Sakshi Anil Fokane (TE-A 42)

Assignment No :- 4

Title :- HTML , Java Script

Objective :-

1) Understand about basic concepts of JavaScript

2) Use JavaScript for validation of data.

Problem Statement :

write a program to design registration form for students by using HTML, CSS & Java Script & perform following Validation all fields Mandatory phone number email address validation .

Outcome :- Student will be able to

1) design static web page using HTML

2) Apply JavaScript to HTML pages for validation of data.

Software & Hardware Requirement

Software - Notepad Any browser.

Theory Concepts :-

Java Script is a programming language of HTML as well as. It is preferred for creating network centric application. If is integrated & complimentary with Java. As

JavaScript is integrated with HTML it is very easy to implement. It is open as well as cross platform.

- The advantage of using JavaScript
  - It requires less server intraction
  - Immediate feedback to the visitors
  - Increased interactivity
  - Richer interfaces

- Validation:
  When client enters the call necessary data & press the Submit button from validation is done at server side if data entered by client is in correct or missing the server needs to send al data back to the client & request for resubmission of form with correct information

- Basic Validation: First of all the form must be checked to make sure all the mandatory field are filled in

- Data format validation. Secondly the data that is entered must be checked for correct format & its

value

- Technology / Tools :-
  JavaScript can be implemented using JavaScript Statement that are placed within the <script>.

- The Script tag takes two important attributes :
  • language :- This attribute specifies what Scripting language you are using.
  - Type :- This attribute is what is now recommended to indicate the Scripting language in use & its value schould be set to 'text/ JavaScript".

- Test Cases :-
  Manual testing is used to clock following validation. All the field like Full Name, class, Department, Address phone no. & email id are mandatory field.
  • Phone no. should be no. only.

- Conclusion :
  Hence, we applied validate the data using JavaScript.

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Write a program to design a registration form for students by using html , css & javascript and perform following validation : all fields are mandatory , phone number and email address validation.

File 1 validation.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<title>JavaScript Form validation</title>
<link rel="stylesheet" href="C:/Users/sandi/Desktop/wt4.css">
<script>
// Defining a function to display error message
function printError(elemId, hintMsg) {
    document.getElementById(elemId).innerHTML = hintMsg;
}

// Defining a function to validate form
function validateForm() {
    // Retrieving the values of form elements
    var name = document.contactForm.name.value;
    var email = document.contactForm.email.value;
    var mobile = document.contactForm.mobile.value;
    var country = document.contactForm.country.value;
    var gender = document.contactForm.gender.value;
    var hobbies = [];
    var checkboxes = document.getElementsByName("hobbies[]");
    for(var i=0; i < checkboxes.length; i++) {
        if(checkboxes[i].checked) {
            // Populate hobbies array with selected values
```

```javascript
      hobbies.push(checkboxes[i].value);
    }
}


    // Defining error variables with a default value
var nameErr = emailErr = mobileErr = countryErr = genderErr = true;


// Validate name
if(name == "") {
    printError("nameErr", "Please enter your name");
} else {
    var regex = /^[a-zA-Z\s]+$/;
    if(regex.test(name) === false) {
        printError("nameErr", "Please enter a valid name");
    } else {
        printError("nameErr", "");
        nameErr = false;
    }
}


// Validate email address
if(email == "") {
    printError("emailErr", "Please enter your email address");
} else {
    // Regular expression for basic email validation
    var regex = /^\S+@\S+\.\S+$/;
    if(regex.test(email) === false) {
        printError("emailErr", "Please enter a valid email address");
    } else{
        printError("emailErr", "");
        emailErr = false;
```

```javascript
        }
    }


    // Validate mobile number
    if(mobile == "") {
        printError("mobileErr", "Please enter your mobile number");
    } else {
        var regex = /^[1-9]\d{9}$/;
        if(regex.test(mobile) === false) {
            printError("mobileErr", "Please enter a valid 10 digit mobile number");
        } else{
            printError("mobileErr", "");
            mobileErr = false;
        }
    }


