

**Lab Session 05 (a): Client-side Validation using JavaScript****Date of the Session: 16/06/2021****Time of the Session: 11:40 AM to 01:00 PM****Title of the Program: Registration Form Validation using JavaScript****Pre-Lab Task: Answer the following before entering into lab**

1) What are the various ways in which JavaScript can display the data?

A) JavaScript can display data in many ways:

- Writing into an alert box, using **window.alert()**.
- Writing into the HTML output using **document.write()**.
- Writing into an HTML element, using **innerHTML**.
- Writing into the browser console, using **console.log()**.

2) What is the keyword used to declare variables in JavaScript? Give an example.

A) **var** keyword is used to declare variables in JavaScript.

```
var x = 5;
```

3) Write the syntax for JavaScript functions.

A) A JavaScript function is defined with the function keyword, followed by a name, followed by parentheses ().

```
function name(parameter1, parameter2, parameter3) {  
    // code to be executed  
}
```

4) Give an example of JavaScript Objects.

A) In JavaScript, almost everything is an object.

```
var person = {firstName:"John", lastName:"Doe", age:50, eyeColor:"blue"};  
var car = {type:"Fiat", model:"500", color:"white"};
```

5) What is the use of caret^ and dollar\$ in JavaScript?

A) They represent the start and end. They match the start of the string (^) and end of the string (\$).

6) What will happen if caret^ is used immediately following the square bracket?

For example: `[^a-zA-Z]`.

A) It checks whether the given string starts with any alphabet or not.

7) What is the use of exec()?

A) The exec() method executes a search for a match in a specified string. Returns a result array, or null.

8) What is the use of match()?

A) The match() method searches a string for a match against a regular expression, and returns the matches, as an Array object.

**In-Lab Task**

1. Design Registration Page and validate the fields with the given constraints

**Name** (Name should contain alphabets and length should not be less than 6 characters).

**E-mail id** (should not be invalid and must follow the standard pattern name@domain.com)

**Password** (Password should not be less than 6 characters length).

**Phone number** (Phone number should contain 10 digits only).

## Registration Form

|                                                                            |                                                                                                                                |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Name                                                                       | <input type="text"/>                                                                                                           |
| E-Mail ID                                                                  | <input type="text"/>                                                                                                           |
| Password                                                                   | <input type="password"/>                                                                                                       |
| Phone Number                                                               | <input type="text"/>                                                                                                           |
| Gender                                                                     | <input type="radio"/> Male <input type="radio"/> Female                                                                        |
| Date of Birth                                                              | <input type="text" value="dd-mm-yyyy"/>                                                                                        |
| Languages Known                                                            | <input type="checkbox"/> English <input type="checkbox"/> Telugu <input type="checkbox"/> Hindi <input type="checkbox"/> Tamil |
| Address                                                                    | <input type="text"/>                                                                                                           |
| District                                                                   | <input type="text" value="Anantapur"/>                                                                                         |
| State                                                                      | <input type="text" value="Andhra Pradesh"/>                                                                                    |
| Pin Code                                                                   | <input type="text"/>                                                                                                           |
| <input type="button" value="Submit"/> <input type="button" value="Reset"/> |                                                                                                                                |

