Indian Institute of Information technology Sonepat

Application Programming
(Practical File)
Semester-II Freshmen Year

Under the guideance of:
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EXPERIMENT-1
Creating HTML web page forms

Procedure:
- first create a HTML structure.
- Now divide the page in different divisions.
- In the top division give information about yourself.
- In the next division create a form using form tag and other input elements.
- Now to make the page attractive use css elements such background color, text color, margin alignment, borders, padding etc.
- Now to make this page temporarly functional use java script form validation.

Code:

```
<!DOCTYPE html>
<html>

<head>
    <title>HTML form</title>
    <link rel="stylesheet" href="style.css">
</head>

<body>
    <form>
        <div class="top">
            <div class="name">Name:Vaibhav Bhaskar</div>
            <div class="name">Branch:IT</div>
            <div class="name">Roll No.:11912060</div>
        </div>
        <div class="container">
            <h2>Register Yourself!</h2>
            <div class="zero">
                First name:<input type="text" id="fname" placeholder="Enter your firstname" name="fname"><br> Last name:<input type="text" id="lname" placeholder="Enter your lastname" name="lname"><br> e-mail Id:
                <input type="email" id="eid" placeholder="Enter your email id" name="emailid"><br> Contact no:<input type="tel" id="telno" placeholder="Enter your telephone number" name="telephone"><br>
            </div>
            <div class="pehla">
                <fieldset>
                    <legend>
                        <h4>What is your Branch ?</h4>
```

```html
                </legend>
                <select id="Branch" placeholder="Branch" name="Branch">
                    <option>Computer science</option>
                    <option>Information Technology</option>
                    <option>ECE</option>
                    <option>Electrical</option>
                    <option>Mechanical</option>
                    <option>Civil</option>
                    <option>Others</option>
                </select><br>
            </fieldset>
        </div>
        <div class="dosra">
            <fieldset>
                <legend>
                    <h4>In which Year are you studying ?</h4>
                </legend>
                <select id="Year" name="Year">
                <option>I</option>
                <option>II</option>
                <option>III</option>
                <option>IV</option>
                </select><br>
            </fieldset>
        </div>
        <div class="teesra">
            <fieldset>
                <legend>
                    <h4>Gender:</h4>
                </legend>
                Male<input type="radio" name="gender"><br>Female<input
type="radio" name="gender"><br>others<input type="radio"
name="gender"><br>
            </fieldset>
        </div>
        <div>
            <button type="submit" id="register">Register</button>
        </div>
    </div>
    </form>
</body>
<script type="text/javascript">
```

```javascript
    document.getElementById("register").addEventListener("click", function(e)
{
      var fieldValue = document.getElementById("fname").value;
      if (fieldValue == null || fieldValue == "") {
         e.preventDefault();
         alert("you must enter a firstname.");
      }
   });
   document.getElementById("register").addEventListener("click", function(e)
{
      var fieldValue = document.getElementById("lname").value;
      if (fieldValue == null || fieldValue == "") {
         e.preventDefault();
         alert("you must enter a lastname.");
      }
   });
   document.getElementById("register").addEventListener("click", function(e)
{
      var fieldValue = document.getElementById("eid").value;
      if (fieldValue == null || fieldValue == "") {
         e.preventDefault();
         alert("you must enter a email id.");
      }
   });
   document.getElementById("register").addEventListener("click", function(e)
{
      var fieldValue = document.getElementById("telno").value;
      if (fieldValue == null || fieldValue == "") {
         e.preventDefault();
         alert("you must enter a contact number.");
      }
   });
</script>
</html>
```

EXPERIMENT-2
Creating Homepage using HTML.

Procedure:

- create a HTMl structure with three rows.
- Each row is a frame created by **frame** tag using **frameset** element.
- In the first row or frame add the image and a small text can be added using the **img** tag.
- Moving to the second row or frame, now create three columns in the similar manner using frameset element.
- Within the second row, in the first colums give a basic information about yourself. In the second column, a text about our institute is added. And finally in the third column a small description about the practical is provided.
- In the final row or frame contact detail: emali id is added.
- Only HTML tags were used in this practical.

