

Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 51043

Name: Vanessa Reetu Prashant More **Assignment No:** 1

Date of Implementation: 17. 8. 23

Q1. Create a static HTML page that displays the following output using frame:

Code:

frame.html

```
<!DOCTYPE html>
<html>

    <head>
        <title>HTML Frames</title>
    </head>

    <frameset rows = "20%,80%">
        <frame name = "top" src = "top_frame.html" />
        <frameset cols = "30%,70%">
            <frame name = "ls" src = "left_frame.html" />
            <frame name = "rs" >
            <!--frame name = "rs" src = "/html/right_frame.html" -->
        </frameset>

    </frameset>

</html>
```

home.html

```
<!DOCTYPE html>
<html>

    <head>
        <title>HOME</title>
    </head>
    <body>
        <h1>
            Home Page
        </h1>
    </body>

</html>
```

profile.html

```
<!DOCTYPE html>
<html>

<head>
    <title>PROFILE</title>
</head>
<body>
    <h1>
        <center>My Profile</center>
    </h1>
    <form>
        <table>
            <tr>
                <td><label for="fname">Name:- </label></td>
                <td><input type="text" id="fname" name="fname"></td>
            </tr>

            <tr>
                <td><label for="cn">Contact No:- </label></td>
                <td><input type="text" id="cn" name="cn"></td>
            </tr>

            <tr aria-rowspan="2">
                <td><button > BUTTON</button></td>
            </tr>
        </table>

    </form>
</body>

</html>
```

left.html

```
<!DOCTYPE html>
<html>

<head>
    <title>HTML Frames</title>
</head>

<body>
    <a href="home.html" target="rs">HOME</a>
    <br>
    <a href="profile.html" target="rs">MY PROFILE</a>
</body>

</html>
```

top.html

```
<!DOCTYPE html>
<html>

<head>
    <title>HTML Frames</title>
</head>

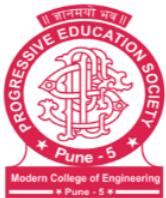
<body>
    <h1>
        <center>
            MY WEBSITE
        </center>
    </h1>
</body>

</html>
```

Output:

A screenshot of a web browser window. The address bar shows the URL "PESMODERNCOE.E...". The page title is "MY WEBSITE". On the left sidebar, there are links for "HOME" and "MY PROFILE". The main content area is titled "My Profile". It contains a form with fields for Name (value: "vanessa") and Contact No. (value: "9876543210"), followed by a "BUTTON" input.

A screenshot of a web browser window. The address bar shows the URL "PESMODERNCOE.E...". The page title is "MY WEBSITE". On the left sidebar, there are links for "HOME" and "MY PROFILE". The main content area is titled "Home Page".



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Q2. Create an HTML document that describes nested ordered lists of cars. The outer list must have three entries: compact, midsize and sports. Inside each of these lists there must be two sub-lists of body styles. The compact and midsize car sub-lists are two doors and four doors; the sports car sublists are coupe and convertible. Each body style sub-list must have at least three entries, each of which is the make and model of a particular car that fits the category. The outer list must use uppercase Roman numerals, the middle lists must use uppercase letters, and the inner lists must use Arabic numerals. The background color for the compact car list must be pink; for the mid-size car list, it must be blue; for the sports car list, it must be red. All of the styles must be in a document style sheet.

Code:

list.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <link rel="stylesheet" href="cars.css">
  <title>Cars Nested Ordered List</title>
</head>
<body>
  <ol type="I">

    <div class="compact">
      <li>Compact</li>
      <ol type="A">
        <li>Two Doors</li>
        <ol>
          <li>Honda Civic</li>
          <li>Toyota Corolla</li>
          <li>Ford Focus</li>
        </ol>
        <li>Four Doors</li>
        <ol>
          <li>Nissan Sentra</li>
          <li>Chevrolet Cruze</li>
          <li>Volkswagen Jetta</li>
        </ol>
      </ol>
    </div>
```

```
</ol>
</div>
<div class="mid">
    <li>Midsize</li>
    <ol type="A">
        <li>Two Doors</li>
        <ol>
            <li>Honda Accord</li>
            <li>Toyota Camry</li>
            <li>Nissan Altima</li>[
                ]
            </ol>
        <li>Four Doors</li>
        <ol>
            <li>Ford Fusion</li>
            <li>Chevrolet Malibu</li>
            <li>Hyundai Sonata</li>
        </ol>
    </ol>
</div>

<div class="sports">
    <li>Sports</li>
    <ol type = "A">
        <li>Coupe</li>
        <ol>
            <li>Ford Mustang</li>
            <li>Chevrolet Corvette</li>
            <li>Porsche 911</li>
        </ol>
        <li>Convertible</li>
        <ol>
            <li>Mazda MX-5 Miata</li>
            <li>BMW Z4</li>
            <li>Audi TT Roadster</li>
        </ol>
    </ol>
</div>

</ol>

</body>
</html>
```

cars.css

```
.compact{  
    background-color: pink;  
    padding: 2%;  
}  
  
.mid{  
    background-color: blue;  
    padding: 2%;  
}  
  
.sports{  
    background-color: red;  
    padding: 2%;  
}
```

Output:

The screenshot shows a web browser window with a dark header bar containing links for Gmail, Google, YouTube, and PESMODERNCOE.E.. On the right side of the header, there is a "Other bookmarks" section with a yellow icon. The main content area displays a hierarchical list of car models:

- I. Compact
 - A. Two Doors
 - 1. Honda Civic
 - 2. Toyota Corolla
 - 3. Ford Focus
 - B. Four Doors
 - 1. Nissan Sentra
 - 2. Chevrolet Cruze
 - 3. Volkswagen Jetta
- II. Midsize
 - A. Two Doors
 - 1. Honda Accord
 - 2. Toyota Camry
 - 3. Nissan Altima
 - []
 - B. Four Doors
 - 1. Ford Fusion
 - 2. Chevrolet Malibu
 - 3. Hyundai Sonata
- III. Sports
 - A. Coupe
 - 1. Ford Mustang
 - 2. Chevrolet Corvette
 - 3. Porsche 911
 - B. Convertible
 - 1. Mazda MX-5 Miata
 - 2. BMW Z4
 - 3. Audi TT Roadster



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Name: Vanessa Reetu Prashant More **Assignment No:** 1

Date of Implementation: 17. 8. 23

Q3. Design and develop a suitable static web site for student admission process using HTML and CSS

Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>FORM</title>
<style>

body{
    background-image: url(book.jpeg);
    background-repeat: no-repeat;
    background-size: cover;
}
```

```
h2{
    font-family: Sans-serif;
    font-size: 24px;
    font-style: normal;
    font-weight: bolder;
    color: rgb(0, 0, 0);
    text-align: center;
}
```

```
table{
    font-family: verdana;
    color:white;
    font-size: 16px;
    font-style: normal;
```

```
font-weight: bold;  
background: rgba(122, 66, 19, 0.486);  
border-collapse: collapse;  
border: 4px solid #000000;  
align-self: center;  
}  
  
tr{  
border-bottom: #0000003b solid;  
}  
  
table.inner{  
border: 10px  
}  
  
input[type=text], input[type=email], input[type=number]{  
width: 50%;  
padding: 6px 12px;  
margin: 5px 0;  
box-sizing: border-box;  
}  
  
input[type=submit], input[type=reset]{  
width: 15%;  
font-size: 20px;  
padding: 8px 12px;  
margin: 5px 0;  
box-sizing: border-box;  
}  
  
.center {  
margin-left: auto;  
margin-right: auto;  
width: 100%;  
height: 100%;  
}  
  
</style>  
</head>  
<body>
```

```
<h2>Student Admission Form </h2>
<form>
<table class="center" cellpadding = "10">

<!-- First Name -->
<tr>
<td>First Name</td>
<td><input type="text" name="FirstName" maxlength="50" placeholder="Fisrt Name" required/>
(Max 50 Characters Allowed)
</td>
</tr>

<!-- Last Name -->
<tr>
<td>Last Name</td>
<td><input type="text" name="LastName" maxlength="50" placeholder="Last Name" required />
(Max 50 Characters Allowed)
</td>
</tr>

<!-- Email ID -->
<tr>
<td>Email ID</td>
<td><input type="email" name="EmailID" maxlength="100" placeholder="abc123@gmail.com" required/></td>
</tr>

<!-- Mobile Number -->
<tr>
<td>Mobile Number</td>
<td>
<input type="text" name="MobileNumber" maxlength="10" placeholder="1234xxxxxx" required/>
(10 Digits Allowed)
</td>
</tr>
```

```
<!--- Gender --->
<tr>
<td>Gender</td>
<td>
<input type="radio" name="Gender" value="Male" required/>
Male
<input type="radio" name="Gender" value="Female" required/>
Female
</td>
</tr>

<!--- Date Of Birth--->
<tr>
<td>Date of Birth(DOB)</td>
<td><input type="date" id="birthday" name="birthday" required></td>
</tr>

<!--- Address --->
<tr>
<td>Address<br /><br /><br /></td>
<td><textarea name="Address" rows="10" cols="50" required></textarea></td>
</tr>

<!--- City --->
<tr>
<td>City</td>
<td><input type="text" name="City" maxlength="50" placeholder="Pune" required/>
(Max 50 Characters Allowed)
</td>
</tr>

<!--- Pin Code--->
<tr>
<td>Pin Code</td>
<td><input type="Number" name="PinCode" maxlength="6" placeholder="411037" required/>
(Max 6 Numbers Allowed)
</td>
</tr>
```

```
<!-- State -->
<tr>
<td>State</td>
<td><input type="text" name="State" maxlength="50" placeholder="Maharashtra" required/>
(Max 50 Characters Allowed)</td>
</tr>

<!-- Country -->
<tr>
<td>Country</td>
<td><input type="text" name="Country" placeholder="India" required /></td>
</tr>

<!-- Qualification-->
<tr>
<td>Qualification <br /><br /><br /></td>
<td>
<br/>
<input type="checkbox" name="HighSchool" value="High School" />
High School(10th)<br>
<input type="checkbox" name="HigherSchool" value="Higher School" />
Higher School(12th)<br/>
<input type="checkbox" name="Graduation" value="Graduation" />
Graduation(Bachelors)<br/>
<input type="checkbox" name="PostGraduation" value="Post Graduation" />
Post Graduation(Masters)<br/>
<input type="checkbox" name="Phd" value="Phd">
Phd
</td>
</tr>
```

```

<!-- Courses -->
<tr>
<td>Course<br />Applied For</td>
<td>
<input type="radio" name="Course" value="MCA" required>
MCA(Master of Computer Applications)<br>
<input type="radio" name="Course" value="MBA" required>
MBA(Master of Business Administraion)<br>
<input type="radio" name="Course" value="M.Tech" required>
M.Tech(Master of Technology)<br>
<input type="radio" name="Course" value="M.Com" required>
M.Com(Master of Commerce)<br>
<input type="radio" name="Course" value="M.Sc" required>
M.Sc(Master of Science)<br>
<input type="radio" name="Course" value="M.A" required>
MA(Master of Arts)<br>
</td>
</tr>

<!-- Submit and Reset -->
<tr>
<td colspan="2" align="center">
<input type="submit" value="Submit">
<input type="reset" >
</td>
</tr>
</table>
</form>
</body>
</html>

```

Output:

Gmail Google YouTube PESMODERNCOE.E.. Other bookmarks

Student Admission Form

First Name	<input type="text" value="Fisrt Name"/> <small>(Max 50 Characters Allowed)</small>
Last Name	<input type="text" value="Last Name"/> <small>(Max 50 Characters Allowed)</small>
Email ID	<input type="text" value="abc123@gmail.com"/>
Mobile Number	<input type="text" value="1234xxxxx"/> <small>(10 Digits Allowed)</small>
Gender	<input checked="" type="radio"/> Male <input type="radio"/> Female
Date of Birth(DOB)	<input type="text" value="dd-mm-yyyy"/> <input type="button" value="..."/>
Address	<input type="text"/>
City	<input type="text" value="Pune"/> <small>(Max 50 Characters Allowed)</small>
Pin Code	<input type="text" value="411037"/> <small>(Max 6 Numbers Allowed)</small>
State	<input type="text" value="Maharashtra"/> <small>(Max 50 Characters Allowed)</small>

Gmail Google YouTube PESMODERNCOE.E.. Other bookmarks

Address	<input type="text"/>
City	<input type="text" value="Pune"/> <small>(Max 50 Characters Allowed)</small>
Pin Code	<input type="text" value="411037"/> <small>(Max 6 Numbers Allowed)</small>
State	<input type="text" value="Maharashtra"/> <small>(Max 50 Characters Allowed)</small>
Country	<input type="text" value="India"/>
Qualification	<input type="checkbox"/> High School(10th) <input type="checkbox"/> Higher School(12th) <input type="checkbox"/> Graduation(Bachelors) <input type="checkbox"/> Post Graduation(Masters) <input type="checkbox"/> Phd
Course Applied For	<input type="checkbox"/> MCA(Master of Computer Applications) <input type="checkbox"/> MBA(Master of Business Administraion) <input type="checkbox"/> M.Tech(Master of Technology) <input type="checkbox"/> M.Com(Master of Commerce) <input type="checkbox"/> M.Sc(Master of Science) <input type="checkbox"/> MA(Master of Arts)
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	



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Date of Implementation: 17. 8. 23

Q4. Design external CSS to set the following rules and link in HTML file.

- a. Give Heading
- b. Set paragraph with font size 13,
- c. Set text color as blue.
- d. Set Heading text color as green.