**Writing Space for In-Lab Task: (For Students use only)****Code:**

```
<!DOCTYPE html>
<html>
<head>
  <title>Registration Form</title>
  <script type="text/javascript">
    function validateform() {
      var name = regform.uname.value;
      var password = regform.upassword.value;
      var email = regform.uemail.value;
      var phnumber = regform.uphnumber.value;
      const nameregex = /^[A-Za-z ]+$/;
      var namevalid = nameregex.test(name);
```

```
var passwordvalid = password.length >= 6;

const emailregex = /^([<>()[]\.,;:\s@"]+(\.[<>()[]\.,;:\s@"]+)*|"(.[+"])@((\[[0-9]{1,3}\. [0-9]{1,3}\. [0-9]{1,3}\. [0-9]{1,3}\)|([a-zA-Z-0-9]+\.)+[a-zA-Z]{2,}))$)/;
var emailvalid = emailregex.test(email);

var phnumbervalid = phnumber.length == 10;

if((name == null || name == "") && (password == null || password == "") &&
(email == null || email == "") && (phnumber == null || phnumber == "")) {
    alert("No data entered");
    return false;
}

if(name == null || name == "") {
    alert("Name not filled");
    regform.uname.focus();
    return false;
}
else if(namevalid == false) {
    alert("Name should only contain alphabets");
    regform.uname.focus();
    return false;
}
else if(name.length < 6) {
    alert("Name should have atleast 6 characters");
    regform.uname.focus();
    return false;
}

if(passwordvalid == false) {
    alert("Password should be atleast 6 characters");
    regform.upassword.focus();
    return false;
}

if(emailvalid == false) {
    alert("Enter valid email");
    regform.uemail.focus();
    return false;
}

if(phnumbervalid == false) {
    alert("Phone number should be 10 digits");
    regform.uphnumber.focus();
    return false;
}
else {
    prompt("Thank you");
}
```

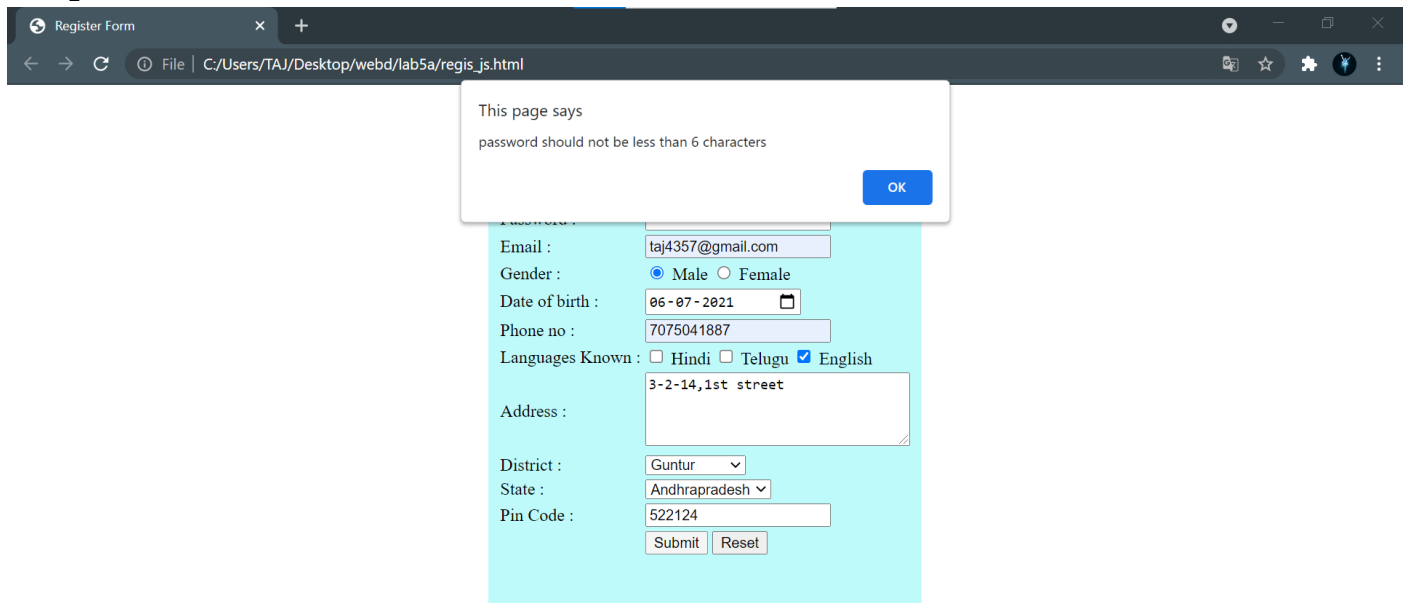
```

    }
  }
</script>
<style type="text/css">
  .ske{
    width: 40%;
    border: 2px solid black;
  }
</style>
</head>
<body>
  <center>
    <div class="ske">

      <form name="regform" onsubmit="return validateform()">
        <h1 style="color: darkblue; font-size: 2em;"><b>Registration Form</b></h1>
        <hr style="color:#999;">
        <table cellpadding="6px">
          <tr>
            <td><b>Name : </b></td>
            <td><input type="text" name="uname"></td>
          </tr>
          <tr>
            <td><b>Password : </b></td>
            <td><input type="password" name="upassword" min="5"></td>
          </tr>
          <tr>
            <td><b>email : </b></td>
            <td><input type="email" name="uemail"></td>
          </tr>
          <tr>
            <td><b>Phone Number : </b></td>
            <td><input type="text" name="uphnumber"></td>
          </tr>
          <tr>
            <td><b>Gender : </b></td>
            <td><input type="radio" name="gender"
value="male"><label><b>Male</b></label><input type="radio" name="gender"
value="female"><label><b>Female</b></label></td>
          </tr>
          <tr>
            <td><b>Date of Birth : </b></td>
            <td><input type="date" name="dob"></td>
          </tr>
          <tr>
            <td><b>Languages Known : </b></td>
            <td>
              <input type="checkbox" name="lang"><label><b>English</b></label>
              <input type="checkbox" name="lang"><label><b>Telugu</b></label>
            </td>
          </tr>
        </table>
      </div>
    </body>
  </html>

