LABSHEET 12

Module

Front-end Web Development

Module Code

IT43004FP

Duration

3 hours

Title:

Validate Web form using JavaScript

Objective(s):

At the end of these lessons, students will be able to.

- Validate a web form using JavaScript.

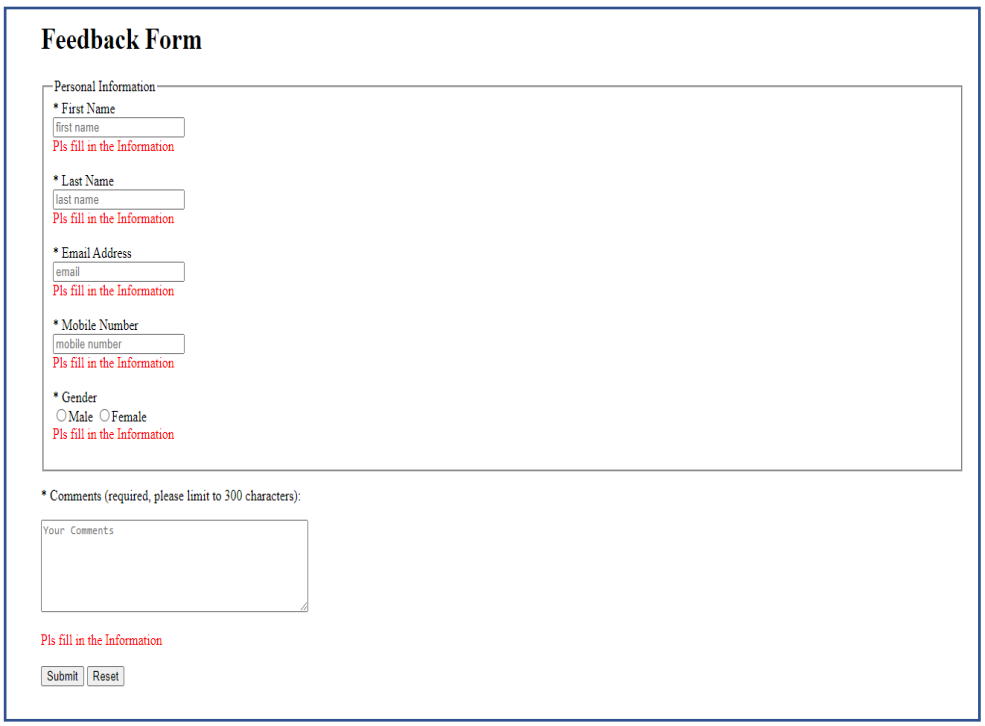
Tools, Equipment and Materials:

1 Personal Computer with Internet access
2 Web Authoring Tool (e.g. Adobe Dreamweaver CC, Visual Studio Code)
3 Web Browser

Instructions:

Part (A) – Create a web form

1 Create the feedback form as shown below:
2 Save the file as FeedbackForm.html.



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Part(B) Create a JavaScript file

1. Create a new file.

2. Type in the following:

```
function validateFeedback() {

                                    }
```

3. Save the file as validateFeedback.js. (**This file must be in the same folder as the html file**.)

4. Type in the following codes:

a) Clear all error messages

```
//clear error messages in the span element

  if(document.getElementById("errfName").innerHTML != ""){
     document.getElementById("errfName").innerHTML = "";
  }
  if(document.getElementById("errlName").innerHTML != ""){
    document.getElementById("errlName").innerHTML = "";
  }
 if(document.getElementById("errEmail").innerHTML != ""){
     document.getElementById("errEmail").innerHTML = "";
  }
  if(document.getElementById("errMobile").innerHTML != ""){
     document.getElementById("errMobile").innerHTML = "";
  }
  if(document.getElementById("errGender").innerHTML != ""){
     document.getElementById("errGender").innerHTML = "";
  }
  if(document.getElementById("errArea").innerHTML != ""){
     document.getElementById("errArea").innerHTML = "";
  }
```