Code:

ext.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="stylesheet" href="external.css">
    <title>External Css</title>
</head>
<body>
    <h1>Use of External Css</h1>
    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Ex laborum ipsam est ullam quae maxime tenetur repudiandae deleniti ducimus excepturi, nostrum minima porro dolorem repellendus soluta necessitatibus numquam? Temporibus, dignissimos. Lorem ipsum dolor sit amet consectetur adipisicing elit. Quasi neque a soluta repellendus recusandae fuga provident ex quidem commodi natus quas, numquam quo nostrum? Voluptates laborum quam nostrum reiciendis aliquam?</p>

</body>
</html>
```

external.css

```
h1{
    color: green;
}

p{
    font-size: 13pt;
}

body{
    color: blue;
}
```

Output:

Use of External Css

Lorem ipsum dolor sit amet consectetur adipisicing elit. Ex laborum ipsam est ullam quae maxime tenetur repudiandae deleniti ducimus excepturi, nostrum minima porro dolorem repellendus soluta necessitatibus numquam? Temporibus, dignissimos. Lorem ipsum dolor sit amet consectetur adipisicing elit. Quasi neque a soluta repellendus recusandae fuga provident ex quidem commodi natus quas, numquam quo nostrum? Voluptates laborum quam nostrum reiciendis aliquam?



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Date of Implementation: 17. 8. 23

Q5. Create an inline CSS that changes the font color of the h1 heading by setting the color property to blue with center aligned And internal DTD for the Library Information like Book Name, Author Name, Publication and Year of Publication.

- a. Ensure its validity
- b. Then try to break it

Code:

```
<!DOCTYPE html>
<html>
<head>
    <title>Library Information</title>
    <style>
        h1 {
            color: blue;
            text-align: center;
        }
    </style>
</head>
<body>

<h1>Library Information</h1>

<!-- Internal DTD for Library Information -->
<?xml version = "1.0"?>
<!DOCTYPE note [
    <!ELEMENT library_info (book_name, author_name, publication, year_of_publication)>
    <!ELEMENT book_name (#PCDATA)>
    <!ELEMENT author_name (#PCDATA)>
    <!ELEMENT publication (#PCDATA)>
    <!ELEMENT year_of_publication (#PCDATA)>
]>

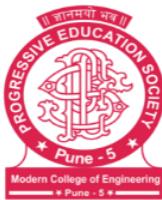
<library_info>
    <book_name>The Great Gatsby</book_name> <br>
    <author_name>F. Scott Fitzgerald</author_name><br>
    <publication>Penguin Books</publication><br>
    <year_of_publication>1925</year_of_publication>
</library_info>

</body>
</html>
```

Output:

The screenshot shows a web browser window with a dark header bar. In the header, there are several icons and links: Gmail, Google, YouTube, and a link to 'PESMODERNCOE.E...'. On the far right of the header, there is a 'More' icon followed by the text 'Other bookmarks'. The main content area has a light blue background. At the top center, the text 'Library Information' is displayed in a large, bold, blue font. Below this title, there is a short paragraph of text in a smaller black font. A horizontal solid black line is positioned below the text, and a dashed black line is located directly beneath it.

The Great Gatsby
F. Scott Fitzgerald
Penguin Books
1925



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Name: Vanessa Reetu Prashant More Assignment No: 2 Date of Implementation: 12. 9. 23

Q1. Create XML file to describe employee details and external DTD to it.

Code:

employee_details.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE employees SYSTEM "employee_details.dtd">
<employees>
<employee>
<employee_id>101</employee_id>
<first_name>Jane</first_name>
<last_name>Will</last_name>
<email>abcdef@email.com</email>
<department>Software Engineer</department>
<salary>55000</salary>
</employee>

<employee>
<employee_id>102</employee_id>
<first_name>Kiara</first_name>
<last_name>Smith</last_name>
<email>xyz@example.com</email>
<department>HR</department>
<salary>60000</salary>
</employee>
</employees>
```

employee_details.dtd

```
<!ELEMENT employees (employee+)>
<!ELEMENT employee (employee_id, first_name, last_name, email, department, salary)>
<!ELEMENT employee_id (#PCDATA)>
<!ELEMENT first_name (#PCDATA)>
<!ELEMENT last_name (#PCDATA)>
<!ELEMENT email (#PCDATA)>
<!ELEMENT department (#PCDATA)>
<!ELEMENT salary (#PCDATA)>
```

Output:

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<employees>
  <link type="text/css" id="dark-mode" rel="stylesheet" href="" />
  ▼<employee>
    <employee_id>101</employee_id>
    <first_name>Jane</first_name>
    <last_name>Will</last_name>
    <email>abcdef@email.com</email>
    <department>Software Engineer</department>
    <salary>55000</salary>
  </employee>
  ▼<employee>
    <employee_id>102</employee_id>
    <first_name>Kiara</first_name>
    <last_name>Smith</last_name>
    <email>xyz@example.com</email>
    <department>HR</department>
    <salary>60000</salary>
  </employee>
</employees>
```



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Name: Vanessa Reetu Prashant More **Assignment No:** 2 **Date of Implementation:** 12. 9. 23

Q2. Design a DTD for an XML database of restaurants. This will check that the XML file is well-formed and that it validates against the DTD you have given. If the document is valid, you get no response; if invalid, you get an error message.

Code:

restaurant.dtd

```
<!ELEMENT restaurants (restaurant+)>
<!ELEMENT restaurant (name, cuisine, location, rating)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT cuisine (#PCDATA)>
<!ELEMENT location (address, city, state, zipcode)>
<!ELEMENT address (#PCDATA)>
<!ELEMENT city (#PCDATA)>
<!ELEMENT state (#PCDATA)>
<!ELEMENT zipcode (#PCDATA)>
<!ELEMENT rating (#PCDATA)>
```

restaurant.xml (Valid)

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE restaurants SYSTEM "restaurant.dtd">
<restaurants>
  <restaurant>
    <name>La Trattoria</name>
    <cuisine>Italian</cuisine>
    <location>
      <address>123 Main Street</address>
      <city>New York</city>
      <state>NY</state>
      <zipcode>10001</zipcode>
    </location>
    <rating>4.5</rating>
  </restaurant>
  <restaurant>
    <name>Sushi Haven</name>
    <cuisine>Japanese</cuisine>
    <location>
      <address>456 Oak Avenue</address>
      <city>Los Angeles</city>
    </location>
```

```

<state>CA</state>
<zipcode>90002</zipcode>
</location>
<rating>4.0</rating>
</restaurant>
</restaurants>

```

restaurant.xml (InValid)

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE restaurants SYSTEM "restaurant.dtd">
<restaurant>
  <name>La Trattoria</name>
  <cuisine>Italian</cuisine>
  <location>
    <address>123 Main Street</address>
    <city>New York</city>
    <state>NY</state>
    <zipcode>10001</zipcode>
  </location>
  <rating>4.5</rating>
</restaurant>
<restaurant>
  <name>Sushi Haven</name>
  <cuisine>Japanese</cuisine>
  <location>
    <address>456 Oak Avenue</address>
    <city>Los Angeles</city>
    <state>CA</state>
    <zipcode>90002</zipcode>
  </location>
  <rating>4.0</rating>
</restaurant>
</restaurants>

```

Output:

Valid:

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```

▼<restaurants>
  <link type="text/css" id="dark-mode" rel="stylesheet" href="">
  ▼<restaurant>
    <name>La Trattoria</name>
    <cuisine>Italian</cuisine>
    ▼<location>
      <address>123 Main Street</address>
      <city>New York</city>
      <state>NY</state>
      <zipcode>10001</zipcode>
    </location>
    <rating>4.5</rating>
  </restaurant>
  ▼<restaurant>
    <name>Sushi Haven</name>
    <cuisine>Japanese</cuisine>
    ▼<location>
      <address>456 Oak Avenue</address>
      <city>Los Angeles</city>
      <state>CA</state>
      <zipcode>90002</zipcode>
    </location>
    <rating>4.0</rating>
  </restaurant>
</restaurants>

```

Invalid:

This page contains the following errors:

error on line 15 at column 5: Extra content at the end of the document

Below is a rendering of the page up to the first error.

La Trattoria Italian 123 Main Street New York NY 10001 4.5



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Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More Assignment No: 2 Date of Implementation: 12. 9. 23

Q3. Create XML file for a student database. Next create the document type definition for the xml structure and finally create the schema document for the xml document.

Code:

stud.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<?xmlstylesheet href="stud.xsd" type="text/xsd"?>
<students>
    <student>
        <name>Kiran</name>
        <course>MCA</course>
        <rollno>424</rollno>
        <address>Pune</address>
    </student>
    <student>
        <name>Aditi</name>
        <course>MBA</course>
        <rollno>862</rollno>
        <address>Mumbai</address>
    </student>
</students>
```

stud.dtd

```
<!ELEMENT students (student+)>
<!ELEMENT student (name, course, rollno, address )>
<!ELEMENT name (#PCDATA)>
<!ELEMENT course (#PCDATA)>
<!ELEMENT rollno (#PCDATA)>
<!ELEMENT address (#PCDATA)>
```

stud.xsd

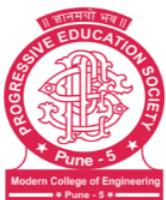
```
<?xml version="1.0" encoding="UTF-8"?>
<xsschema xmlns:xss="http://www.w3.org/2001/XMLSchema">
    <xselement name="students">
        <xsccomplexType>
            <xssequence>
                <xselement name="student" maxOccurs="unbounded">
                    <xsccomplexType>
                        <xssequence>
                            <xselement name="name" type="xs:string"/>
                            <xselement name="course" type="xs:string"/>
                            <xselement name="rollno" type="xs:integer"/>
                            <xselement name="address" type="xs:string"/>
                        </xssequence>
                    </xsccomplexType>
                </xselement>
            </xssequence>
        </xsccomplexType>
    </xselement>
</xsschema>
```

```
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>
```

Output:

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml-stylesheet href="stud.xsd" type="text/xsd"?>
<students>
  <link type="text/css" id="dark-mode" rel="stylesheet" href="" />
  <student>
    <name>Kiran</name>
    <course>MCA</course>
    <rollno>424</rollno>
    <address>Pune</address>
  </student>
  <student>
    <name>Aditi</name>
    <course>MBA</course>
    <rollno>862</rollno>
    <address>Mumbai</address>
  </student>
</students>
```



Progressive Education Society's
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Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 2

Date of Implementation: 12. 9. 23

Q4. Open the XML file "amazon-extended.xml". The file contains 2 types of products: books and software. Create an XSL transformation document for presenting all the products in the XML file. Transform the XML using the XSLT you developed. Save the developed XSL transformation file as: "all-products.xsl". View the resulting HTML file in a browser window.

Code:

amazon-extended.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<products>
  <product>
    <type>book</type>
    <name>The Great Gatsby</name>
    <author>F. Scott Fitzgerald</author>
    <price>15.99</price>
    <description>A classic novel about the American Dream.</description>
  </product>
  <product>
    <type>book</type>
    <name>To Kill a Mockingbird</name>
    <author>Harper Lee</author>
    <price>12.50</price>
    <description>An iconic novel addressing racial injustice.</description>
  </product>
  <product>
    <type>software</type>
    <name>Microsoft Office 365</name>
    <version>2022</version>
    <price>149.99</price>
    <description>Office suite for productivity and collaboration.</description>
  </product>
  <product>
    <type>software</type>
    <name>Adobe Photoshop</name>
    <version>CC 2023</version>
    <price>199.99</price>
    <description>Professional image editing software.</description>
  </product>
</products>
```

all-products.xslt

```
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:output method="html" encoding="UTF-8"/>

  <xsl:template match="/products">
    <html>
      <head>
        <title>Product Catalog</title>
      </head>
      <body>
        <h1>Product Catalog</h1>
        <table>
          <tr>
            <th>Type</th>
            <th>Name</th>
            <th>Author/Version</th>
            <th>Price</th>
            <th>Description</th>
          </tr>
          <xsl:apply-templates select="product"/>
        </table>
      </body>
    </html>
  </xsl:template>
  <xsl:template match="product">
    <tr>
      <td><xsl:value-of select="type"/></td>
      <td><xsl:value-of select="name"/></td>
      <td>
        <xsl:choose>
          <xsl:when test="type = 'book'">
            <xsl:value-of select="author"/>
          </xsl:when>
          <xsl:otherwise>
            <xsl:value-of select="version"/>
          </xsl:otherwise>
        </xsl:choose>
      </td>
      <td><xsl:value-of select="price"/></td>
      <td><xsl:value-of select="description"/></td>
    </tr>
  </xsl:template>
</xsl:stylesheet>
```

amazon-prod.html (HTML formed)