    // Validate country
    if(country == "Select") {
        printError("countryErr", "Please select your country");
    } else {
        printError("countryErr", "");
        countryErr = false;
    }


    // Validate gender
    if(gender == "") {
        printError("genderErr", "Please select your gender");
    } else {
        printError("genderErr", "");
        genderErr = false;
    }
```

```
    // Prevent the form from being submitted if there are any errors

    if((nameErr || emailErr || mobileErr || countryErr || genderErr) == true) {

      return false;

    } else {

      // Creating a string from input data for preview

      var dataPreview = "You've entered the following details: \n" +

              "Full Name: " + name + "\n" +

              "Email Address: " + email + "\n" +

              "Mobile Number: " + mobile + "\n" +

              "Country: " + country + "\n" +

              "Gender: " + gender + "\n";

      if(hobbies.length) {

        dataPreview += "Hobbies: " + hobbies.join(", ");

      }

      // Display input data in a dialog box before submitting the form

      alert(dataPreview);

    }

};

</script>

</head>

<body>

<form name="contactForm" onsubmit="return validateForm()"
action="/examples/actions/confirmation.php" method="post">

  <h2>Application Form</h2>

  <div class="row">

    <label>Full Name</label>

    <input type="text" name="name">

    <div class="error" id="nameErr"></div>

  </div>

  <div class="row">

    <label>Email Address</label>
```

```html
    <input type="text" name="email">

    <div class="error" id="emailErr"></div>

</div>

<div class="row">

    <label>Mobile Number</label>

    <input type="text" name="mobile" maxlength="10">

    <div class="error" id="mobileErr"></div>

</div>

<div class="row">

    <label>Country</label>

    <select name="country">

        <option>Select</option>

        <option>Australia</option>

        <option>India</option>

        <option>United States</option>

        <option>United Kingdom</option>

    </select>

    <div class="error" id="countryErr"></div>

</div>

<div class="row">

    <label>Gender</label>

    <div class="form-inline">

        <label><input type="radio" name="gender" value="male"> Male</label>

        <label><input type="radio" name="gender" value="female"> Female</label>

    </div>

    <div class="error" id="genderErr"></div>

</div>

<div class="row">

    <label>Hobbies <i>(Optional)</i></label>

    <div class="form-inline">

        <label><input type="checkbox" name="hobbies[]" value="sports"> Sports</label>
```

```html
        <label><input type="checkbox" name="hobbies[]" value="movies"> Movies</label>

        <label><input type="checkbox" name="hobbies[]" value="music"> Music</label>

      </div>

    </div>

    <div class="row">

      <input type="submit" value="Submit">

    </div>

</form>

</body>

</html>
```

File 2 – wt4.css

```css
body {

    font-size: 16px;

    background: #f9f9f9;

    font-family: "Segoe UI", "Helvetica Neue", Arial, sans-serif;

}

h2 {

    text-align: center;

    text-decoration: underline;

}

form {

    width: 300px;

    background: #fff;

    padding: 15px 40px 40px;

    border: 1px solid #ccc;

    margin: 50px auto 0;

    border-radius: 5px;

}
```

```css
label {

  display: block;

  margin-bottom: 5px

}

label i {

  color: #999;

  font-size: 80%;

}

input, select {

  border: 1px solid #ccc;

  padding: 10px;

  display: block;

  width: 100%;

  box-sizing: border-box;

  border-radius: 2px;

}

.row {

  padding-bottom: 10px;

}

.form-inline {

  border: 1px solid #ccc;

  padding: 8px 10px 4px;

  border-radius: 2px;

}

.form-inline label, .form-inline input {

  display: inline-block;

  width: auto;

  padding-right: 15px;

}

.error {

  color: red;
```

```css
    font-size: 90%;
}
input[type="submit"] {
    font-size: 110%;
    font-weight: 100;
    background: #006dcc;
    border-color: #016BC1;
    box-shadow: 0 3px 0 #0165b6;
    color: #fff;
    margin-top: 10px;
    cursor: pointer;
}
input[type="submit"]:hover {
    background: #0165b6;
}
```