WEB DEVELOPMENT ETH

DIGITAL ASSIGNMENT – 3

NAME	:	NITHISH G
REG NO	:	19BCS0012
COURSE	:	WEB-DEVELOPMENT
DATE	:	23/11/2021

Question

Develop the Servlet/JSP application to process the student grades.
·   Design the form for the following fields register number, name
and test score of 5 courses using HTML and CSS.
·   Using JavaScript, validate all the fields at client end.
·   After the successful validation, calculate the total marks and grade
by server.
·   The server should send the response as to display the table with
register number and name are headings, courses, test scores and
grades are the contents of the table.

Source code:

Student_marks

```html
<!DOCTYPE HTML>

<html>

<head>

 <title>Students Grade</title>

 <link rel="stylesheet" href="students_grade.css" />

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

</head>

<body>

<img src="std_mark.jpg" style=" position: absolute; left: -100px; top: 130px;"  alt="" />

<form action="students_score.jsp" method="post" style="border-radius: 40px;">

<div id="std_details">

    <span style="width: 100px;">Reg No. : </span>

    <input name="regno" type="text"  pattern="\d{2}[A-Z]{3}[0]{2}([0-9][1-9]|[1-9][0-9])" /><br><br>

    <span style="width: 100px;">Name : </span>

    <input name="name" type="text" pattern="^[A-Za-z]{3,}$" /><br><br>

    <p id="error" align = "center" style="

bottom : 90px;

 color: WHITE;

text-align : center;

margin:0;

">error</p>

</div>

<div id="score">

<span>Web development : </span><input name="wd" type="number" max="100" min="0" pattern="^([1][0][0]|[1-9][0-9]|[0-9])$"  /> <br><br>
```

```html
<span>Software testing : </span><input name="st" type="number" max="100" min="0" pattern="^([1][0][0]|[1-9][0-9]|[0-9])$" /> <br><br>

<span>Data mininig : </span><input name="dm" type= "number" max="100" min="0" pattern="^([1][0][0]|[1-9][0-9]|[0-9])$" /><br><br>

<span>Cloud computing : </span><input name="cc" type="number" max="100" min="0" pattern="^([1][0][0]|[1-9][0-9]|[0-9])$"/> <br><br>

<span>E-DBMS : </span><input name="ed" type="number" max="100" min="0" min="0" pattern="^([1][0][0]|[1-9][0-9]|[0-9])$" />
</div>
<input type="submit" id="submit" onclick="validate()">
<input type="reset" id="reset"/>


</form>
</body>
</html>
```

Student marks .css

```css
body{
  font-family: "Trebuchet MS", Helvetica, sans-serif;


}


form{
    border: 1px solid #949494;

    position: relative;

    height: 400px;

    width: 880px;

    font-size: 18PX;

    left: 400px;

    top : 100px;

    border-radius: 20px;

}


#std_details{
    position: absolute;

    left: 50px;

    width: 280px;

    border: 1px solid #B0B0B0;

    background: white;

    top : 110px;

    padding: 30px;

    border-radius: 15px;


}
#score{
    position: absolute;

    left: 450px;

    width: 320px;

    border: 1px solid #B0B0B0;

    background: white;

    top : 50px;

    padding: 30px;

    border-radius: 15px;
}
#std_details span , #score span{
```

```css
    display: inline-block;

    padding-right: 15px;

    text-align: right;

    width: 160px;

}
#submit, #reset{

    position : absolute;

    right : 260px;

    bottom: 40px;


}
#reset{

    right : 130px;

}


input{

    width: 100px;

}
input[type="text"]:invalid{

    color: red;

}
input[type="text"]:valid{

    color: green;

    font-weight: bold;

}
input[type="number"]:invalid{

    color: red;

}
input[type="number"]:valid{

    color: green;

    font-weight: bold;

}
```