```
<html>
  <head>
    <title>Product Catalog</title>
  </head>
  <body>
    <h1>Product Catalog</h1>
    <table>
      <tr>
        <th>Type</th>
        <th>Name</th>
        <th>Author/Version</th>
        <th>Price</th>
        <th>Description</th>
      </tr>
      <tr>
        <td>book</td>
        <td>The Great Gatsby</td>
        <td>F. Scott Fitzgerald</td>
        <td>15.99</td>
        <td>A classic novel about the American Dream.</td>
      </tr>
      <tr>
        <td>book</td>
        <td>To Kill a Mockingbird</td>
        <td>Harper Lee</td>
        <td>12.50</td>
        <td>An iconic novel addressing racial injustice.</td>
      </tr>
      <tr>
        <td>software</td>
        <td>Microsoft Office 365</td>
        <td>2022</td>
        <td>149.99</td>
        <td>Office suite for productivity and collaboration.</td>
      </tr>
      <tr>
        <td>software</td>
        <td>Adobe Photoshop</td>
        <td>CC 2023</td>
        <td>199.99</td>
        <td>Professional image editing software.</td>
      </tr>
    </table>
  </body>
</html>
```

Output:

Gmail Google YouTube S PESMODERNCOE...

Product Catalog

Type	Name	Author/Version	Price	Description
book	The Great Gatsby	F. Scott Fitzgerald	15.99	A classic novel about the American Dream.
book	To Kill a Mockingbird	Harper Lee	12.50	An iconic novel addressing racial injustice.
software	Microsoft Office 365	2022	149.99	Office suite for productivity and collaboration.
software	Adobe Photoshop	CC 2023	199.99	Professional image editing software.



Progressive Education Society's
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Name: Vanessa Reetu Prashant More **Assignment No:** 2 **Date of Implementation:** 12. 9. 23

Q5. Create an XML document with the following sample real estate data

- a. Root element real-estate will contain a sequence of sub-elements agencies, owners, properties and flats, all with an empty content
- b. Ensure well-formedness
- c. Create an internal DTD to ensure its validity and then try to break it.
- d. Move the DTD to an external file and validate the XML document again

Modify the DTD schema: Using parameter entities and conditional sections, declare 2 modes for the content of owners: – Verbose • Everything – Standard • everything except the description, Activate the standard mode and adjust the XML document appropriately

Create an internal DTD to ensure its validity and then try to break it.

Code:

real-estate1.xml (Valid)

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE real-estate [
    <!ELEMENT real-estate (agencies, owners, properties, flats)>
    <!ELEMENT agencies EMPTY>
    <!ELEMENT owners EMPTY>
    <!ELEMENT properties EMPTY>
    <!ELEMENT flats EMPTY>
]>
<real-estate>
    <agencies></agencies>
    <owners></owners>
    <properties></properties>
    <flats></flats>
</real-estate>
```

Output:

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<real-estate>
  <link type="text/css" id="dark-mode" rel="stylesheet" href="" />
  <agencies/>
  <owners/>
  <properties/>
  <flats/>
</real-estate>
```

real-estate1.xml (Invalid)

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE real-estate [
    <!ELEMENT real-estate (agencies, owners, properties, flats)>
    <!ELEMENT agencies EMPTY>
    <!ELEMENT owners EMPTY>
    <!ELEMENT properties EMPTY>
    <!ELEMENT flats EMPTY>
]>

<agencies></agencies>
<owners></owners>
<properties></properties>
<flats></flats>
</real-estate>
```

Output:

The screenshot shows a web browser window with a dark header bar containing icons for Gmail, Google, YouTube, and PESMODERNCOE.E.. On the right side of the header, there is a "All Bookmarks" button. The main content area has a pink background. At the top left of this area, the text "This page contains the following errors:" is displayed. Below it, a message reads "error on line 11 at column 3: Extra content at the end of the document". Further down, another message says "Below is a rendering of the page up to the first error.". At the bottom right of the content area, there is a small button labeled "Show hidden icons". A horizontal black line is visible at the bottom of the browser window.

This page contains the following errors:

error on line 11 at column 3: Extra content at the end of the document

Below is a rendering of the page up to the first error.

Show hidden icons

Move the DTD to an external file and validate the XML document again

Code:

External DTD

real-estate1.dtd

```
<!ELEMENT real-estate (agencies, owners, properties, flats)>
<!ELEMENT agencies EMPTY>
<!ELEMENT owners EMPTY>
<!ELEMENT properties EMPTY>
<!ELEMENT flats EMPTY>
```

real-estate2.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE real-estate SYSTEM "real_estate1.dtd">
<real-estate>
  <agencies></agencies>
  <owners></owners>
  <properties></properties>
  <flats></flats>
</real-estate>
```

Output:



This screenshot shows a browser window displaying the XML document. The page header includes links to Gmail, Google, YouTube, and PESMODERNCOE.E... Below the header, a message states: "This XML file does not appear to have any style information associated with it. The document tree is shown below." The document tree is displayed as a hierarchical structure:

```
▼<real-estate>
  <link type="text/css" id="dark-mode" rel="stylesheet" href="" />
  <agencies/>
  <owners/>
  <properties/>
  <flats/>
</real-estate>
```

Modify the DTD schema: Using parameter entities and conditional sections, declare 2 modes for the content of owners: – Verbose • Everything – Standard • everything except the description, Activate the standard mode and adjust the XML document appropriately

Code:

sv_real-estate.dtd

```
<!ENTITY % ownerContentVerbose "(name, phone, email, description?)">
<!ENTITY % ownerContentStandard "(name, phone, email)">
<!ELEMENT real-estate (agencies, owners, properties, flats)>
<!ELEMENT agencies EMPTY>
<!ELEMENT owners (%ownerContentVerbose; | %ownerContentStandard;)>
<!ELEMENT properties EMPTY>
<!ELEMENT flats EMPTY>
```

**sv_real-estate.xml
(Standard mode activated)**

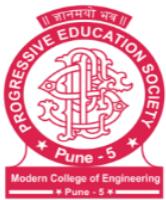
```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE real-estate SYSTEM "sv_real-estate.dtd">
<real-estate>
  <agencies></agencies>
  <owners>
    <name>John Doe</name>
    <phone>123-456-7890</phone>
    <email>john@example.com</email>
  </owners>
  <properties></properties>
  <flats></flats>
</real-estate>
```

Output:



This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<real-estate>
  <link type="text/css" id="dark-mode" rel="stylesheet" href="" />
  <agencies/>
  ▼<owners>
    <name>John Doe</name>
    <phone>123-456-7890</phone>
    <email>john@example.com</email>
    <description>New flat</description>
  </owners>
  <properties/>
  <flats/>
</real-estate>
```



Progressive Education Society's
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Name: Vanessa Reetu Prashant More **Assignment No:** 3 **Date of Implementation:** 26. 9. 23

Q1. Write a Java Script code to check the password strength when user is typing his password

(Do not write code on submit button)

Password length \geq 10 Strong

Password length < 10 and ≥ 5 Medium

Password length < 4 Weak

Code:

password.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Password check</title>
    <script src="pwd_check.js"></script>
</head>
<body>
    <h1>Password Strength</h1>
    <form name="f1">
        <label>Password: </label>
        <input type="password" id="pwd" onkeyup="check()">
    </form>
    <p id="strength"></p>
</body>
</html>
```

pwd_check.js

```
function check(){

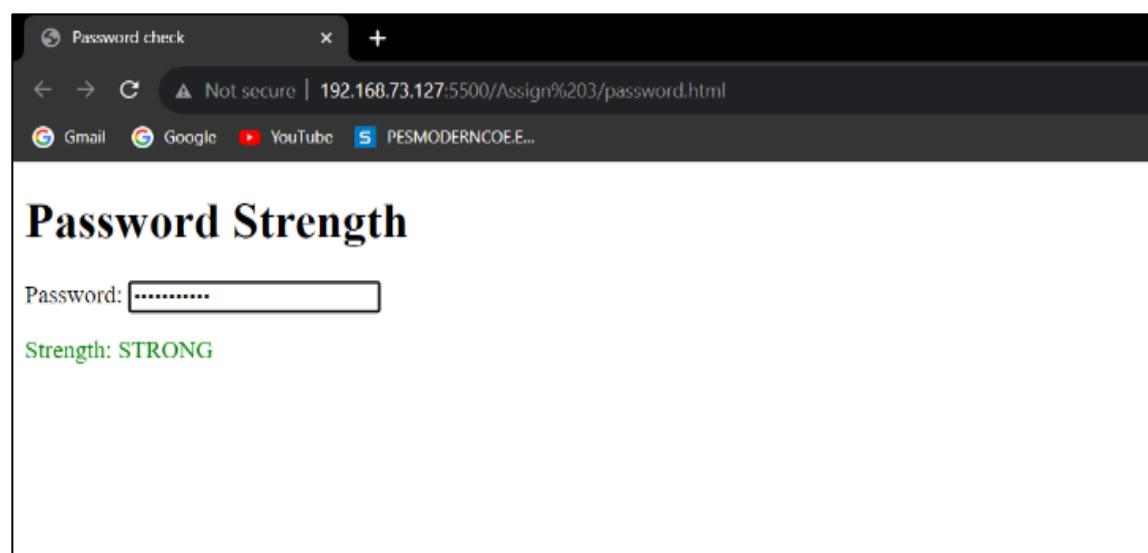
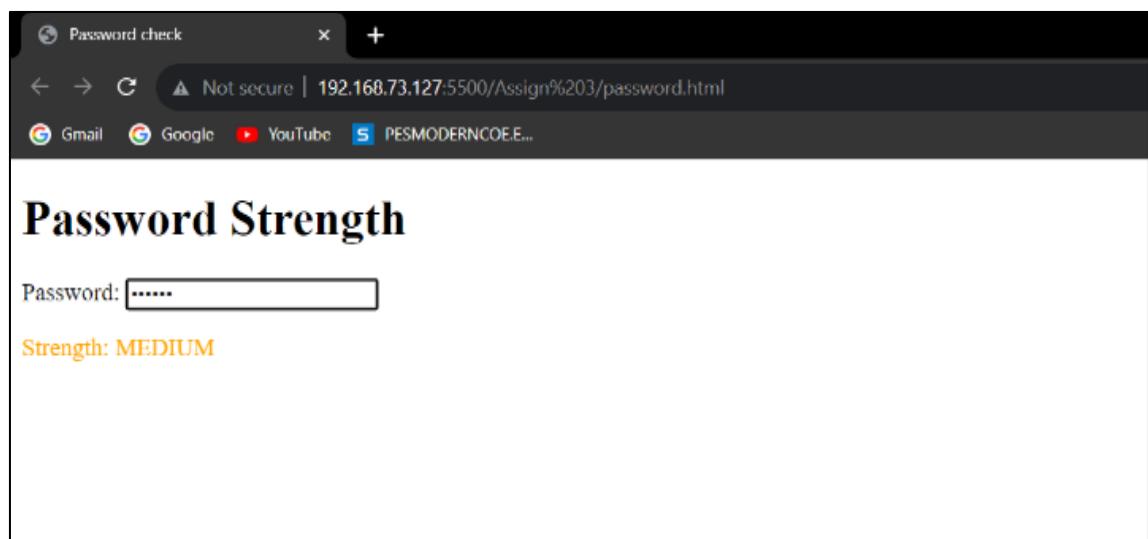
    var pwd = document.getElementById("pwd");
    var passwordStrength = document.getElementById("strength");

    var val = pwd.value;
    var l = val.length;

    if(l >= 10){
        passwordStrength.textContent="Strength: STRONG";
        passwordStrength.style.color="Green";
    }else if(l < 10 & l >= 5){
        passwordStrength.textContent="Strength: MEDIUM";
        passwordStrength.style.color="Orange";
    }else{
        passwordStrength.textContent="Strength: WEAK";
        passwordStrength.style.color="Red";
    }
}
```

```
}else{
    passwordStrength.textContent="Strength: WEAK";
    passwordStrength.style.color="Red";
}
}
```

Output:





Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More **Assignment No:** 3 **Date of Implementation:** 26. 9. 23

Q2. Write a Java Script functions that accepts a string as a parameter and converts the first letter of each word of the string in upper case. (Don't use built in function).

Code:

```
<!DOCTYPE html>
<html>
<head>
    <title>String Capitalization</title>
</head>
<body>
    <h1>String Capitalization</h1>

    <label for="inputString">Enter a string:</label>
    <input type="text" id="inputString">
    <button onclick="capitalizeString()">Capitalize</button>

    <p>Capitalized String: <span id="capitalizedResult"></span></p>

    <script>
        function capitalizeString() {
            var inputElement = document.getElementById("inputString");
            var resultElement = document.getElementById("capitalizedResult");

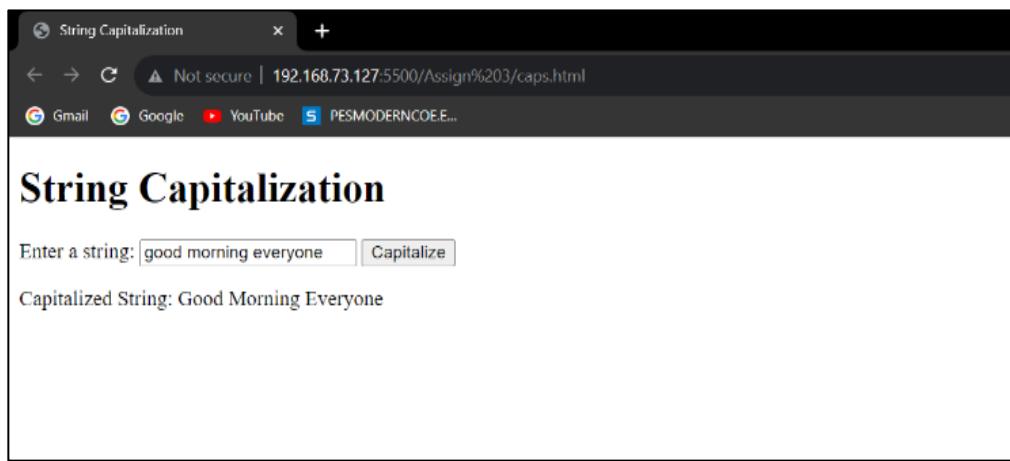
            var inputString = inputElement.value;