```

```
<input type="checkbox" name="lang"><label><b>Hindi</b></label>
<input type="checkbox" name="lang"><label><b>Tamil</b></label>
</td>
</tr>
<tr>
<td><b>Address : </b></td>
<td><textarea id = "address"></textarea></td>
</tr>
<tr>
<td><b>Distric : </b></td>
<td>
<select name = "district">
<option vlaue = "krishna">Krishna</option>
<option vlaue = "guntur">Guntur</option>
<option vlaue = "wgodavari">West Godavari</option>
<option vlaue = "egodavari">East Godavari</option>
<option vlaue = "ananthpur">Ananthpur</option>
<option vlaue = "viskhapatnam">Vishakhapatnam</option>
</select>
</td>
</tr>
<tr>
<td><b>State : </b></td>
<td>
<select name = "district">
<option vlaue = "ap">Andhra Pradesh</option>
<option vlaue = "ts">Telangana</option>
<option vlaue = "ka">Karnataka</option>
<option vlaue = "tn">Tamil Nadu</option>
<option vlaue = "kl">Kerala</option>
</select>
</td>
</tr>
<tr>
<td><b>Pin Code : </b></td>
<td><input type="text" name="name"></td>
</tr>
<tr>
<td></td>
<td><input type="submit" name="submit" style="margin-right: 5px;"><input
type="reset" name="submit"></td>
</tr>
</table>
</form>
</div>
</center>
</body>
</html>
```

**Output:**

The screenshot shows a web browser window with the address bar displaying "File | C:/Users/TAJ/Desktop/webd/lab5a/regist.js.html". The browser title is "Register Form". A modal dialog box is open, displaying the message: "This page says password should not be less than 6 characters". Below the dialog, a registration form is visible with the following fields and values:

- Email : taj4357@gmail.com
- Gender : ☒ Male ☐ Female
- Date of birth : 06-07-2021
- Phone no : 7075041887
- Languages Known : ☐ Hindi ☐ Telugu ☒ English
- Address : 3-2-14, 1st street
- District : Guntur
- State : Andhrapradesh
- Pin Code : 522124

At the bottom of the form are "Submit" and "Reset" buttons.