Studentmarkds .js

```javascript
function validate()

{

    var input = document.getElementsByTagName('input');

    var error = document.getElementById('error');

    if(!/\d{2}[A-Z]{3}[0]{2}([0-9][1-9]|[1-9][0-9])/.test(input[0].value))

    {

        error.innerHTML ="Invalid Reg no. (eg: 19BCS0012)";

    }
    if(!/^[A-Za-z]{3,}$/.test(input[1].value))

    {

        error.innerHTML = "Invalid Name"

    }
    if(!/^([1][0][0]|[1-9][0-9]|[0-9])$/.test(input[2].value))

    {

        error.innerHTML = "Invalid mark"

    }
```

```
    if(!/^([1][0][0]|[1-9][0-9]|[0-9])$/.test(input[3].value))

    {

        error.innerHTML = "Invalid mark"

    }

    if(!/^([1][0][0]|[1-9][0-9]|[0-9])$/.test(input[4].value))

    {

        error.innerHTML = "Invalid mark"

    }


    if(!/^([1][0][0]|[1-9][0-9]|[0-9])$/.test(input[5].value))

    {

        error.innerHTML = "Invalid mark"

    }

    if(!/^([1][0][0]|[1-9][0-9]|[0-9])$/.test(input[6].value))

    {

        error.innerHTML = "Invalid mark"

    }


}
```

Student mark.jsp

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>19BCS0012 | RESULT</title>

    <style type="text/css">

     body{

         font-family: 'Trebuchet MS', Helvetica, sans-serif;


        }


        table{


    background-image: linear-gradient(to right top, #f8de96, #ffcfa2, #ffc4be, #ffc1e1, #f8c7ff);

    font-size: 24px;

    border: 2px solid #0F0826;


    border-top-left-radius: 8px;

    border-top-right-radius: 8px;

    position : absolute;

    top : 80px;

    margin-left: 712px;


        }


        table tr td{


        color: #000;

                border: 2px solid #0F0826;
```

```
                border-radius : 10px;


        }


    </style>
</head>
<body>



    <img src="score.jpg" alt="" style="position:absolute; " />


    <%
    String web_dev = request.getParameter("wd");

    String sw_test = request.getParameter("st");

    String cld_cmp = request.getParameter("cc");

    String dat_min = request.getParameter("dm");

    String ed = request.getParameter("ed");

    if(!(web_dev == null || web_dev.isEmpty()))

    {

    int web_dev_marks = Integer.parseInt(web_dev);

    int sw_test_marks = Integer.parseInt(sw_test);

    int cld_cmp_marks = Integer.parseInt(cld_cmp);

    int dat_min_marks = Integer.parseInt(dat_min);

    int ed_marks = Integer.parseInt(ed);


    int total = web_dev_marks+sw_test_marks+cld_cmp_marks+dat_min_marks+ed_marks;

    int avg = (total)/5;

    int percent = avg;

    String grade ="";


    if(percent < 40){

        grade = "F";

        //request.setAttribute("grade", grade);

    }

    else if(percent >=40 && percent <=49){

        grade = "E";

    }

    else if(percent >=50 && percent<=59){

        grade = "D";

    }

    else if(percent >=60 && percent <=69){

        grade = "C";

    }

    else if(percent >=70 && percent <=79){

        grade = "B";

    }

    else if(percent >=80 && percent <=89){

        grade = "A";

    }
```

```jsp
else if (percent >=90 && percent <=100){

    grade = "S";

}
request.setAttribute("Grade", grade);

%>
    <table border="1" class="marks" cellpadding="10"  style="border: 2px solid #0F0826;">
  <tbody>
    <tr>
      <th colspan="3"><%= request.getParameter("regno") %><span> - </span><%= request.getParameter("name") %></th>
    </tr>


    <tr>


      <th >SI.No</th>
      <th >Subjects</th>
      <th >Marks</th>
    </tr>


    <tr>
      <td>1.</td>
      <td>WEB DEVELOPMENT</td>
      <td align="center"><%= request.getParameter("wd") %></td>



    </tr>
    <tr>
      <td>2.</td>
      <td>SOFTWARE TESTING</td>
      <td align="center"><%= request.getParameter("st") %></td>