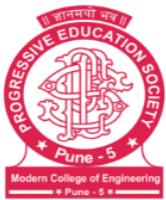
            var words = inputString.split(' ');
            var capitalizedWords = [];

            for (var i = 0; i < words.length; i++) {
                var word = words[i];
                var capitalizedWord = word.charAt(0).toUpperCase() + word.slice(1);
                capitalizedWords.push(capitalizedWord);
            }

            var resultString = capitalizedWords.join(' ');
            resultElement.textContent = resultString;
        }
    </script>
</body>
</html>
```

Output:





Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More **Assignment No:** 3 **Date of Implementation:** 26. 9. 23

Q3. Write user defined Java Script function to take birth date as input compare it with the current date, check that the difference in dates should be more than 18 years and accordingly display an alert telling valid or invalid input.

Code:

```
<!DOCTYPE html>
<html>
<head>
    <title>Age Verification</title>
</head>
<body>
    <h1>Age Verification</h1>

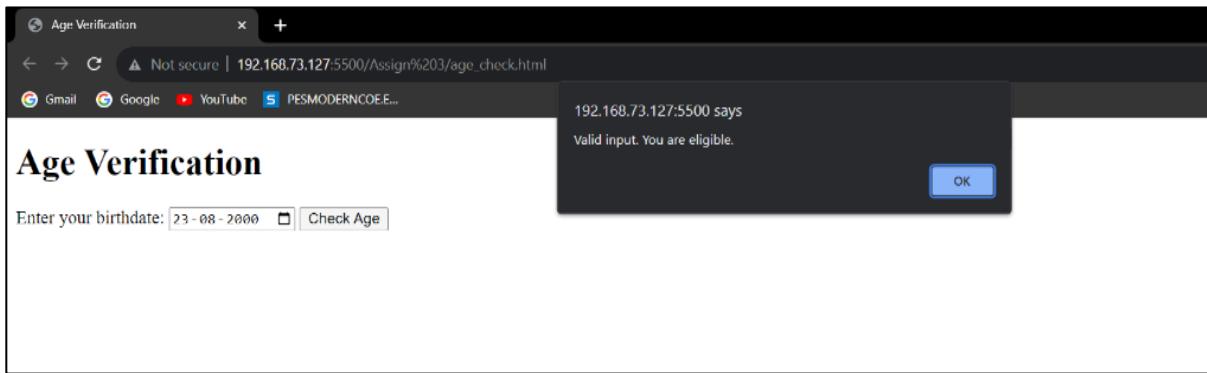
    <label for="birthdate">Enter your birthdate:</label>
    <input type="date" id="birthdate">
    <button onclick="checkAge()">Check Age</button>

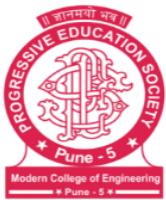
    <script>
        function checkAge() {
            var birthdateInput = document.getElementById("birthdate");
            var birthdate = new Date(birthdateInput.value);
            var currentDate = new Date();

            // Calculate the difference in years
            var ageDifference = currentDate.getFullYear() - birthdate.getFullYear();

            // Check if the birthdate is less than 18 years ago
            if (ageDifference < 18) {
                alert("Invalid input. You must be at least 18 years old.");
            } else {
                alert("Valid input. You are eligible.");
            }
        }
    </script>
</body>
</html>
```

Output:





Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More **Assignment No:** 3 **Date of Implementation:** 26. 9. 23

Q4. Write a JavaScript code to create a web Page which accepts various information and validate the information entered and display proper messages as shown below.

Order Information

Product ID:

Description:

Credit Card No:

Your Email ID:

Code:

form_validation.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <script src="validation.js"></script>

</head>
<body>
```

```
<form name="f1">
    <table>
        <tr>
            <td colspan="2">
                <center>
                    <h1>Order Information</h1>
                </center>
            </td>
        </tr>
        <tr>
            <td>Product ID:</td>
            <td><input type="text" name="pid" id="pid"></td>
        </tr>
```

```

<tr>
    <td>Description: </td>
    <td><input type="text" name="desc" id="desc"></td>
</tr>

<tr>
    <td>Credit Card No: </td>
    <td><input type="text" name="ccn" id="ccn"></td>
</tr>

<tr>
    <td>Your Email ID: </td>
    <td><input type="text" name="eid" id="eid"></td>
</tr>

<tr>
    <td><center>
        <input type="button" name="submit" id="sub" value = "Submit" onclick="validate()">
    </center>
    </td>

    <td>
        <center>
            <input type="button" name="clear" id="clr" value = "Clear" onclick="clearFields()">
        </center>
    </td>
</tr>
</table>
</form>
</body>
</html>

```

validation.js

```

function validate(){

    var prodId = document.getElementById("pid").value.trim();
    var descrip = document.getElementById("desc").value.trim();
    var cred = document.getElementById("ccn").value.trim();
    var email = document.getElementById("eid").value.trim();

    if (prodId==""){
        alert("Enter A valid Product ID");
        document.f1.pid.value="";
        document.getElementById("pid").focus();
        return true;
    }

    else if (descrip==""){
        alert("Enter A valid Description");
        document.f1.desc.value="";
        document.getElementById("desc").focus();
        return true;
    }
}

```

```
}

else if (!/\d{16}/.test(cred)){
    alert("Enter A valid Credit Card Number");
    document.f1.ccn.value="";
    document.getElementById("ccn").focus();
    return true;
}

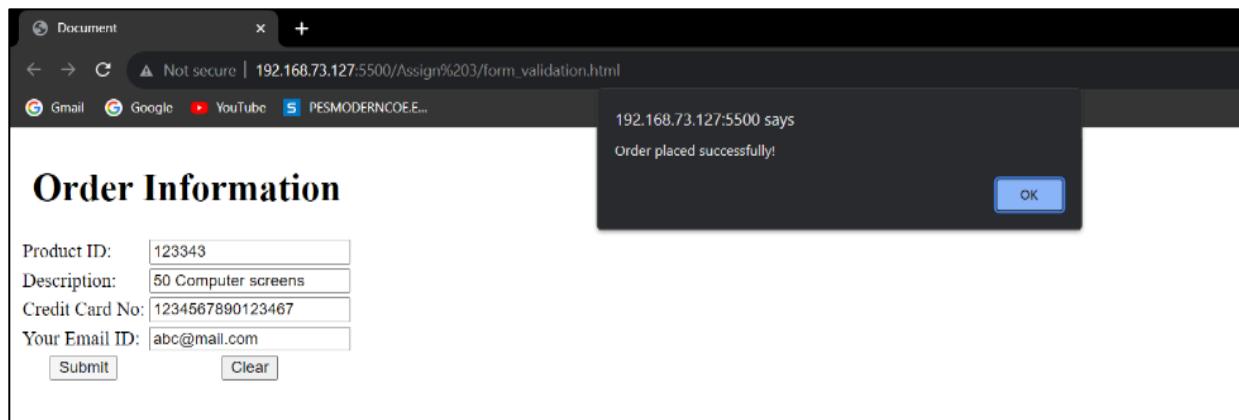
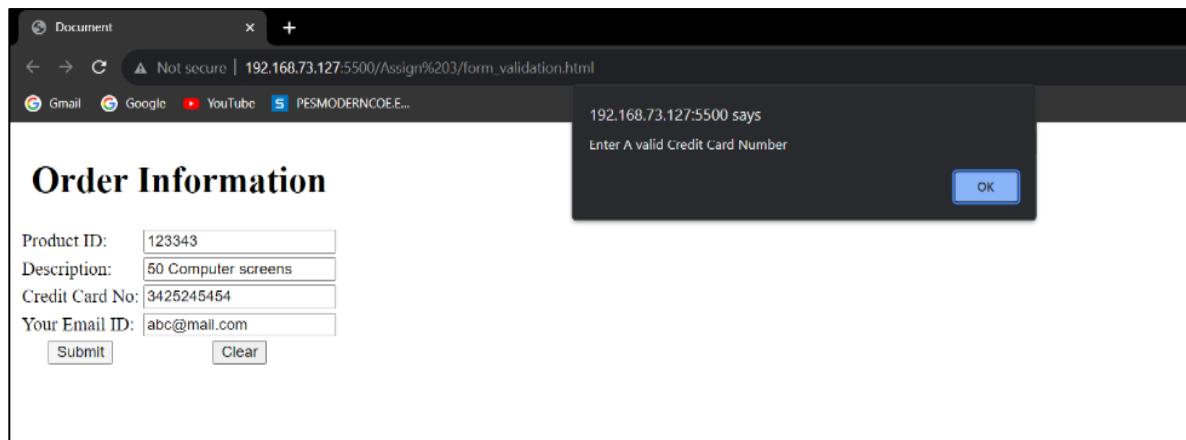
else if (!/\S+@\S+\.\S+/.test(email)){
    alert("Enter A valid Email ID");
    document.f1.eid.value="";
    document.getElementById("eid").focus();
    return true;
}

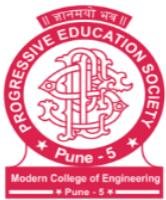
else{
    alert("Order placed successfully!");
    return true;
}

}

function clearFields() {
    document.f1.pid.value="";
    document.f1.desc.value="";
    document.f1.ccn.value="";
    document.f1.eid.value="";
}
```

Output:





Progressive Education Society's
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(410906) Web Technologies Lab

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Q5. Write a JavaScript program to find an area of different geometric shapes

Code:

```
<!DOCTYPE html>
<html>
<head>
    <title>Geometric Shape Area Calculator</title>
</head>
<body>
    <h1>Geometric Shape Area Calculator</h1>

    <label for="shape">Select a shape:</label>
    <select id="shape">
        <option value="rectangle">Rectangle</option>
        <option value="triangle">Triangle</option>
        <option value="circle">Circle</option>
    </select>

    <div id="inputFields">
        <!-- Rectangle Input Fields -->
        <div id="rectangleInputs">
            <br>
            <label for="rectLength">Length:</label>
            <input type="number" id="rectLength"><br><br>
            <label for="rectWidth">Width:</label>
            <input type="number" id="rectWidth"><br><br>
        </div>

        <!-- Triangle Input Fields -->
        <div id="triangleInputs">
            <br>
            <label for="triBase">Base:</label>
            <input type="number" id="triBase"><br><br>
            <label for="triHeight">Height:</label>
            <input type="number" id="triHeight"><br><br>
        </div>

        <!-- Circle Input Fields -->
        <div id="circleInputs">
            <br>
```

```

<label for="circleRadius">Radius:</label>
<input type="number" id="circleRadius"><br><br>
</div>
</div>

<button onclick="calculateArea()">Calculate Area</button>

<p id="result"></p>

<script>
    function calculateArea() {
        var shapeSelect = document.getElementById("shape");
        var selectedShape = shapeSelect.value;

        var resultElement = document.getElementById("result");

        if (selectedShape === "rectangle") {
            var length = parseFloat(document.getElementById("rectLength").value);
            var width = parseFloat(document.getElementById("rectWidth").value);

            var area = length * width;
            resultElement.textContent = "Area of Rectangle: " + area;
        } else if (selectedShape === "triangle") {
            var base = parseFloat(document.getElementById("triBase").value);
            var height = parseFloat(document.getElementById("triHeight").value);

            var area = 0.5 * base * height;
            resultElement.textContent = "Area of Triangle: " + area;
        } else if (selectedShape === "circle") {
            var radius = parseFloat(document.getElementById("circleRadius").value);

            var area = Math.PI * Math.pow(radius, 2);
            resultElement.textContent = "Area of Circle: " + area.toFixed(2);
        } else {
            resultElement.textContent = "Please select a valid shape.";
        }
    }

    // Displaying input feeds upon selection
    var shapeSelect = document.getElementById("shape");
    shapeSelect.addEventListener("change", function() {
        var selectedShape = shapeSelect.value;
        var inputFields = document.getElementById("inputFields");

        var rectangleInputs = document.getElementById("rectangleInputs");
        var triangleInputs = document.getElementById("triangleInputs");
        var circleInputs = document.getElementById("circleInputs");

        rectangleInputs.style.display = "none";
        triangleInputs.style.display = "none";
        circleInputs.style.display = "none";
    });
}

```

```
if (selectedShape === "rectangle") {  
    rectangleInputs.style.display = "block";  
} else if (selectedShape === "triangle") {  
    triangleInputs.style.display = "block";  
} else if (selectedShape === "circle") {  
    circleInputs.style.display = "block";  
}  
});  
</script>  
</body>  
</html>
```

Output:

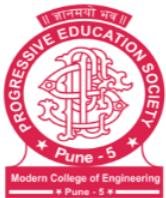
Geometric Shape Area Calculator

Select a shape:

Length:

Width:

Area of Rectangle: 24



Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 4

Date of Implementation: 10. 10. 23

Q1. Write a simple Angular Js program which takes Name of user as input in the textbox and say Hello to him/her.

Code:

```
<!DOCTYPE html>
<html ng-app="myApp">

<head>
  <title>Say Hello</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></script>
</head>

<body>
  <div ng-controller="HelloController">
    <input type="text" ng-model="userName" placeholder="Enter your name">
    <p>Hello, {{ userName }}!</p>
  </div>

  <script>
    var app = angular.module('myApp', []);

    app.controller('HelloController', function($scope) {
      $scope.userName = ""; // Initialize userName

      // No need for a separate function, ng-model updates in real-time
    });
  </script>
</body>

</html>
```

Output:





Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 4

Date of Implementation: 10. 10. 23

Q2. Build a navigation menu that highlights the selected entry. Use only Angular's directives.

