

Practical-5

Aim: JavaScript

1. Basic JS Practical: script tags, alerts, documents, functions, arrays, loops, and conditions.
2. Advanced JS Practical: Objects, DOM references: getElementById, InnerHTML etc.

1. Basic JS Practical: script tags, alerts, documents, functions, arrays, loops, and conditions.

```
<!DOCTYPE html>
<head>
  <title>Basic JS Practical</title>
  <script type="text/javascript">
    function d(){
      var name=["Aesh","Hunaid","Dhruval","Harshad","Sneh"];
      document.getElementById("1").innerHTML="Array : "+name;
      for(var i=0; i<names.length; i++){
        console.log(names[i]);
      }
    }
    function details()
    {
      alert("It is the alert box of function");
    }
  </script>
</head>
<body>
  <p>
    <h3>Click the following button to see the magic of javascript</h3>
    <p>
      <button type="button" onclick="details()">Alert Box!!</button>
      <button type="button" id="myBtn" onclick="d()">Array</button>
      <p id="1"></p>
    </body>
</html>
```

Output:



Fig.1 Alert Box

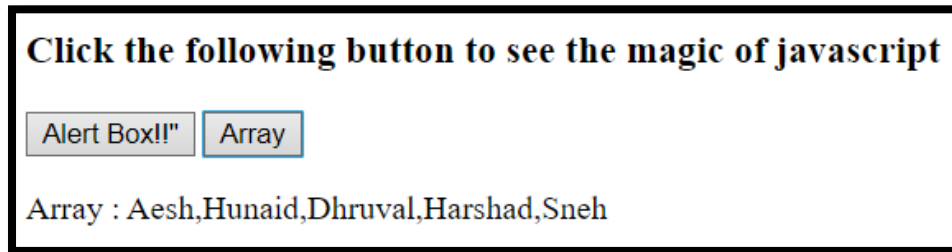


Fig.2 Array

2. Advanced JS Practical: Objects, DOM references: getElementById, InnerHTML etc.

```
<!DOCTYPE html>
<head>
  <title>Advanced JS Practical</title>
  <script type="text/javascript">
    function object(){
      let person = {
        firstName : "John",
        lastName  : "Doe",
        age       : 50,
        eyeColor  : "blue"
      };
      document.getElementById("1").innerHTML = "Creating an object : "+person.firstName + " " +
person.lastName;
    }
    function innerHTML1() {
      document.getElementById("2").innerHTML = "";
    }
  </script>
</head>
<body>
  <p>
    <h3>Click the following button to see Objects, DOM references: getElementById, InnerHTML
etc.</h3>
    <p>
      <button type="button" id="myBtn1" onclick="object()">Object</button>
      <p id="1"></p>
      <p id="2">Click the button to delete my HTML content (innerHTML).</p>
      <button type="button" onclick="innerHTML1()">innerHTML</button>
    </body>
</html>
```

Output:

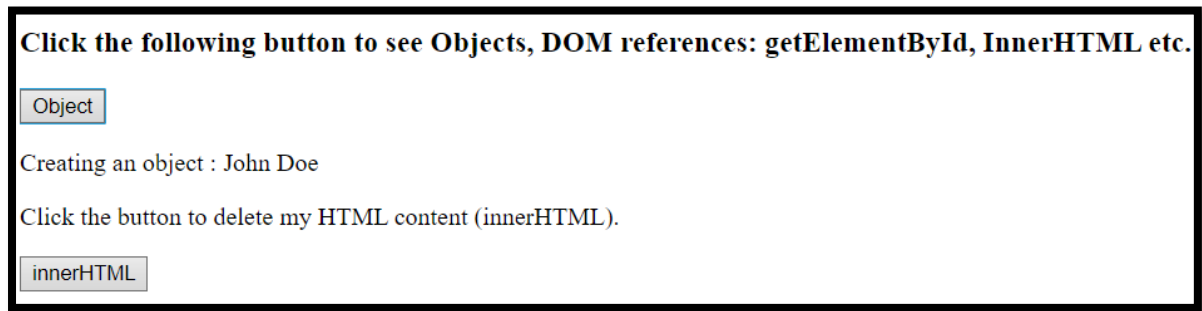


Fig.1 Creating an Object

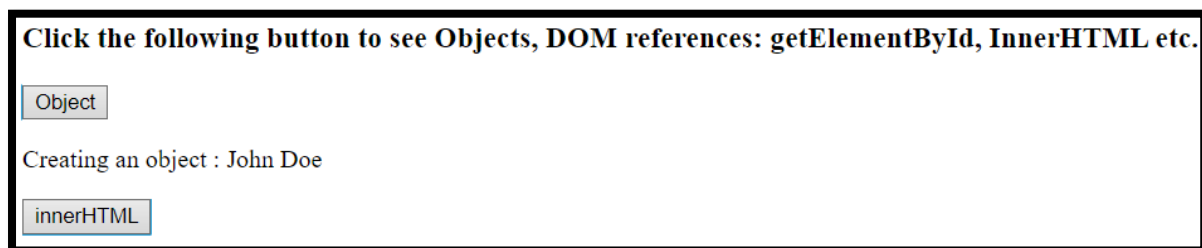


Fig.2 Using getElementById & InnerHTML to delete the paragraph line (You can see above Fig.1 in which line is present)

Practical-6

Aim: JavaScript and Event Listeners

1. Listeners and JavaScript Practical: Mouse motion, movement, keyboard
2. Perform Regular Expressions and validation using JavaScript

1. Listeners and JavaScript Practical: Mouse motion, movement, keyboard

```
<!DOCTYPE html>
<html>
<head>
  <title>JavaScript and Event Listeners 1</title>
  <script>
    picture1=new Image
    picture1.src="picture1.png"
    picture2=new Image
    picture2.src="picture2.png"
    function myFunction() {
      var x = document.getElementById("fname");
      x.value = x.value.toUpperCase();
    }
  </script>
</head>
<body>
<h1>Listeners and JavaScript Practical: Mouse motion, movement, keyboard</h1>
<p>The onmouseover event occurs when you bring your mouse over any element and the
onmouseout occurs when you take your mouse out from that element.</p>
<a                                onMouseOver="document.picture.src=picture2.src"
onMouseOut="document.picture.src=picture1.src">
</a>
<p>A function is triggered when the user releases a key in the input field. The function transforms
the character to upper case.</p>
Enter your name: <input type="text" id="fname" onkeyup="myFunction()">
</body>
</html>
```

Output:

Listeners and JavaScript Practical: Mouse motion, movement, keyboard

The onmouseover event occurs when you bring your mouse over any element and the onmouseout occurs when you take your mouse out from that element.

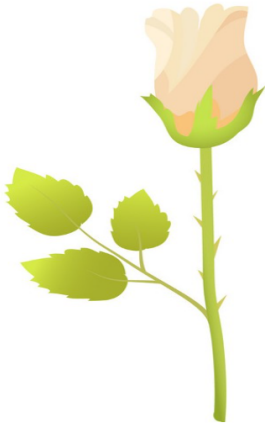


Fig.1 Mouse Motion & Movement when mouse is move out from the element

Listeners and JavaScript Practical: Mouse motion, movement, keyboard

The onmouseover event occurs when you bring your mouse over any element and the onmouseout occurs when you take your mouse out from that element.



Fig.2 Mouse Motion & Movement when mouse is move over any element

A function is triggered when the user releases a key in the input field. The function transforms the character to upper case.

Enter your name:

Fig.3 The keyboard function is used to transforms the character to upper case

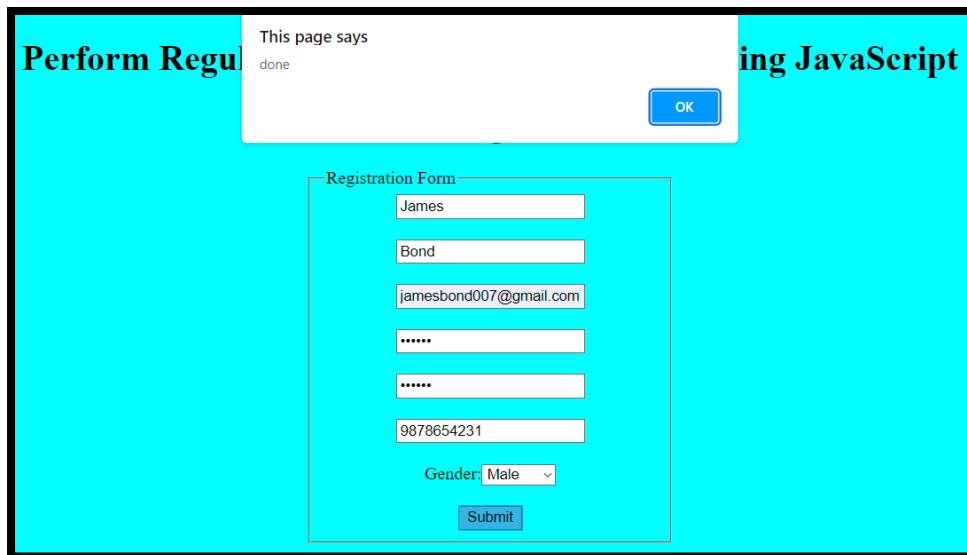
2. Perform Regular Expressions and validation using JavaScript

```
<!DOCTYPE html>
<html>
<head>
  <title>JavaScript and Event Listeners 2</title>
  <style>
    legend {
      display: block;
      padding-left: 2px;
      padding-right: 2px;
      border: none;
    }
  </style>
  <script type="text/javascript">
    function validate() {
      var user = document.getElementById("e").value;
      var user2 = document.getElementById("e");
      var re = /^[^\\w+([\\.-]?\\w+)*@\\w+([\\.-]?\\w+)*\\.\\w{2,3})+$/;
      if (re.test(user)) {
        alert("done");
        return true;
      }
      else {
        user2.style.border = "red solid 3px";
        return false;
      }
    }
  </script>
</head>
<body bgcolor="cyan">
  <center>
    <h1>Perform Regular Expressions and validation using JavaScript</h1>
    <h1>Email Registration</h1>
    <form>
      <fieldset style="width:300px">
        <legend>Registration Form</legend>
        <table>
          <tr>
            <input type="text" placeholder="First Name" maxlength="10">
          </tr>
          <br><br>
          <tr>
            <input type="text" placeholder="Last Name" maxlength="10">
          </tr>
          <br><br>
          <tr>
            <input type="email" placeholder="username@gmail.com" id="e">
          </tr>
          <br><br>
        </table>
      </fieldset>
    </form>
  </center>
</body>
</html>
```

```

<tr>
  <input type="password" placeholder="Password">
</tr>
<br><br>
<tr>
  <input type="password" placeholder="Confirm Password">
</tr>
<br><br>
<tr>
  <input type="text" placeholder="Contact">
</tr>
<br><br>
<tr>
  <label>Gender:</label>
  <select id="gender">
    <option value="male">Male</option>
    <option value="female">Female</option>
    <option value="others">Others</option>
  </select>
</tr>
<br><br>
<tr><input type="submit" onclick="validate()" value="Submit">
</tr>
</table>
</fieldset>
</form>
</center>
</body>
</html>
  
```

Output:




The screenshot shows a web browser window with a yellow background. At the top, there is a navigation bar with the text "Perform Regular" on the left and "ing JavaScript" on the right. In the center, there is a white box with the text "This page says" and "done" below it, and an "OK" button. Below this, there is a "Registration Form" box. The form contains the following fields: "Name" (filled with "James"), "Surname" (filled with "Bond"), "Email" (filled with "jamesbond007@gmail.com"), "Password" (filled with "*****"), "Confirm Password" (filled with "*****"), "Phone Number" (filled with "9878654231"), and "Gender" (a dropdown menu with "Male" selected). A "Submit" button is at the bottom of the form.

Fig.1 After submitting correct information

Perform Regular Expressions and validation using JavaScript

Email Registration

Registration Form

 A part following '@' should not contain the symbol '+'.

Gender: Male

Fig.2 After submitting incorrect information (E-mail)