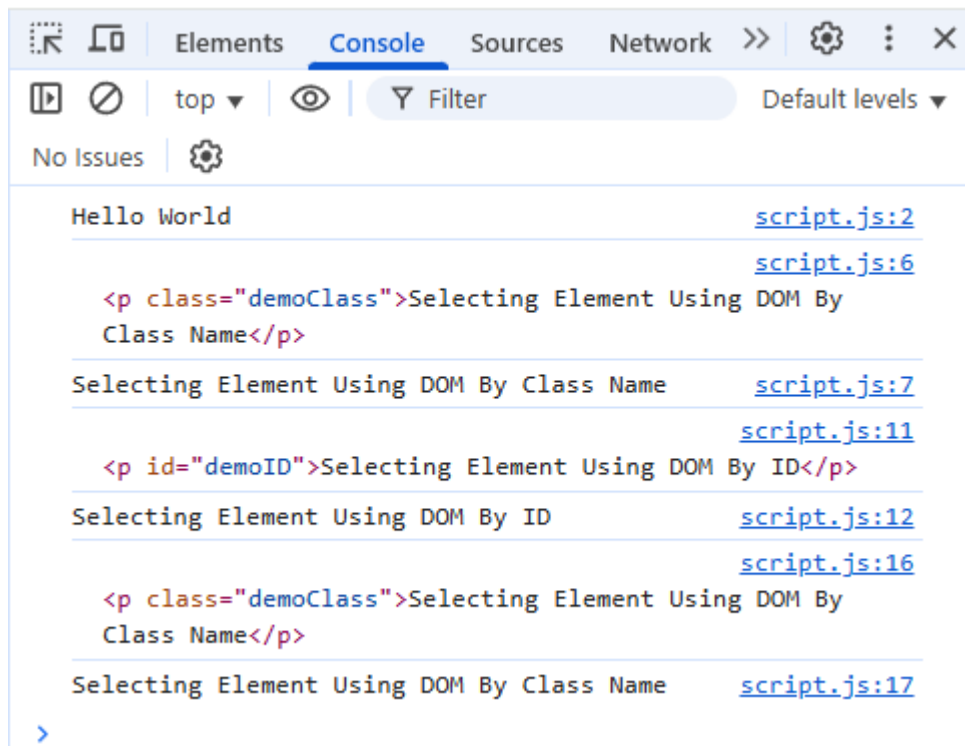
Selecting Element Using DOM By Class Name

Selecting Element Using DOM By ID

Click To See New Paragraph

Click To See Hover Effect

This Is New Paragraph By Click
This Is New Paragraph By Click
This Is New Paragraph By Click
This Is New Paragraph By Hover
This Is New Paragraph By Hover
This Is New Paragraph By Hover
This Is New Paragraph By Click



2. Form Validation Using JavaScript

HTML :

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet" href="style.css">
  <title>Form Validation</title>
</head>

<body>
  <div class="nav">
    <h1>Basic Of Form Validation</h1>
  </div>

  <form name="myForm" action="handleSubmit">

    <div>
      <label for="username">Enter Your Name : </label>
      <input class="input" type="text" id="username" name="Username" required placeholder="Enter your
username">
    </div>

    <div>
      <label for="email">Enter Your Email : </label>
      <input class="input" type="email" id="email" name="email" required placeholder="Enter your email
address">
    </div>

    <div>
      <label for="password">Enter Your Password : </label>
      <input class="input" type="password" id="password" required name="password" placeholder="Enter
your password">
    </div>

    <div>
      <label for="password">Confirm Password : </label>
      <input class="input" type="password" id="confirmPassword" required name="confirmPassword"
placeholder="confirm password">
    </div>

    <div>
      <p>Select your Gender</p>
      <input type="radio" id="Male" required name="gender" value="male">
      <label for="Male">Male</label>
      <input type="radio" id="Female" required name="gender" value="female">
      <label for="Female">Female</label>
    </div>

    <div>
      <label for="age">Enter Your Age : </label>
```

```

    <input class="input" type="number" id="age" name="age" required placeholder="Enter your age">
</div>

<div>
    <input class="button" type="submit" value="Submit">
    <input class="button" type="button" onclick="print()" value="Print Form">
</div>

</form>
<script src="script.js"></script>
</body>

</html>

```

CSS :

```

* {
    font-family: 'Courier New', Courier, monospace;
    margin: 0;
    padding: 0;
}

```

```

body {
    background: aliceblue;
    color: blueviolet;
}

```

```

div {
    margin-bottom: 1rem;
}

```

```

.nav {
    background: rgb(43, 226, 119);
    padding: 1rem 2rem;
}

```

```

h1 {
    text-align: center;
}

```

```

.button {
    margin: 8px 16px;
    padding: 8px 16px;
    font: bold 14px sans-serif;
    color: aliceblue;
    background: blueviolet;
    border: none;
    border-radius: 4px;
}

```

```

.input {
    padding: .5rem 1rem;
    width: 50%;
    border: none;
}

```

```
form{
  width: 70%;
  margin: 0 auto;
}
```

JavaScript :

```
// handling submit event
```

```
// To Check Name
```

```
function checkName(name) {
  if (name.length < 3) {
    alert("Name should be at least 3 characters long");
    return false;
  }
  return true;
}
```

```
// To Check Email
```

```
function checkEmail(email) {
  // RegEx For Email
  let re = /^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$/;
  if (!re.test(email)) {
    alert("Invalid Email");
    return false;
  }
  return true;
}
```

```
// To Check Password
```

```
function checkPassword(password, confirmPassword) {
  if (password.length < 6) {
    alert("Password should be at least 6 characters long");
    return false;
  }

  if (password !== confirmPassword) {
    alert("Passwords do not match");
    return false;
  }
  return true;
}
```

```
// To Check Age
```

```
function checkAge(age) {
  if (age < 14) {
    alert("You must be at least 14 years old");
    return false;
  }
  return true;
}
```

```
myForm.addEventListener("submit", handleSubmit);
```

```

function handleSubmit(e) {
    e.preventDefault();
    let name = document.querySelector("#username").value;
    let email = document.querySelector("#email").value;
    let password = document.querySelector("#password").value;
    let confirmPassword = document.querySelector("#confirmPassword").value;
    let age = document.querySelector("#age").value;

    if (checkName(name) && checkEmail(email) && checkPassword(password, confirmPassword) &&
    checkAge(age)) {
        alert("Form submitted successfully");
    }

    // Reset Form
    name = "";
    email = "";
    password = "";
    confirmPassword = "";
    age = "";
}

```

Basic Of Form Validation

Enter Your Name :

Enter Your Email :

Enter Your Password :

Confirm Password :

Select your Gender

☐ Male ☐ Female

Enter Your Age :

Submit

Print Form