Code:

```
<!DOCTYPE html>
<html ng-app="myApp">

<head>
  <title>AngularJS Navigation Menu</title>
  <style>
    .selected {
      background-color: #ff0000;
      color: #fff;
    }
  </style>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></script>
</head>

<body>
  <div ng-controller="MenuController">
    <ul>
      <li ng-repeat="item in menuItems" ng-click="selectItem(item)" ng-class="{ 'selected': selectedItem === item }">{ { item } }</li>
    </ul>
  </div>

  <script>
    var app = angular.module('myApp', []);

    app.controller('MenuController', function($scope) {
      $scope.menuItems = ['Home', 'About', 'Services', 'Contact'];
      $scope.selectedItem = $scope.menuItems[0]; // Initialize the selected item

      $scope.selectItem = function(item) {
        $scope.selectedItem = item;
      };
    });
  </script>
</body>

</html>
```

Output:



- Home
- About**
- Services
- Contact



Progressive Education Society's
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MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 4

Date of Implementation: 10. 10. 23

Q3. Design and Implement Login Application OR Notepad Application using angular JS, HTML, CSS.

Login Application

Code:

login.html

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="loginstyles.css">
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.7.8/angular.min.js"></script>
<script src="loginapp.js"></script>
</head>
<body ng-app="loginApp" ng-controller="LoginController">
<div class="login-container">
<h1>Login</h1>
<form name="loginForm" ng-submit="login()">
<div class="form-group">
<input type="text" ng-model="username" placeholder="Username" required>
</div>
<div class="form-group">
<input type="password" ng-model="password" placeholder="Password" required>
</div>
<button type="submit">Login</button>
</form>
<div ng-show="loginError" class="error-message">
    Invalid username or password.
</div>
</div>
</body>
</html>
```

loginapp.js

```
var app = angular.module('loginApp', []);
app.controller('LoginController', function ($scope) {
  $scope.username = "";
  $scope.password = "";
  $scope.loginError = false;
  $scope.login = function () {
    if ($scope.username === 'user' && $scope.password === 'password') {
      console.log('Login successful');
      alert('Login successful');
    } else {
      $scope.loginError = true;
    }
  };
});
```

loginstyles.css

```
body {
  background-color: #f4f4f4;
  text-align: center;
}
```

```
.login-container {
  background-color: #fff;
  padding: 20px;
  width: 300px;
  margin: 0 auto;
  margin-top: 50px;
  border: 1px solid #ccc;
  border-radius: 5px;
}
```

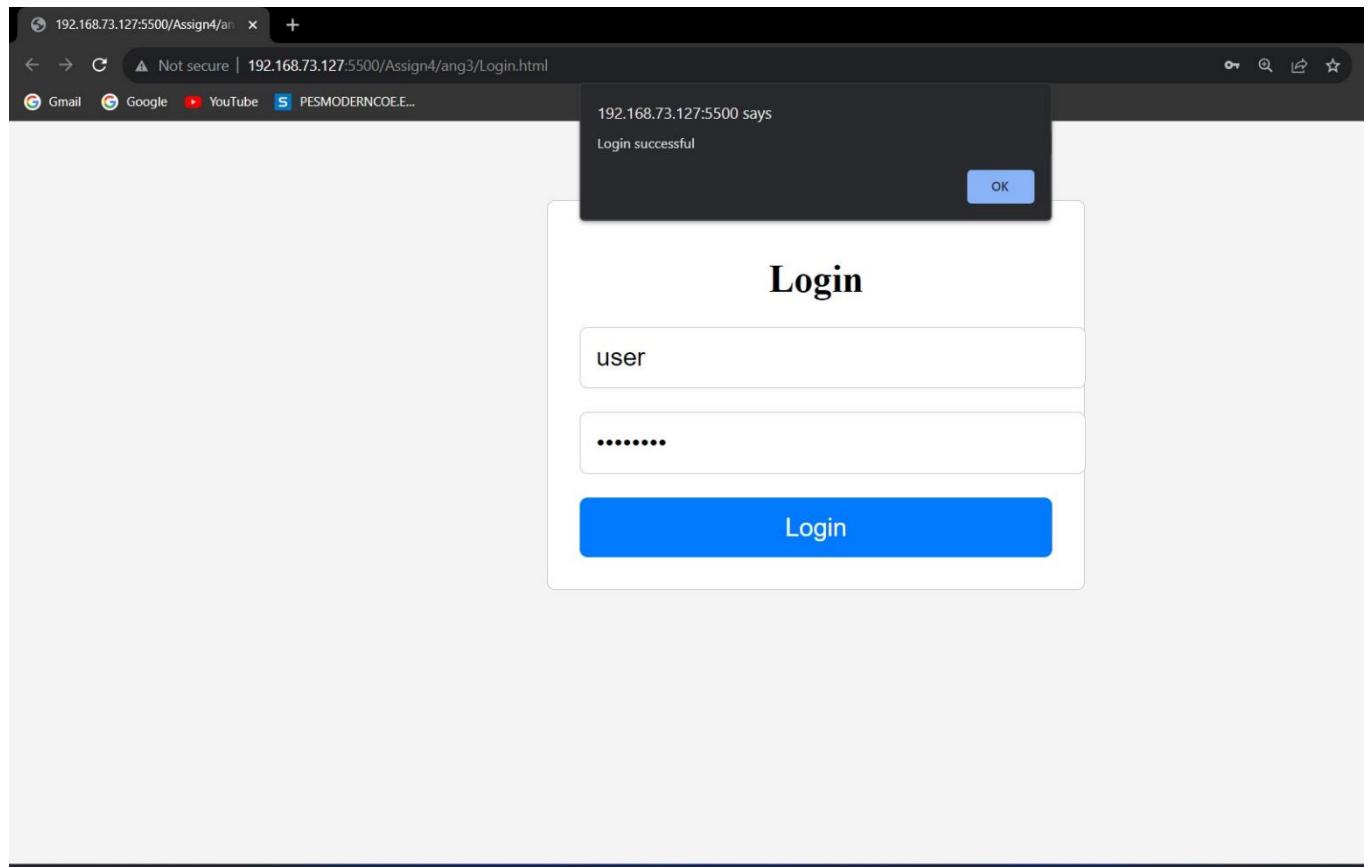
```
.login-container h1 {
  font-size: 24px;
}
```

```
.form-group {
  margin-bottom: 15px;
}
```

```
input[type="text"],
input[type="password"] {
  width: 100%;
  padding: 10px;
  border: 1px solid #ccc;
  border-radius: 5px;
  font-size: 16px;
}
```

```
button {  
    width: 100%;  
    padding: 10px;  
    background-color: #007bff;  
    color: #fff;  
    border: none;  
    border-radius: 5px;  
    font-size: 16px;  
}  
  
.error-message {  
    color: red;  
    margin-top: 10px;  
}
```

Output:



Notepad application

Code:

notepad.html

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="notepadstyles.css">
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.7.8/angular.min.js"></script>
  <script src="notepadapp.js"></script>
</head>
<body ng-app="notepadApp" ng-controller="NotepadController">
  <div class="notepad-container">
    <h1>Notepad</h1>
    <textarea ng-model="noteText" class="note-editor" placeholder="Start typing your notes here..."></textarea>
    <div class="controls">
      <button ng-click="clearNote()">Clear</button>
      <button ng-click="saveNote()">Save</button>
    </div>
    <div class="saved-notes">
      <h2>Saved Notes</h2>
      <ul>
        <li ng-repeat="note in savedNotes">{{ note }}</li>
      </ul>
    </div>
  </div>
</body>
</html>
```

notepadapp.js

```
var app = angular.module('notepadApp', []);

app.controller('NotepadController', function ($scope) {
  $scope.noteText = "";
  $scope.savedNotes = [];

  $scope.saveNote = function () {
    if ($scope.noteText) {
      $scope.savedNotes.push($scope.noteText);

      var blob = new Blob([$scope.noteText], { type: 'text/plain' });
      var url = URL.createObjectURL(blob);
      var a = document.createElement('a');
      a.href = url;
      a.download = 'note.txt';
      a.textContent = 'Download Note';
      a.style.display = 'block';
      a.style.marginTop = '10px';
    }
  };
});
```

```
document.querySelector('.saved-notes').appendChild(a);

    $scope.noteText = ""; // Clear the text area
}
};

$scope.clearNote = function () {
    $scope.noteText = "";
};
});

});
```

notepadstyles.css

```
body {
    background-color: #f4f4f4;
    text-align: center;
}
```

```
.notepad-container {
    background-color: #fff;
    padding: 20px;
    width: 500px;
    margin: 0 auto;
    margin-top: 50px;
    border: 1px solid #ccc;
    border-radius: 5px;
}
```

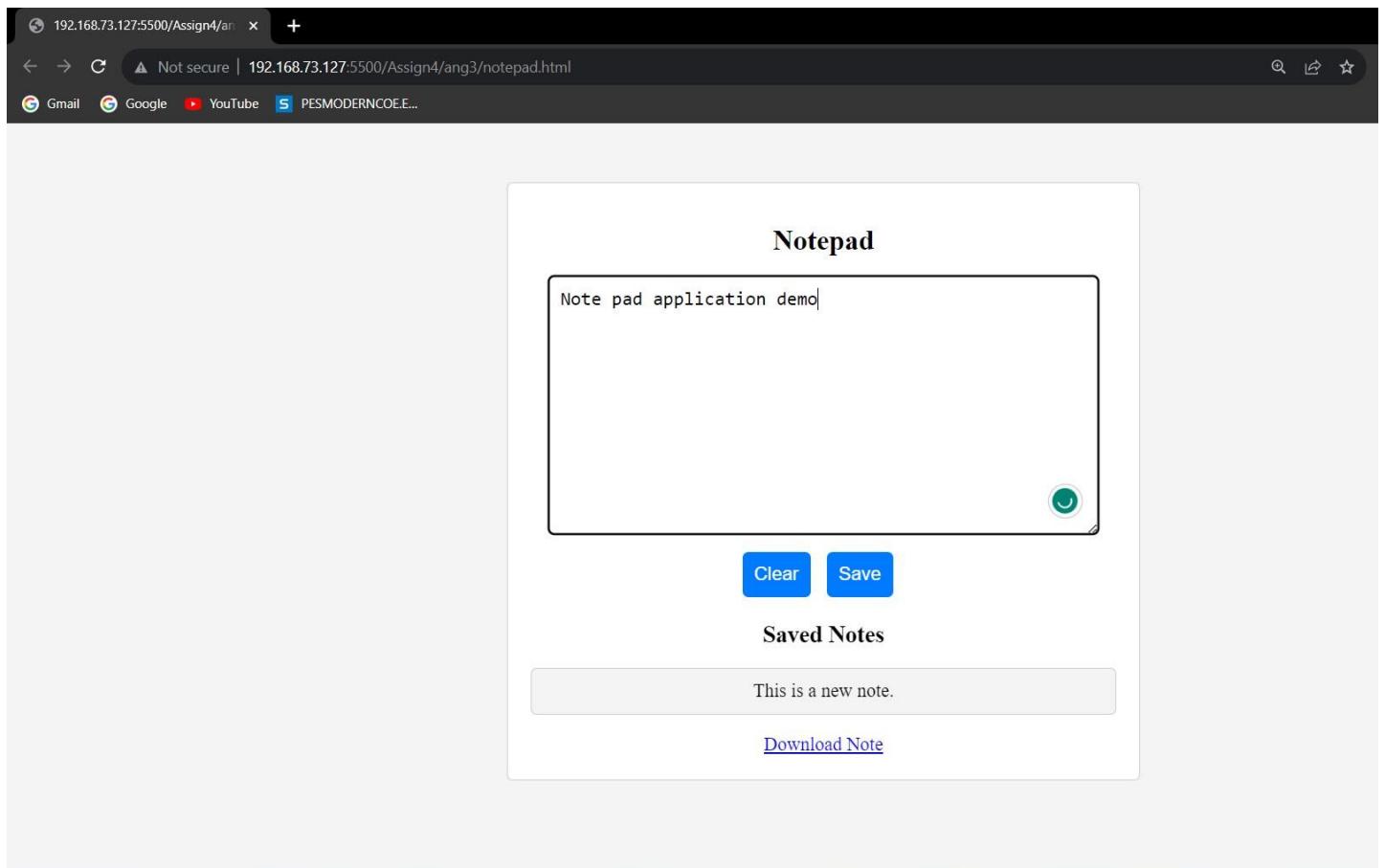
```
.notepad-container h1 {
    font-size: 24px;
}
```

```
.note-editor {
    width: 90%;
    height: 200px;
    padding: 10px;
    border: 1px solid #ccc;
    border-radius: 5px;
    font-size: 16px;
    margin-bottom: 10px;
}
```

```
.controls button {
    padding: 10px;
    background-color: #007bff;
    color: #fff;
    border: none;
    border-radius: 5px;
    font-size: 16px;
    margin-right: 10px;
}
```

```
.saved-notes h2 {  
    font-size: 20px;  
    margin-top: 20px;  
}  
  
.saved-notes ul {  
    list-style-type: none;  
    padding: 0;  
}  
  
.saved-notes li {  
    font-size: 16px;  
    margin-bottom: 10px;  
    border: 1px solid #ccc;  
    border-radius: 5px;  
    padding: 10px;  
    background-color: #f4f4f4;  
}
```

Output:





Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 4

Date of Implementation: 10. 10. 23

Q4. Design simple AngularJS program which takes two numbers as input from user in two textfield and display addition of these numbers in another textfield. Use AngularJS expression for addition.