**Post-Lab Task:**

1. Design Customer Information page and validate the fields with the given constraints.

**Customer\_ID** (Maximum Length of the ID should be only 3)

**Name** (Should be between 6 and 15 Character)

**Account Number** (Should be 6 Digits)

**Amount to Deposit** (Should be between 500 to 5,00,000)

**Email** (Should not be invalid and must follow the standard pattern [name@domain.com](mailto:name@domain.com))

**Rate of interest** (Should be in number)

**Maturity Amount** (Should be in number)

## **CUSTOMER INFORMATION**

**CUSTOMER\_ID****NAME****ACCOUNT NUMBER****DEPOSIT TYPE**☒ FIXED DEPOSIT☐ RECURRING DEPOSIT**AMOUNT TO DEPOSIT****NO.OF YEARS**☒ ONE☐ TWO☐ THREE**EMAIL****RATE OF INTEREST****MATURITY AMOUNT**

### **Writing Space for Post-Lab Task: (For Students use only)**

**Code:**

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>Customer Information</title>
  <style type="text/css">
    .skel{
      width: 50%;
      border: 1px solid black;
    }
  </style>
  <script type="text/javascript">
    function validateform() {
      var cust_id = custform.userid.value;
      var myname = custform.name.value;
      var acnum = custform.acccnum.value;
      var money = parseInt(custform.amount.value);
      var mail = custform.email.value;
      var r = custform.rate.value;
```

**Page No. 8**



```
<td><strong>CUSTOMER_ID</strong></td>
<td><input type="text" name="userid"></td>
</tr>
<tr>
<td><strong>NAME</strong></td>
<td><input type="text" name="name"></td>
</tr>
<tr>
<td><strong>ACCOUNT NUMBER</strong></td>
<td><input type="text" name="accnum"></td>
</tr>
<tr>
<td><strong>DEPOSIT TYPE</strong></td>
<td><input type="radio" name="d" value="fd">FIXED DEPOSIT</td>
<td><input type="radio" name="d" value="rd">RECURRING
DEPOSIT</td>
</tr>
<tr>
<td><strong>AMOUNT TO DEPOSIT</strong></td>
<td><input type="text" name="amount"></td>
</tr>
<tr>
<td><strong>NO.OF YEARS</strong></td>
<td><input type="radio" name="y" value="one">ONE</td>
<td><input type="radio" name="y" value="two">TWO</td>
<td><input type="radio" name="y" value="three">THREE</td>
</tr>
<tr>
<td><strong>EMAIL</strong></td>
<td><input type="email" name="email"></td>
</tr>
<tr>
<td><strong>RATE OF INTEREST</strong></td>
<td><input type="text" name="rate"></td>
</tr>
<tr>
<td><strong>MATURITY AMOUNT</strong></td>
<td><input type="text" name="Mamount"></td>
</tr>
<tr>
<td></td>
<td><input type="submit" name="submit"></td>
<td><input type="reset" name="reset"></td>
</tr>
</table>
</form>
</div>
</center>
</body>
```

&lt;/html&gt;

**Output:**

| <u><b>CUSTOMER INFORMATION</b></u>                                         |                                                                                 |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| CUSTOMER_ID                                                                | <input type="text"/>                                                            |
| NAME                                                                       | <input type="text"/>                                                            |
| ACCOUNT NUMBER                                                             | <input type="text"/>                                                            |
| DEPOSIT TYPE                                                               | <input type="radio"/> FIXED DEPOSIT <input type="radio"/> RECURRING DEPOSIT     |
| AMOUNT TO DEPOSIT                                                          | <input type="text"/>                                                            |
| NO.OF YEARS                                                                | <input type="radio"/> ONE <input type="radio"/> TWO <input type="radio"/> THREE |
| EMAIL                                                                      | <input type="text"/>                                                            |
| RATE OF INTEREST                                                           | <input type="text"/>                                                            |
| MATURITY AMOUNT                                                            | <input type="text"/>                                                            |
| <input type="button" value="Submit"/> <input type="button" value="Reset"/> |                                                                                 |

***Student's Signature******(For Evaluator's use only)***

| <b>Comment of the Evaluator (if Any)</b> | <b>Evaluator's Observation</b>           |
|------------------------------------------|------------------------------------------|
|                                          | <b>Marks Secured:</b> _____ out of _____ |
|                                          | <b>Full Name of the Evaluator:</b>       |
|                                          | <b>Signature of the Evaluator:</b>       |
|                                          | <b>Date of Evaluation:</b>               |