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b) Store textbox values into a variable

```
   // store textbox value into variable
   // first name
   var fname = document.feedbackForm.txtfName;
          var newfname = fname.value;
          var fname0 = newfname.charAt(0);    // New addition
          var fname1 = newfname.charAt(1);    // New addition
 // last name
   var lname = document.feedbackForm.txtlName;
 // Email
 // store the index value of @ and .
   var emailID = document.feedbackForm.txtEmail;
   atpos = emailID.value.indexOf("@");
   dotpos = emailID.value.lastIndexOf(".");
 // store mobile number into variable
   var mobileN = document.feedbackForm.txtMobile;
   var mobileExpress = /^\(?[8-9]{1}\)?([0-9]{7})$/; //mobile number must starts with
                                        8/9 and total  digits must be 8. Letters not allowed
 // store the value of checkbox and radio buttons. True/False
   var maleChk = document.getElementById("rbMale").checked;
   var femaleChk = document.getElementById("rbFemale").checked;
   var areaChk = document.getElementById("txtArea").value;
```

c) Check if the variable is empty and change box background colour

```
// check if first name is empty
            if(fname0 == "" && fname1 == ""){
      document.getElementById("errfName").innerHTML = "<br>Please enter your first
                                                    name, with minimum of 2 characters!";
      fname.style.backgroundColor = "pink"; // change to pink colour
      fname.focus();
      return false;
      }
// change back to light colour
// if(fname.value !="" && fname0 !=""){
           if((fname0 !="") && (fname1 !="")){
                    fname.style.backgroundColor = "#e8f0fe"; // change colour
// errfName.innerHTML="";
                   document.getElementById("errfName").style.display = "none";
      }
  // check if last name is empty
      if (lname.value == ""){
      document.getElementById("errlName").innerHTML = "<br>Please enter your last
                                            name, with a minimum of 2 characters!";
      lname.style.backgroundColor = "pink"; // change to pink colour
```

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```
        lname.focus();
        return false;
        }
// change back to light colour
        if(lname.value !=""){
        lname.style.backgroundColor = "#e8f0fe";
                        errlName.innerHTML="";
      }
 // check if email is valid/empty
       if (emailID.value == "" || atpos < 1 || (dotpos - atpos < 2)) {
        document.getElementById("errEmail").innerHTML = "<br>Empty / Incorrect email
                                                                address!";
                        emailID.style.backgroundColor = "pink";   // change to pink colour
        emailID.focus();
        return false;
    }
// change back to light colour
        if(emailID.value !="" || !(atpos < 1) || !(dotpos - atpos < 2)){
        emailID.style.backgroundColor = "#e8f0fe";
                        errEmail.innerHTML="";
      }
// check if mobile number is empty or valid
    if (mobileN.value == "" || !mobileN.value.match(mobileExpress)){
        document.getElementById("errMobile").innerHTML = "<br>Empty / Invalid mobile
                                                                number!";
                        mobileN.style.backgroundColor = "pink";     // change to pink colour
        mobileN.focus();
        return false;
    }
// change back to light colour
        if(mobileN.value !="" || mobileN.value.match(mobileExpress)){
        mobileN.style.backgroundColor = "#e8f0fe";
                        errMobile.innerHTML="";
      }
// check if gender is selected
     if (maleChk == false && femaleChk == false){
        document.getElementById("errGender").innerHTML = "<br>Please select your gender!";
        return false;
     }
 // check if comment box is filled
    if (areaChk == ""){
        document.getElementById("errArea").innerHTML = "Please enter your comments!";
        return false;
        }
```

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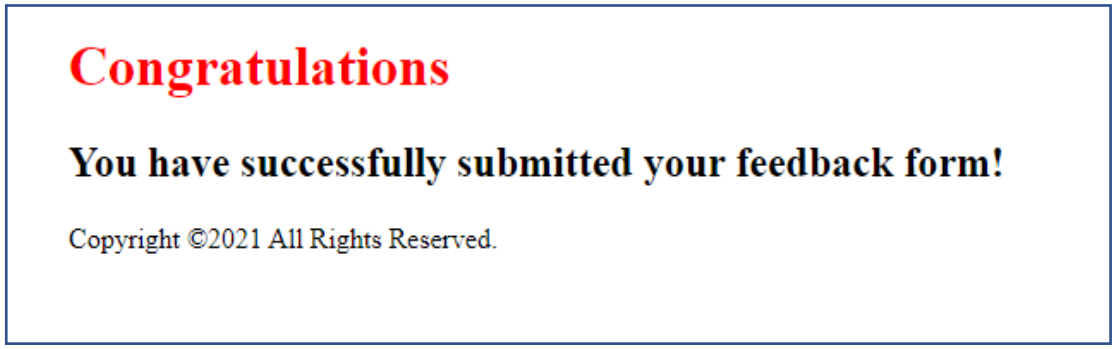
d) Return a true value if all inputs are filled