Code:

```
<!DOCTYPE html>
<html ng-app="myApp">

<head>
  <title>AngularJS Addition Program</title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></script>
</head>

<body>
  <div ng-controller="AdditionController">
    <label for="num1">Enter the first number:</label>
    <input type="number" id="num1" ng-model="num1">

    <br>
    <label for="num2">Enter the second number:</label>
    <input type="number" id="num2" ng-model="num2">

    <br>
    <label>Result:</label>
    <input type="text" id="result" value="{{ num1 + num2 }}>
  </div>

  <script>
    var app = angular.module('myApp', []);

    app.controller('AdditionController', function($scope) {
      $scope.num1 = 0; // Initialize the first number
      $scope.num2 = 0; // Initialize the second number
    });
  </script>
</body>

</html>
```

Output:

A screenshot of a web browser window titled "AngularJS Addition Program". The address bar shows the URL "192.168.73.127:5500/Assign4/ang4/add.html". Below the address bar, there are links for Gmail, Google, YouTube, and PESMODERNCOE.E... The main content area contains three input fields and one output field. The first input field is labeled "Enter the first number:" and contains the value "24". The second input field is labeled "Enter the second number:" and contains the value "65". The third input field is labeled "Result:" and contains the value "89".

Enter the first number:

Enter the second number:

Result:



Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 4

Date of Implementation: 10. 10. 23

Q5. Design and Implement Timer Application using angular JS, HTML, CSS.

Code:

time.html

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="styles.css">
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.7.8/angular.min.js"></script>
  <script src="app.js"></script>
</head>
<body ng-app="timerApp" ng-controller="TimerController">
  <div class="container">
    <h1>Timer App</h1>
    <div class="timer">
      <h2>{{ displayTime }}</h2>
      <div class="controls">
        <button ng-click="startTimer()" ng-disabled="isRunning">Start</button>
        <button ng-click="stopTimer()" ng-disabled="!isRunning">Stop</button>
        <button ng-click="resetTimer()">Reset</button>
      </div>
    </div>
  </div>
</body>
</html>
```

app.js

```
var app = angular.module('timerApp', []);

app.controller('TimerController', function ($scope, $interval) {
  $scope.displayTime = "00:00:00";
  $scope.isRunning = false;
  var timer;

  $scope.startTimer = function () {
    if (!$scope.isRunning) {
      $scope.isRunning = true;
      var startTime = Date.now() - ($scope.time || 0);
      timer = $interval(function () {
```

```

        var currentTime = Date.now();
        $scope.time = currentTime - startTime;
        $scope.displayTime = formatTime($scope.time);
    }, 1000);
}
};

$scope.stopTimer = function () {
    if ($scope.isRunning) {
        $scope.isRunning = false;
        $interval.cancel(timer);
    }
};

$scope.resetTimer = function () {
    $scope.time = 0;
    $scope.displayTime = "00:00:00";
    $scope.isRunning = false;
    $interval.cancel(timer);
};

function formatTime(milliseconds) {
    var totalSeconds = Math.floor(milliseconds / 1000);
    var hours = Math.floor(totalSeconds / 3600);
    var minutes = Math.floor((totalSeconds % 3600) / 60);
    var seconds = totalSeconds % 60;

    return (
        (hours < 10 ? "0" : "") + hours + ":" +
        (minutes < 10 ? "0" : "") + minutes + ":" +
        (seconds < 10 ? "0" : "") + seconds
    );
}
});
);

```

styles.css

```

body {
    background-color: #e7e4e4;
    text-align: center;
}

.container {
    margin-top: 50px;
}

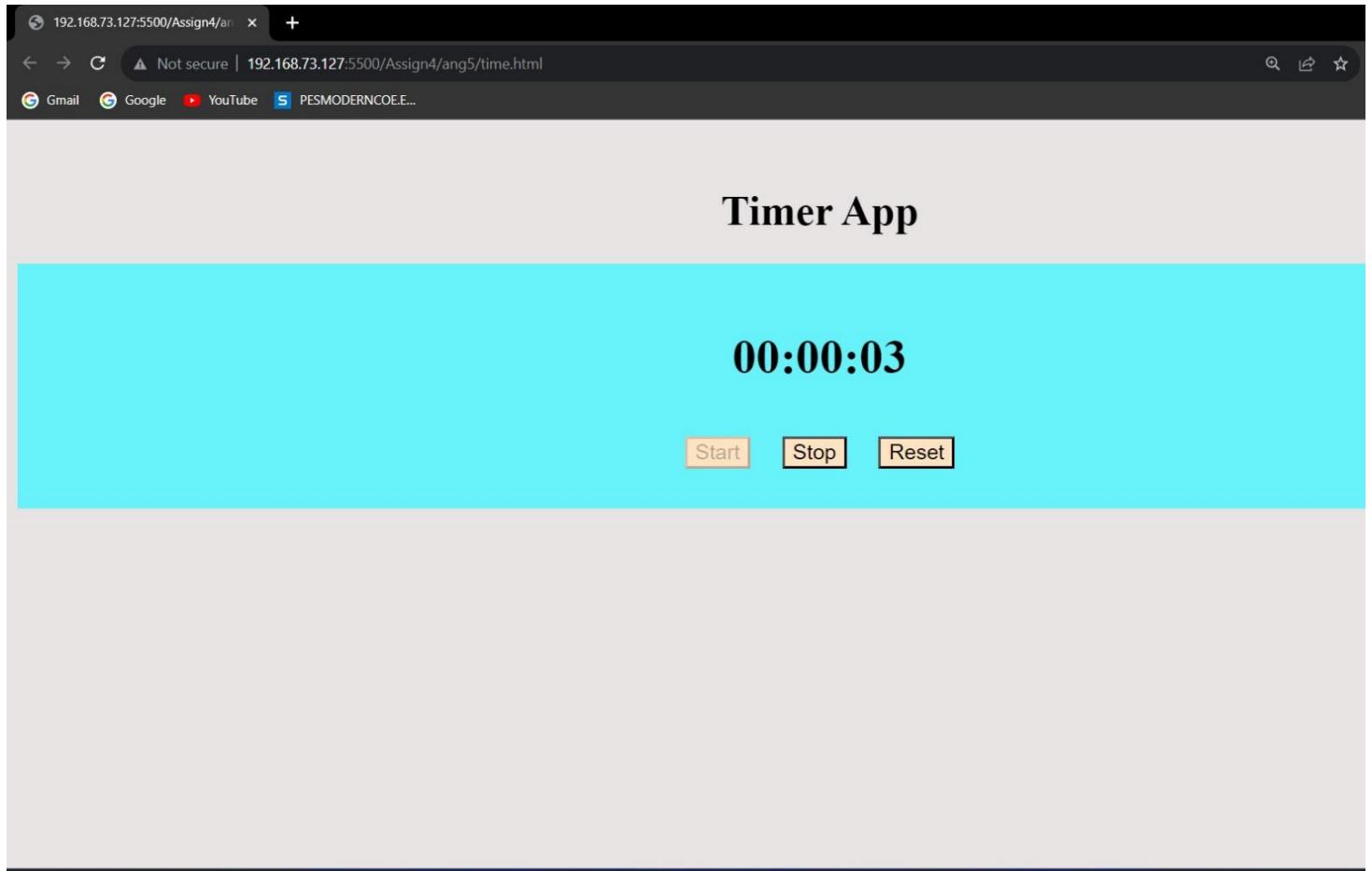
.timer {
    background-color: #68f2fa;
    padding: 20px;
}

.timer h2 {

```

```
    font-size: 36px;  
}  
  
.controls button {  
    margin: 10px;  
    font-size: 16px;  
    background-color: bisque;  
}
```

Output:





Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 5

Date of Implementation: 31. 10. 23

Q1. Create a PHP code, which will retrieve the data captured by the HTML form, display the name of the form and also display the message Data Entered Successfully on the HTML form page, after performing the following validations

- a. The book name form field is not left blank.
- b. The author name form field is not left blank.
- c. The publisher name form field is not left blank.
- d. The synopsis form field is not left blank

Code:

q1.html <!DOCTYPE html>

```
<html>
  <body>
    <form action="Q1.php" method="post">
      <h1>Book Details Form</h1>
      Book name:<input type="text" name="book_name" ><br><br>
      Author name:<input type="text" name="author_name" ><br><br>
      Publisher name:<input type="text" name="publisher_name" ><br><br>
      Synopsis<br>
      <textarea name="synopsis" placeholder="Start typing..." ></textarea>
      <br><br><input type="submit" value="Submit" >
    </form>
  </body>
</html>
```

q1.php

```
<?php
echo "Form Name: Book Details Form";
echo "<br><br>";
$book_name = $_POST['book_name'];
$author_name = $_POST['author_name'];
$publisher_name = $_POST['publisher_name'];
$synopsis = $_POST['synopsis'];
if (empty($book_name) || empty($author_name) || empty($publisher_name) || empty($synopsis)) {
  echo "Error: All fields must be filled in.";
  exit();
}
echo "----Data entered successfully!----";
echo "<br>";

echo "Book Name: $book_name";
echo "<br>";
echo "Author Name: $author_name";
```

```
echo "<br>";  
echo "Publisher Name: $publisher_name";  
echo "<br>";  
echo "Synopsis: $synopsis";  
?>
```

Output:



Book Details Form

Book name:

Author name:

Publisher name:

Synopsis



Form Name: Book Details Form

----Data entered successfully!----

Book Name: The man eaters of Kumaon

Author Name: Jim Corbett

Publisher Name: Oxford

Synopsis: Book about Jim Corbett's experiences



Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 5

Date of Implementation: 31. 10. 23

Q2. Use Cookies to retain some information for 30 minutes, dependent on logged-in users.

Code:

q2cookie.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Login Page</title>
</head>
<body>
    <h2>Login</h2>
    <form action="q2cookie.php" method="post">
        <label for="username">Username:</label>
        <input type="text" name="username" required><br><br>
        <label for="password">Password:</label>
        <input type="password" name="password" required><br><br>
        <input type="submit" value="Login">
    </form>
</body>
</html>
```

q2cookie.php

```
<?php
session_start();
function setLoggedIn($username) {
    $_SESSION['username'] = $username;

    setcookie('loggedInUser', $username, time() + 1800, '/');

}

if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $username = $_POST['username']; // Get username from the login form
    $password = $_POST['password']; // Get password from the login form

    if ($username === 'user' && $password === 'user') {
        setLoggedIn($username);
        echo "Login successful. Welcome, " . $username . "!";
    } else {
        echo "Invalid username or password. Please try again.";
    }
}

?>
```

Output:





Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 5

Date of Implementation: 31. 10. 23

Q3. Create HTML page that contain textbox, submit / reset button. Write PHP program to display this information and store into text file.

Code:

q3text.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Form Submission</title>
</head>
<body>
    <h2>Information for text file</h2>
    <form action="q3text.php" method="post">
        <label for="textInput">Enter Text:</label><br>
        <textarea name="textInput" id="textInput" required></textarea><br><br>
        <input type="submit" value="Submit">
        <input type="reset" value="Reset">
    </form>
</body>
</html>
```

q3text.php

```
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $textInput = $_POST['textInput'];

    echo "You entered: " . $textInput;

    $file = 'stored_text.txt';

    if (file_put_contents($file, $textInput . "\n", FILE_APPEND) !== false) {
        echo "<br>Data stored successfully.";
    } else {
        echo "<br>Error storing data.";
    }
}
?>
```

Output:



You entered: This is a test file
Data stored successfully.



Enter Text:
This is a test file



Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More

Assignment No: 5

Date of Implementation: 31. 10. 23

Q4. Define Class called Computer. Define Subclasses of Computer called Desk Top and Laptop. Accept details of 3 categories. Show accepted information by overriding display method. (Define at least three attributes in each class. Assume suitable data)

Code:

q4class.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Computer Details</title>
</head>
<body>
    <h2>Enter Computer Details</h2>
    <form action="q4class.php" method="post">
        <label for="brand">Brand:</label>
        <input type="text" name="brand" required><br><br>

        <label for="model">Model:</label>
        <input type="text" name="model" required><br><br>

        <label for="processor">Processor:</label>
        <input type="text" name="processor" required><br><br>

        <label for="type">Type (Desktop or Laptop):</label>
        <select name="type" required>
            <option value="Desktop">Desktop</option>
            <option value="Laptop">Laptop</option>
        </select><br><br>

        <label for="additional1">Additional Info 1:</label>
        <input type="text" name="additional1" required><br><br>

        <label for="additional2">Additional Info 2:</label>
        <input type="text" name="additional2" required><br><br>

        <label for="additional3">Additional Info 3:</label>
        <input type="text" name="additional3" required><br><br>

        <input type="submit" value="Submit">
        <input type="reset" value="Reset">
    </form>
</body></html>
```

q4class.php

```
<?php  
class Computer {  
    protected $brand;  
    protected $model;  
    protected $processor;  
  
    public function __construct($brand, $model, $processor) {  
        $this->brand = $brand;  
        $this->model = $model;  
        $this->processor = $processor;  
    }  
  
    public function display() {  
        echo "<h3>Computer Details</h3>";  
        echo "Brand: " . $this->brand . "<br>";  
        echo "Model: " . $this->model . "<br>";  
        echo "Processor: " . $this->processor . "<br>";  
    }  
}  
  
class Desktop extends Computer {  
    protected $keyboard;  
    protected $monitor;  
    protected $mouse;  
  
    public function __construct($brand, $model, $processor, $keyboard, $monitor, $mouse) {  
        parent::__construct($brand, $model, $processor);  
        $this->keyboard = $keyboard;  
        $this->monitor = $monitor;  
        $this->mouse = $mouse;  
    }  
  
    public function display() {  
        parent::display();  
        echo "<h4>Desktop Details</h4>";  
        echo "Additional info 1: " . $this->keyboard . "<br>";  
        echo "Additional info 2: " . $this->monitor . "<br>";  
        echo "Additional info 3: " . $this->mouse . "<br>";  
    }  
}  
  
class Laptop extends Computer {  
    protected $displaySize;  
    protected $batteryLife;  
    protected $weight;  
  
    public function __construct($brand, $model, $processor, $displaySize, $batteryLife, $weight) {  
        parent::__construct($brand, $model, $processor);  
        $this->displaySize = $displaySize;  
        $this->batteryLife = $batteryLife;  
        $this->weight = $weight;
```

```
}

public function display() {
    parent::display();
    echo "<h4>Laptop Details</h4>";
    echo "Additional info 1: " . $this->displaySize . "<br>";
    echo "Additional info 2: " . $this->batteryLife . "<br>";
    echo "Additional info 3: " . $this->weight . "<br>";
}
}

if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $brand = $_POST['brand'];
    $model = $_POST['model'];
    $processor = $_POST['processor'];
    $type = $_POST['type'];
    $additional1 = $_POST['additional1'];
    $additional2 = $_POST['additional2'];
    $additional3 = $_POST['additional3'];

    if ($type === 'Desktop') {
        $desktop = new Desktop($brand, $model, $processor, $additional1, $additional2, $additional3);
        $desktop->display();
    } elseif ($type === 'Laptop') {
        $laptop = new Laptop($brand, $model, $processor, $additional1, $additional2, $additional3);
        $laptop->display();
    }
}
?>
```

