Experiment No.4

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Title:

Write a program to design registration form for students by using HTML, CSS, JavaScript and perform following validations: all fields mandatory, phone number and email address validation.

Theory:

JavaScript is a programming language of HTML as well as web. It is preferred for creating network-centric applications. It is integrated and complimentary with Java. As JavaScript is integrated with HTML it is very easy to implement. It is open as well as cross-platform.

Advantages:

The advantages of using JavaScript are:

- It requires less server interaction
- Immediate feedback to the visitors
- Increased interactivity
- Richer interfaces **Validation**:

When client enters all the necessary data and presses the submit button, form validation is done at server side. If data entered by a client is incorrect or missing, the server needs to send all data back to the client and request for resubmission of form with correct information. This is really a lengthy process which puts a lot of load on the server.

So, JavaScript provides a way to validate form's data on the client's side itself before sending it to the web server. Form validation performs two functions:

1. Basic Validation: First of all the form must be checked up to make sure all the mandatory fields are filled in. It would require just a loop through each field in the form and check for the data.

2. Data Format Validation: Secondly, the data that is entered must be checked for correct format and its value. The code must include appropriate logic to test correctness of data.

Program:

HTML code:

```
<!DOCTYPE html>

<html>

  <head>

    <title>Student Registration Form</title>

    <link rel="stylesheet" href="style.css">

  </head>

  <body>

    <h1>Registration Form</h1>

    <hr>

    <div class="container">

      <form name="stdreg" action="welcome.html">

        <div class="row">

          <div class="col-20"><label>Username:</label></div>
```

```html
        <div class="col-

                        80"><input type="text" name="uname"
placeholder="Enter your username"></div>

        </div>

        <div class="row">

          <div class="col-20"><label>Password:</label></div>

          <div class="col-80"><input type="password" name="upwd"
placeholder="Enter your password"></div>

        </div>

        <div class="row">

          <div class="col-20"><label>Confirm Password:</label></div>

          <div class="col-80"><input type="password" name="cupwd"
placeholder="Enter your password"></div>

        </div>

        <div class="row">

          <div class="col-20"><label>Firstname:</label></div>

          <div class="col-80"><input type="text" name="fname"
placeholder="Enter your firstname"></div>

        </div>

        <div class="row">

          <div class="col-20"><label>Lastname:</label></div>

          <div class="col-80"><input type="text" name="lname"
placeholder="Enter your lastname"></div>

        </div>

        <div class="row">
```

```html
        <div class="col-

                    20"><label>Gender:</label></div>

    <div class="col-80">

      <input type="radio" name="gender" value="Male">Male

      <input type="radio" name="gender" value="Female">Female

    </div>

  </div>

  <div class="row">

    <div class="col-20"><label>Email:</label></div>

    <div class="col-80"><input type="text" name="uemail"
placeholder="Enter your email id"></div>

  </div>

  <div class="row">

    <div class="col-20"><label>Course:</label></div>

    <div class="col-80"><select name="ucourse">

      <option>Select Class</option>

      <option>SE COMP</option>

      <option>TE COMP</option>

      <option>BE COMP</option>

      </select></div>

  </div>
  <div class="row">
```

```html
            <div class="col-

                <div class="col-20"><label>Mobile No.:</label></div>   80"><input
type="text" name="umno"
placeholder="Enter your mobile number"></div>

        </div>

        <div class="row">

            <input type="submit" value="Submit" onclick="return validate();">

            <input type="reset" value="Reset">

        </div>

      </form>

    </div>

  </body>

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

</html>
```

CSS code:

```css
*{   box-sizing: borderbox;

}

.container{   background-color:

aquamarine;   border:1px solid red;   border-radius:

5px;   padding:

10px;   width: 80%;   margin:

auto;
```

```css
}
.row:after{    content:
" ";    display: table;
clear: both;
}
.col-20{  width: 20%;
float:left;    margintop:
5px;
}
.col-80{    width: 80%;
float:left;    margintop:
5px;
}
input[type=text],input[type=password],input[type=email]{    width:
100%;    padding:5px;
}
.login{    width: 45%;    margin:
auto;    border: 1px solid red;
border-radius: 5px;
```
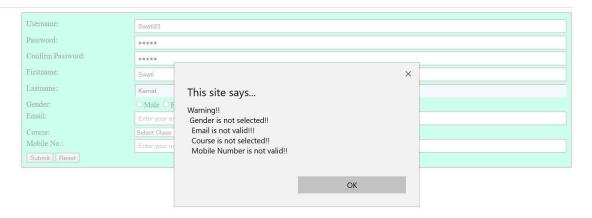
```css
padding: 10px;    backgroundcolor:

bisque;

}

input[type=submit],input[type="reset"]{  cursor:

   pointer;

}

.leavespace{    margintop:20px;

}
```

JavaScript code: function validate(){   var uname

```javascript
= stdreg.uname.value;    var upwd =

stdreg.upwd.value;    var cupwd =

stdreg.cupwd.value;    var fname =

stdreg.fname.value;    var lname =

stdreg.lname.value;    var uemail =

stdreg.uemail.value;    var ucourse =

stdreg.ucourse.selectedIndex;    var umobno

= stdreg.umno.value;    var flag = false;    var str = "";    var efilter = /^([a-zAZ0-

9\_\.\-])+\@(([a-zAZ0-9\-])+\.)+([a-zA-Z0-9]{2,4})+$/;    if(uname.trim()===""){

flag=true;      str +="  Username should not be blank!!\n"; }
```

```
if(upwd.trim()===""&&cupwd.trim()===""||upwd!=cupwd){        flag=true;
str +=" Password is Blank or Does not Match!!\n";

    }
    if(fname.trim()===""){        flag = true;        str
+= " Firstname should not be blank!!\n";

    }
    if(lname.trim()===""){        flag=true;        str
+= " Lastname should not be blank!!\n";

    }
    if(stdreg.gender[0].checked==false&&stdreg.gender[1].checked==false){
        flag=true;        str +=" Gender is not
selected!!\n";

    }
    if(!efilter.test(uemail)){        flag=true;
str +=" Email is not valid!!!\n";

    }
    if(ucourse==0){        flag=true;        str+="
Course is not selected!!\n";

    }
    if(isNaN(umobno)||umobno.length<12){
```

flag = true;   str+=" Mobile Number is not

valid!!\n";

   }   if(flag){

alert("Warning!!\n"+str);   return false;

   }   else{

return true;

   }

}

Output:

Conclusion:

We designed a registration form for students using HTML, CSS and JavaScript and performed validtaions.