```
return true;  // return a true value if all input fields are filled correctly
```

5. Test out your program and see if it works.

6. The output you should see is this:



- END -

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FeedbackForm.html :

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Our Feedback Form</title>
<script src="validateFeedback.js"></script>
<script>
function resetForm(){
document.getElementById("feedbackForm").reset();
}
</script>
<style>
.red {
        color: red;
    }
</style>
</head>
<body>
<h1>Feedback Form</h1>
<form action="ThankYou.html" id="feedbackForm"
name="feedbackForm" onsubmit="return(validateFeedback());"
method="POST">
<!--Start of Feedback form-->
<fieldset>
<legend>Personal Information</legend>
<label for="lblfname"><span>* </span>First Name</label><br>
<input type="text" name="txtfName" id="txtfName" minlength="2"
maxlength="30" placeholder="first name">
<span class="red" id="errfName"><br>Pls fill in the
Information</span><br><br>
<label for="lbllname"><span>* </span>Last Name</label><br>
<input type="text" name="txtlName" id="txtlName"
minlength="2"maxlength="30" placeholder="last name">
<span class="red" id="errlName"><br>Pls fill in the
Information</span><br><br>
<label for="lblEmail"><span>* </span>Email Address</label><br>
```

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```
<input type="text" name="txtEmail" id="txtEmail" placeholder="email">
<span class="red" id="errEmail"><br>Pls fill in the Information</span><br><br>
<label for="lblmobile"><span>* </span>Mobile Number</label><br>
<input type="text" name="txtMobile" id="txtMobile" placeholder="mobile number">
<span class="red" id="errMobile"><br>Pls fill in the Information</span><br><br>
<label for="lblGender"><span>* </span>Gender</label><br>
<label>
<input type="radio" name="gender" id="rbMale">Male
</label>
<label>
<input type="radio" name="gender" id="rbFemale">Female
</label>
<span class="red" id="errGender"><br>Pls fill in the Information</span><br><br>
</fieldset>
<!-- Comments -->
<p>
<p><span> * </span>Comments (required, please limit to 300 characters):</p>
<div class="container">
<textarea id="txtArea" cols=48 rows="6" maxlength="300" placeholder="Your Comments"></textarea><br>
</p>
<span class="red" id="errArea">Pls fill in the Information</span>
</div><br>
<!-- End Comments -->
<button>Submit</button>
<button onclick="resetForm()">Reset</button>
<br>
</form>
<!--End of Feedback form-->
</body>
</html>
```

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validateFeedback.js :

```
function validateFeedback() {
   //clear error messages in the span element

   if(document.getElementById("errfName").innerHTML != ""){
      document.getElementById("errfName").innerHTML = "";
   }
   if(document.getElementById("errlName").innerHTML != ""){
     document.getElementById("errlName").innerHTML = "";
   }
          if(document.getElementById("errEmail").innerHTML != ""){
      document.getElementById("errEmail").innerHTML = "";
   }
   if(document.getElementById("errMobile").innerHTML != ""){
      document.getElementById("errMobile").innerHTML = "";
   }
   if(document.getElementById("errGender").innerHTML != ""){
      document.getElementById("errGender").innerHTML = "";
   }
   if(document.getElementById("errArea").innerHTML != ""){
      document.getElementById("errArea").innerHTML = "";
   }