Output:

The screenshot shows a web browser window titled "Computer Details". The URL in the address bar is "localhost/q4class.html". The page content is a form titled "Enter Computer Details" with the following fields:

- Brand:
- Model:
- Processor:
- Type (Desktop or Laptop):
- Additional Info 1:
- Additional Info 2:
- Additional Info 3:

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

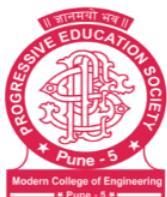
The screenshot shows a web browser window titled "localhost/q4class.php". The URL in the address bar is "localhost/q4class.php". The page content displays the entered computer details:

Computer Details

Brand: lenovo
Model: S145
Processor: i5

Laptop Details

Additional info 1: 8 gb ram
Additional info 2: 1TB HD
Additional info 3: SSD



Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24
(410906) Web Technologies Lab

Class: SY-MCA

Shift / Div: A

Batch: S2

Roll Number: 52043

Name: Vanessa Reetu Prashant More **Assignment No:** 6 **Date of Implementation:** 14. 11. 23

Q1. Design a Registration form Default.aspx page with fields Username, choose password, confirm password, age, email id, city and a submit button.

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="WebApplication1.Default" %>

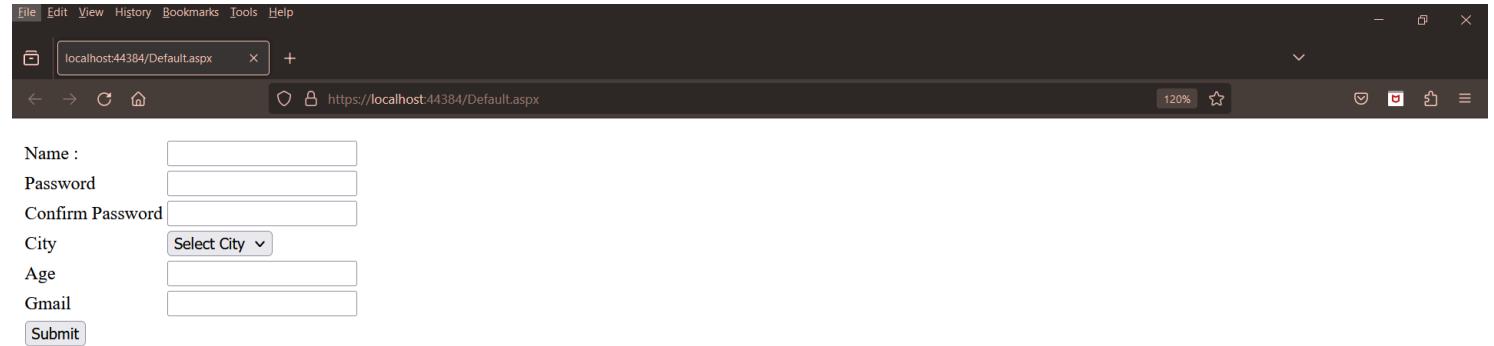
<!DOCTYPE html>

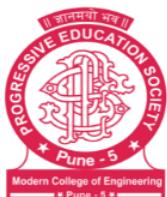
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <p>
            <table class="auto-style1">
                <tr>
                    <td>Name :</td>
                    <td>
                        <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>Password</td>
                    <td>
                        <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>Confirm Password</td>
                    <td>
                        <asp:TextBox ID="TextBox3" runat="server" TextMode="Password"></asp:TextBox>
                    </td>
                </tr>
                <tr>
                    <td>City</td>
                    <td>
                        <asp:DropDownList ID="DropDownList1" runat="server">
                            <asp:ListItem Text="Select City" Value="select" Selected="True"></asp:ListItem>
                            <asp:ListItem Text="Bangalore" Value="Bangalore"></asp:ListItem>
                            <asp:ListItem Text="Pune" Value="Pune"></asp:ListItem>
                            <asp:ListItem Text="Mumbai" Value="Mumbai"></asp:ListItem>
                        </asp:DropDownList>
                    </td>
                </tr>
            </table>
        </p>
    </form>
</body>
</html>
```

```

        </td>
    </tr>
    <tr>
        <td>Age</td>
        <td>
            <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
        </td>
    </tr>
    <tr>
        <td>Gmail</td>
        <td>
            <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
        </td>
    </tr>
    <tr>
        <td>
            <asp:Button ID="Button1" runat="server" Text="Submit" OnClick="Button1_Click" />
        </td>
    </tr>
</table>
</p>
</form>
</body>
</html>

```





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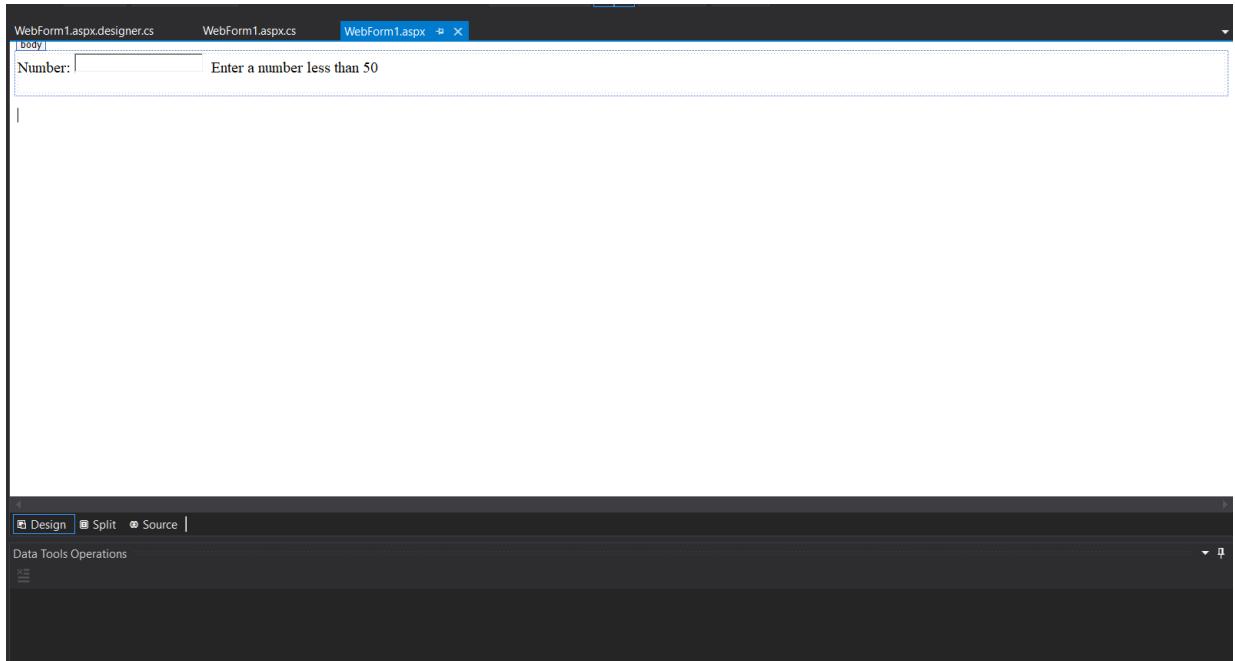
Name: Vanessa Reetu Prashant More Assignment No: 6 Date of Implementation: 14. 11. 23

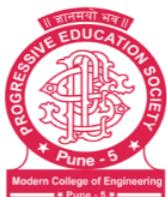
Q2. Write a Client side script to use CustomValidator control (Use JavaScript)

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="Validation.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
    <script type="text/javascript">
        function validateNumber(source, args) {
            var intBonus = args.Value;
            if (intBonus > 50) {
                args.IsValid = false;
            } else {
                args.IsValid = true;
            }
        }
    </script>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            Number:
            <asp:TextBox ID="TextBox1" Runat="server"></asp:TextBox>
            &nbsp;
            <asp:CustomValidator ID="CustomValidator1"
                runat="server"
                ControlToValidate="TextBox1"
                ErrorMessage="Enter a number less than 50"
                ClientValidationFunction="validateNumber"
                ValidateEmptyText="True" Display="Dynamic" ></asp:CustomValidator>
            &nbsp;<br />
            <br />
        </div>
    </form>
</body>
</html>
```





Progressive Education Society's

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Name: Vanessa Reetu Prashant More Assignment No: 6 Date of Implementation: 14. 11. 23

Q3. Create ASP.NET application to store and retrieve values in database (Use Employee database having fields E-Id, EName, Contact No., Department, Salary)

Database Query:

```
CREATE TABLE Employees (
    EId INT PRIMARY KEY IDENTITY(1,1),
    EName NVARCHAR(100),
    ContactNo NVARCHAR(20),
    Department NVARCHAR(50),
    Salary DECIMAL(18, 2)
);
```

Webconfig:

```
<connectionStrings>
    <add name="EmployeeDBConnectionString" connectionString="Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=\\D:\\PESMCOE\\Web Technology\\Assign
6\\Database_site\\App_Data\\Database1.mdf\\;Integrated Security=True\\"
providerName="System.Data.SqlClient" />
</connectionStrings>
```

Default.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Default.aspx.cs"
Inherits="EmployeeManagement.Default" %>
```

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Employee Management</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Employee Information</h2>
            <div>
                Employee Name: <asp:TextBox ID="txtEName" runat="server"></asp:TextBox><br />
                Contact No.: <asp:TextBox ID="txtContactNo" runat="server"></asp:TextBox><br />
                Department: <asp:TextBox ID="txtDepartment" runat="server"></asp:TextBox><br />
                Salary: <asp:TextBox ID="txtSalary" runat="server"></asp:TextBox><br />
                <asp:Button ID="btnSubmit" runat="server" Text="Submit" OnClick="btnSubmit_Click" />
            </div>
        </div>
    </form>
</body>
</html>
```

Default.aspx.cs

```
using System;
using System.Data.SqlClient;
using System.Configuration;

namespace EmployeeManagement
{
    public partial class Default : System.Web.UI.Page
    {
        protected void btnSubmit_Click(object sender, EventArgs e)
        {
            string connectionString =
ConfigurationManager.ConnectionStrings["EmployeeDBConnectionString"].ConnectionString;

            using (SqlConnection connection = new SqlConnection(connectionString))
            {
                connection.Open();

                string query = "INSERT INTO Employees (EName, ContactNo, Department, Salary) VALUES
(@EName, @ContactNo, @Department, @Salary)";

                using (SqlCommand command = new SqlCommand(query, connection))
                {
                    command.Parameters.AddWithValue("@EName", txtEName.Text);
                    command.Parameters.AddWithValue("@ContactNo", txtContactNo.Text);
                    command.Parameters.AddWithValue("@Department", txtDepartment.Text);
                    command.Parameters.AddWithValue("@Salary", Convert.ToDecimal(txtSalary.Text));

                    command.ExecuteNonQuery();
                }
            }

            // Redirect to EmployeeManagement page after submitting
            Response.Redirect("EmployeeManagement.aspx");
        }
    }
}
```

EmployeeManagement.aspx.cs

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="EmployeeManagement.aspx.cs"
Inherits="EmployeeManagement.EmployeeManagement" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Employee Management</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Employee List</h2>
            <asp:GridView ID="gvEmployees" runat="server" AutoGenerateColumns="true"></asp:GridView>
```

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

EmployeeManagement.aspx.cs:

```
using System;
using System.Configuration;
using System.Data;
using System.Data.SqlClient;

namespace EmployeeManagement
{
    public partial class EmployeeManagement : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            if (!IsPostBack)
            {
                BindGrid();
            }
        }

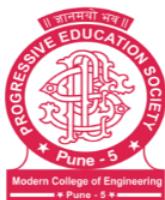
        private void BindGrid()
        {
            string connectionString =
ConfigurationManager.ConnectionStrings["EmployeeDBConnectionString"].ConnectionString;

            using (SqlConnection connection = new SqlConnection(connectionString))
            {
                connection.Open();

                string query = "SELECT * FROM Employees";

                using (SqlDataAdapter adapter = new SqlDataAdapter(query, connection))
                {
                    DataTable dataTable = new DataTable();
                    adapter.Fill(dataTable);

                    gvEmployees.DataSource = dataTable;
                    gvEmployees.DataBind();
                }
            }
        }
    }
}
```



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Name: Vanessa Reetu Prashant More **Assignment No:** 6 **Date of Implementation:** 14. 11. 23

Q4. Create login form in ASP.NET with database connectivity

Database:

```
CREATE TABLE Users (
    Username NVARCHAR(50) PRIMARY KEY,
    Password NVARCHAR(50)
);
```

Web.config:

```
<connectionStrings>
    <add name="UserDBConnectionString" connectionString = " Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=\\D:\\PESMCOE\\Web Technology\\Assign
6\\Database_site\\App_Data\\logincreds.mdf\\" providerName="System.Data.SqlClient" />
</connectionStrings>
```

Login.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Login.aspx.cs"
Inherits="UserAuthentication.Login" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Login</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <h2>Login</h2>
            <div>
                Username: <asp:TextBox ID="txtUsername" runat="server"></asp:TextBox><br />
                Password: <asp:TextBox ID="txtPassword" runat="server" TextMode="Password"></asp:TextBox><br />
            </div>
            <asp:Button ID="btnLogin" runat="server" Text="Login" OnClick="btnLogin_Click" />
        </div>
    </form>
</body>
</html>
```

Login.aspx.cs:

```
using System;
using System.Configuration;
using System.Data.SqlClient;

namespace UserAuthentication
{
    public partial class Login : System.Web.UI.Page
    {
        protected void btnLogin_Click(object sender, EventArgs e)
        {
            string username = txtUsername.Text.Trim();
            string password = txtPassword.Text.Trim();

            string connectionString =
ConfigurationManager.ConnectionStrings["UserDBConnectionString"].ConnectionString;

            using (SqlConnection connection = new SqlConnection(connectionString))
            {
                connection.Open();

                string query = "SELECT COUNT(*) FROM Users WHERE Username = @Username AND Password = @Password";

                using (SqlCommand command = new SqlCommand(query, connection))
                {
                    command.Parameters.AddWithValue("@Username", username);
                    command.Parameters.AddWithValue("@Password", password);

                    int count = (int)command.ExecuteScalar();

                    if (count > 0)
                    {
                        // Successful login
                        Response.Redirect("Welcome.aspx");
                    }
                    else
                    {
                        // Failed login
                        Response.Write("<script>alert('Invalid username or password');</script>");
                    }
                }
            }
        }
    }
}
```



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Name: Vanessa Reetu Prashant More **Assignment No:** 6 **Date of Implementation:** 14. 11. 23

Q5. Create a Web Site in ASP.NET. The Web Site present weather data from the Weather station

Details.cshtml

@model WeatherApp.Data.WeatherData

```
@{  
    string url = "http://openweathermap.org/img/wn/" + Model.weather[0].icon + "@2x.png";  
}  
<div class="container">  
    <div class="row">  
        <div class="col-2"></div>  
        <div class="col-8">  
            <div style="height:2.5vw;"></div>  
            <div class="card shadow text-white" style="background-color: #292a2c !important;font-family:'Times New Roman'">  
                <div class="card-body">  
                    <h4 class="card-title">Weather in @Html.DisplayFor(model => model.name)</h4>  
                    <div style="border-bottom:2px solid #968d7b;width:100%;"></div>  
                    <div class="card-img">  
                        <img src=@url />  
                    </div>  
                    <dl class="row">  
                        <dt class="col-2">  
                            General Info:  
                        </dt>  
                        <dd class="col-10">  
                            @Html.DisplayFor(model => model.weather[0].main)  
                        </dd>  
                        <dt class="col-3" style="margin-right:-3vw;">  
                            Temperature:  
                        </dt>  
                        <dd class="col-9">  
                            @Html.DisplayFor(model => model.main.temp)°C  
                        </dd>  
                        <dt class="col-2">  
                            Highest:  
                        </dt>  
                        <dd class="col-10">  
                            @Html.DisplayFor(model => model.main.temp_max)°C  
                        </dd>  
                        <dt class="col-2">
```

```
    Lowest:  
    </dt>  
    <dd class="col-10">  
        @Html.DisplayFor(model => model.main.temp_min)°C  
    </dd>  
    <dt class="col-3" style="margin-right:-3.vw;">  
        Feels like:  
    </dt>  
    <dd class="col-9" >  
        @Html.DisplayFor(model => model.main.feels_like)°C  
    </dd>  
    <dt class="col-2">  
        Humidity:  
    </dt>  
    <dd class="col-10">  
        @Html.DisplayFor(model => model.main.humidity)  
    </dd>  
    <dt class="col-2">  
        Pressure:  
    </dt>  
    <dd class="col-10">  
        @Html.DisplayFor(model => model.main.pressure) Bar  
    </dd>  
    </dl>  
    <a asp-area="" asp-controller="Weather" asp-action="Search" class="btn btn-primary text-white" style="margin-left:85%;font-family:'Times New Roman'">Cancel</a>  
    </div>  
    </div>  
    </div>  
    <div class="col-2"></div>  
    </div>  
</div>
```

Search.cshtml

```
@model List<WeatherApp.Data.WeatherData>
<script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"></script>
<div class="container-fluid jumbotron mw-100 img-fluid">
    <div class="row center mw-100 w-100">
        <div class="col-5"></div>
        <div class="col-2">
            <h1 style="font-family:'Times New Roman'">Weather ASP.NET</h1>
        </div>
        <div class="col-5"></div>
    </div>
</div>
<div class="shadow text-left text-white" style="background-color:#3f3f3e;">
    <div class="row mw-100 center w-100">
        <div class="col-5"></div>
        <div class="col-2">
            <div style="height:0.5vw;"></div>
            @using (Html.BeginForm("Search", "Weather"))
            {
                <label class="d-block">Search By City Name</label>
                @Html.TextBox("CityName")
                <button class="d-inline-block btn btn-primary text-white p-2" type="submit" value="Search" style="margin-left:0.2vw;font-family:'Times New Roman'">Search</button>
            }
            <div style="height:0.5vw;"></div>
        </div>
        <div class="col-5"></div>
    </div>
</div>
<div style="height:16vw;"></div>
<div class="shadow text-white" style="background-color:#3f3f3e;">
    <div class="row mw-100 center w-100">
        <div class="col-3"></div>
        <div class="col-3">
            <div class="card">
                <div class="card-body">
                    <div class="card-title">
                        </div>
                    </div>
                </div>
            </div>
        </div>
        <div class="col-3 text-dark">
            <div id="piechart">
                @if (Model == null ||
                    Model.Count <= 0)
                {
                    <div class="card">
                        <div class="card-body">
                            <div class="card-title">
                                <h4 style="color:red;text-align:center;">Error! Could not read data</h4>
                            </div>
                        </div>
                }
            </div>
        </div>
    </div>
</div>
```

```

        </div>
    </div>
}
else
{
    <div class="card">
        <div class="card-body">
            <div class="card-title">Population data</div>
            <div class="card-text">
                <script type="text/javascript">
                    // Load google charts
                    google.charts.load('current', { 'packages': ['corechart'] });
                    google.charts.setOnLoadCallback(drawChart);

                    // Draw the chart and set the chart values. TODO needs to grab value from Model[e].city.population
                    function drawChart() {
                        var data = google.visualization.arrayToDataTable([
                            ['Task', 'Population'],
                            ['@Model[0].name', 1000],
                            ['@Model[1].name', 2060],
                            ['@Model[2].name', 4004],
                            ['@Model[3].name', 3060],
                            ['@Model[4].name', 2000]
                        ]);
                        // Optional; add a title and set the width and height of the chart
                        var options = {'width': 800, 'height': 400 };

                        // Display the chart inside the <div> element with id="piechart"
                        var chart = new google.visualization.PieChart(document.getElementById('piechart'));
                        chart.draw(data, options);
                    }
                </script>
            </div>
        </div>
    </div>
    <div class="col-3"></div>
</div>
</div>
<div style="height:16vw;"></div>

```

Layout.cshtml

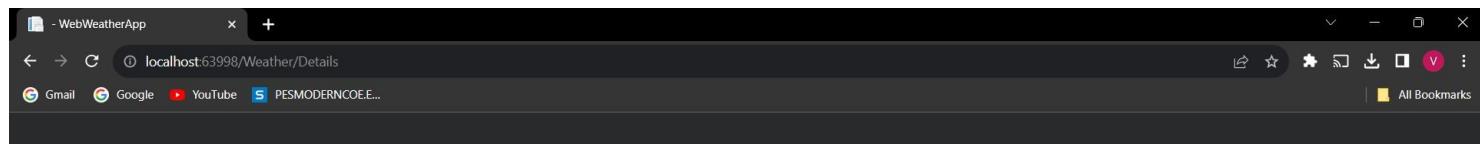
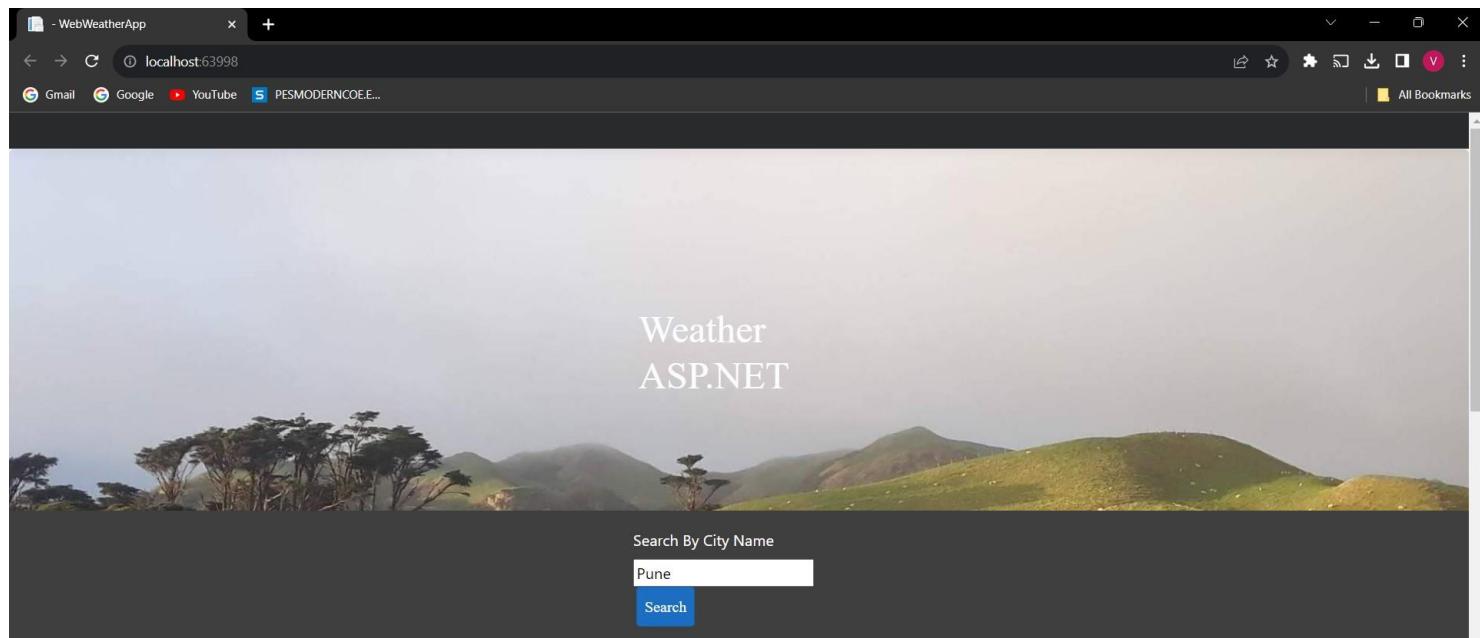
```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>@ ViewData["Title"] - WebWeatherApp</title>
    <link rel="stylesheet" href="~/lib/bootstrap/dist/css/bootstrap.min.css" />
    <link rel="stylesheet" href="~/css/site.css" />

```

```
</head>
<body>
    <header>
        <nav class="navbar navbar-expand-sm navbar-toggleable-sm navbar-inverse bg-white border-bottom box-shadow">
            @*<div class="container">
                <a class="navbar-brand" asp-area="" asp-controller="Weather" asp-action="Search">Search By City</a>
                <button class="navbar-toggler" type="button" data-toggle="collapse" data-target=".navbar-collapse" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
                    <span class="navbar-toggler-icon"></span>
                </button>
            </div>*@
        </nav>
    </header>
    <div class="mw-100">
        <main role="main" class="pb-3">
            @RenderBody()
        </main>
    </div>
    <footer class="border-top footer text-muted">
        <div class="container">
            <div class="row">
                <div class="col-2" style="text-align:left;">
                    <div class="row">
                        <a href="https://github.com/Carpenteri1" class="d-block">
                            
                        </a>
                    @*
                        <a href="" class="d-block">
                            
                        </a>
                    *@
                </div>
            <div class="row">
                </div>
                <div class="row"></div>
            </div>
            <div class="col-8">
                </div>
                <div class="col-2"></div>
            </div>
        </div>
    </footer>
<script src="~/lib/jquery/dist/jquery.min.js"></script>
```

```
<script src="~/lib/bootstrap/dist/js/bootstrap.bundle.min.js"></script>
<script src="~/js/site.js" asp-append-version="true"></script>
@RenderSection("Scripts", required: false)
</body>
</html>
```



General	Clouds
Info:	
Temperature:	24.8°C
Highest:	24.8°C
Lowest:	24.8°C
Feels like:	24.93°C
Humidity:	61
Pressure:	1011 Bar

Cancel