    </tr>
    <tr>
      <td>3.</td>
      <td>CLOUD COMPUTING</td>
      <td align="center"><%= request.getParameter("cc") %></td>



    </tr>
    <tr>
     <td>4.</td>
      <td>DATA MINING</td>
      <td align="center"><%= request.getParameter("dm") %></td>



    </tr>
    <tr>
     <td>5.</td>
      <td>E-DBMS</td>
      <td align="center"><%= request.getParameter("ed") %></td>
```

```
        </tr>


        <tr>



        <td colspan="3" align="center" style="color: #000; font-weight : bold;

         border-top: 2px solid #000;">Total Marks - <%=total %></td>

        </tr>




        <tr>



        <td style="color: black; font-weight : bold; text-align : center;" colspan="3" >Overall Grade - <%=grade %></td>



        </tr>


      </tbody>

   </table>



    <%

}

%>



</body>

</html>
```
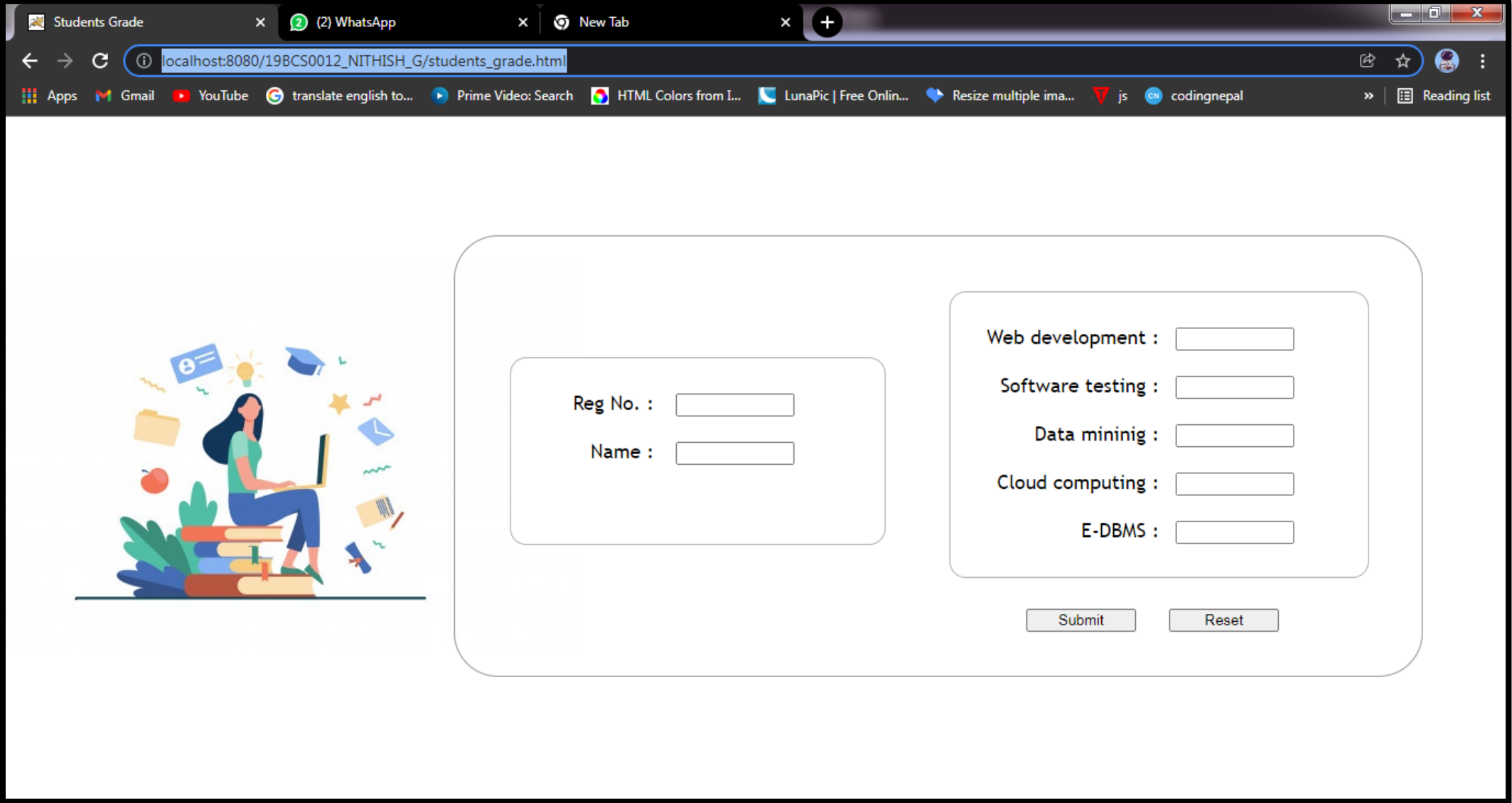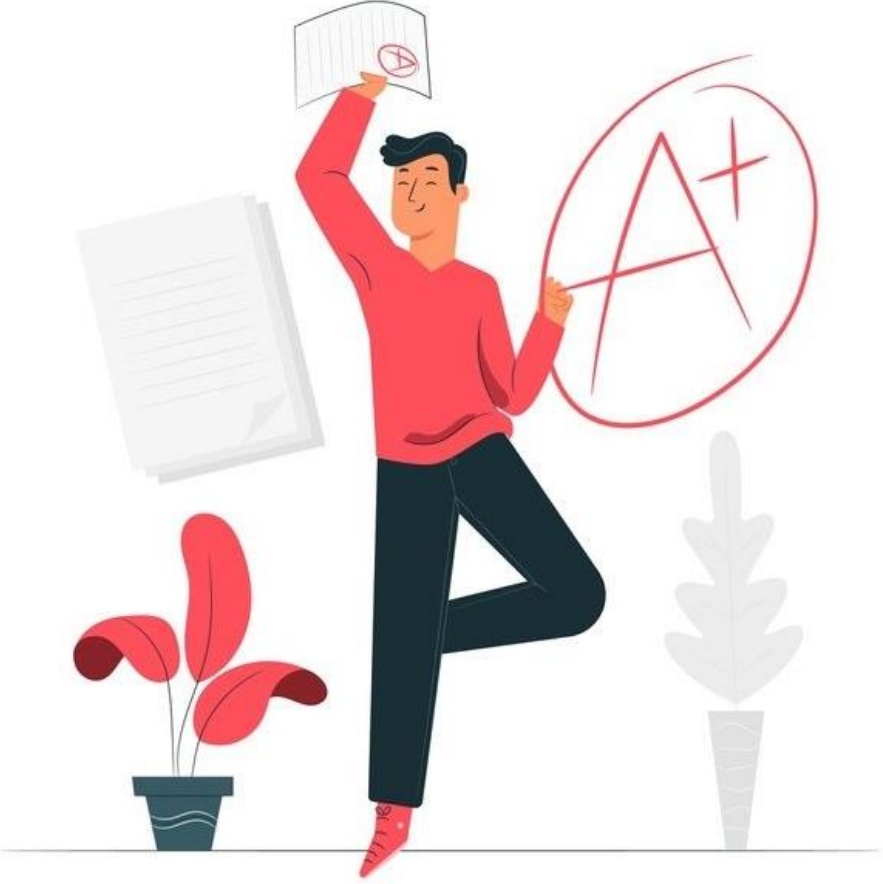
OUTPUT

Reg No. :   19BCS0012

Name :   Nithish

Web development :   100

Software testing :   100

Data mininig :   100

Cloud computing :   100

E-DBMS :   100

Submit   Reset

19BCS0012 - Nithish		
SI.No	Subjects	Marks
1.	WEB DEVELOPMENT	100
2.	SOFTWARE TESTING	100
3.	CLOUD COMPUTING	100
4.	DATA MINING	100
5.	E-DBMS	100
Total Marks - 500		
Overall Grade - S		

Reg No. :   19BCS001

⚠ Please match the requested format.

Invalid mark

Web development :

Software testing :

Data mininig :

Cloud computing :

E-DBMS :

Submit   Reset

Thank You Mam!