   //store textbox value into variable
   // first name
   var fname = document.feedbackForm.txtfName;
          var newfname = fname.value;
          var fname0 = newfname.charAt(0);  // New addition
          var fname1 = newfname.charAt(1);  // New addition
 // last name
   var lname = document.feedbackForm.txtlName;
 //Email
 //store the index value of @ and .
   var emailID = document.feedbackForm.txtEmail;
   atpos = emailID.value.indexOf("@");
   dotpos = emailID.value.lastIndexOf(".");
 //store mobile number into variable
   var mobileN = document.feedbackForm.txtMobile;
   var mobileExpress = /^\(?[8-9]{1}\)?([0-9]{7})$/; //mobile number must starts with 8/9
                                                      and total digits must be 8. Letters not allowed
//store the value of checkbox and radio buttons. True/False
   var maleChk = document.getElementById("rbMale").checked;
   var femaleChk = document.getElementById("rbFemale").checked;
   var areaChk = document.getElementById("txtArea").value;

 //check if first name is empty
```


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```
            if(fname0 == "" && fname1 == ""){
      document.getElementById("errfName").innerHTML = "<br>Please enter your first
                                                    name, with minimum of 2 characters!";
      fname.style.backgroundColor = "pink"; // change to pink colour
      fname.focus();
      return false;
      }
 // change back to light colour
 // if(fname.value !="" && fname0 !=""){
    if((fname0 !="") && (fname1 !="")){
    fname.style.backgroundColor = "#e8f0fe"; // change colour
// errfName.innerHTML="";
   document.getElementById("errfName").style.display = "none";
      }
// check if last name is empty
      if (lname.value == ""){
      document.getElementById("errlName").innerHTML = "<br>Please enter your last
                                                    name, with minimum of 2 characters!";
      lname.style.backgroundColor = "pink"; // change to pink colour
      lname.focus();
      return false;
      }
// change back to light colour
      if(lname.value !=""){
      lname.style.backgroundColor = "#e8f0fe";
      errlName.innerHTML="";
    }
// check if email is valid/empty
   if (emailID.value == "" || atpos < 1 || (dotpos - atpos < 2)) {
      document.getElementById("errEmail").innerHTML = "<br>Empty / Incorrect email
address!";
      emailID.style.backgroundColor = "pink"; // change to pink colour
      emailID.focus();
      return false;
   }
// change back to light colour
      if(emailID.value !="" || !(atpos < 1) || !(dotpos - atpos < 2)){
      emailID.style.backgroundColor = "#e8f0fe";
      errEmail.innerHTML="";
    }
   //check if mobile number is empty or valid
   if (mobileN.value == "" || !mobileN.value.match(mobileExpress)){
      document.getElementById("errMobile").innerHTML = "<br>Empty / Invalid mobile
number!";
      mobileN.style.backgroundColor = "pink"; // change to pink colour
      mobileN.focus();
```


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```
      return false;
   }
// change back to light colour
      if(mobileN.value !="" || mobileN.value.match(mobileExpress)){
      mobileN.style.backgroundColor = "#e8f0fe";
      errMobile.innerHTML="";
     }

   // check if gender is selected or not selected
   if (maleChk == false && femaleChk == false){
      document.getElementById("errGender").innerHTML = "<br>Please select your gender!";
      return false;
   }
 // check if comment box is filled
   if (areaChk == ""){
      document.getElementById("errArea").innerHTML = "Please enter your comments!";
      return false;
      }
   return true;  // return a true value if all input fields are filled correctly
}
```

- END -

Submitted by:

Name: Joshua Chan

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