Code:

```
<!DOCTYPE html>
<html>

<head>
   <title>Assingment_page</title>
</head>
<frameset rows="25%,*,20%">
   <frame src="frame_a.html"></frame>
   <frame src="frame_b.html"></frame>
   <frame src="frame_c.html"></frame>
</frameset>

</html>
****************************************************
/*frame-a*/
<!DOCTYPE html>
<html>

<head>
   <style>
      img {
         display: block;
         margin-left: auto;
         margin-right: auto;
      }
```

```html
      </style>
    </head>

    <body>
      <marquee>
          This is a HTML home page replicated as our college's home page for the
      Application programming programming practical file. Submitted to Mr.
      Arquam,faculty IIIT Sonepat.
        </marquee>
        <img src="Capture.PNG" alt="IIIT SONEPAT LOGO" style="width:
      50%;">

    </body>

    </html>
```
****
```html
    /*frame-b*/
    <!DOCTYPE html>
    <html>
    <frameset cols="15%,*,25%">
      <frame src="info.html" />
      <frame src="centre.html" />
      <frame src="right.html" />
    </frameset>

    </html>
```
****
```html
    /*frame-c*/
    <!DOCTYPE html>
    <html>

    <head>
      <style type="text/css">
        h1 {
          text-decoration: underline;
          text-shadow: blue;
          text-align: center;
        }

        h3 {
          text-align: center;
        }
      </style>
```

```html
    </head>

    <body>
      <h1>Contact Details:</h1>
      <h3>email:vaib0990@gmail.com</h3>

    </body>

    </html>
    ***********************************************
    <!DOCTYPE html>
    <html>

    <head>
      <style type="text/css">
        body {
          background-color: white;
        }

        h1 {
          text-decoration: underline;
        }
      </style>
    </head>

    <body>
      <h1>Submitted by:</h1>
      <h3>
        <ul>
          <li>VAIBHAV BHASKAR</li><br>
          <li>BRANCH: IT</li><br>
          <li>ROLL NO: 11912060</li>
        </ul>
      </h3>
    </body>

    </html>
    *****************************************************
    <!DOCTYPE html>
    <html>

    <head>
      <style type="text/css">
```

```css
        body {
            background-image: url(download.PNG);
            background-position: center;
            background-repeat: no-repeat;
        }

        h1 {
            text-align: center;
            text-decoration: underline;
        }
    </style>
```

```html
    <body>
        <h1>Welcome to IIIT SONEPAT</h1>
        <h2>Indian Institute of Information Technology, Sonepat (IIIT, Sonepat)
is one of the
        Indian Institutes of Information Technology located at Sonepat,
Haryana.
        The academic session of IIIT Sonepat started from its mentor Institute
National
        Institute of Technology, Kurukshetra from year 2014. IIIT Sonepat is a
joint venture
        of the Ministry of Human Resource Development, Government of
India, the Govt.
        of Haryana, with Industries in Public-Private Partnership model and has
been declared
         as the Institute of national importance.</h2>

        <a href="http://iiitsonepat.ac.in/">Read more-link to the official
iiitsonepat website.</a>
    </body>
</head>

</html>
```
****
```html
<!DOCTYPE html>
<html>

<head>
    <style type="text/css">
        body {
            background-color: white;
        }
```

```
h1 {
    text-decoration: underline;
    text-align: center;
}
</style>
</head>

<body>
    <h1>ABOUT THE PRACTICAL:</h1>
    <h3>This is the assignment given to the students of our class. our goal was
to create a web page using basics of html.This Web page is being created by
using concept of frames.The page is first divided into three rows section,and
further the second section
        is divided into three column sections.
    </h3>
    <h3>the first section consists of the logo of our college and an statement
flashing at the top was created using the marquee tag, further in the second
section the first part displays my details. the second part has an background
image and an welcome
        statement that has been taken from the<a href="http://iiitsonepat.ac.in/">
official iiit sonepat website</a>. and the third section is the part in which you
are reading.<br> Concept of CSS is not used in this web page. only html tags
and different files linked together are being used.<br>          Thank You
    </h3>
</body>

</html>
```

Output:

EXPERIMENT-3
Creating XHTML and CSS and understanding it's use in creating web pages.
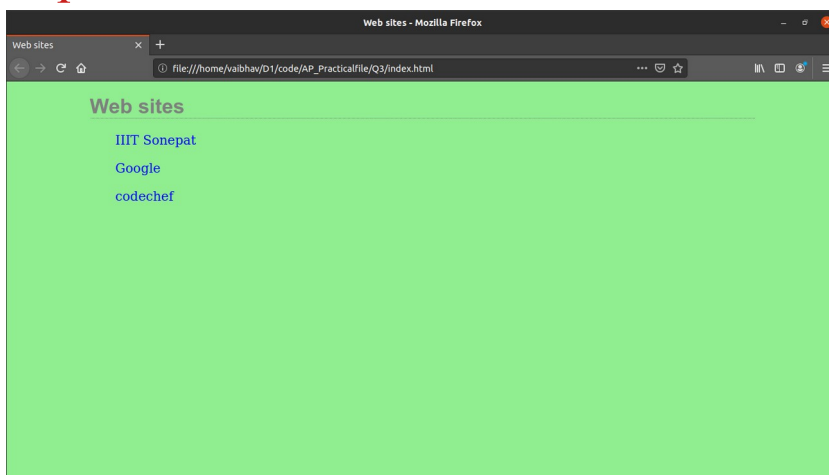
Procedure:
- Create a basic HTML structure with a modification in the doctype.
- Create body tag and write contents.
- Create a list with iiitsonepat, google, codeforces as websites.
- Add appropriate CSS.

Code:

```
<?xml version="1.0"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transition.dtd">
<html>
<head><title>
Web sites
</title>
<style>
body {
margin-left: 10%;
margin-top: 1em;
margin-right: 10%;
background: #ff9;
}
h1 {
font-family: Arial, sans-serif;
color: #600;
border-bottom: thin dotted black;
}
li {
margin-top: 1em;
font-size: 1.25em;
}
ul {
list-style-type: none;
}
a {
text-decoration: none;
}
a:link, a:visited {
color: blue;
}
```

```
a:hover {
color: white;
text-decoration: underline;
background: blue;
}
img {
border: thin solid black;
}
</style>
</head>
<body>
<h1>
Web sites
</h1>
<ul>
<li>
<a href="http://www.iiitsonepat.ac.in/">
IIIT Sonepat
</a>
</li>
<li>
<a href="http://www.google.com.edu/">
Google
</a>
</li>
<li>
<a href="http://codechef.com/">codechef</a>
</li>
</ul>
</body>
</html>
```
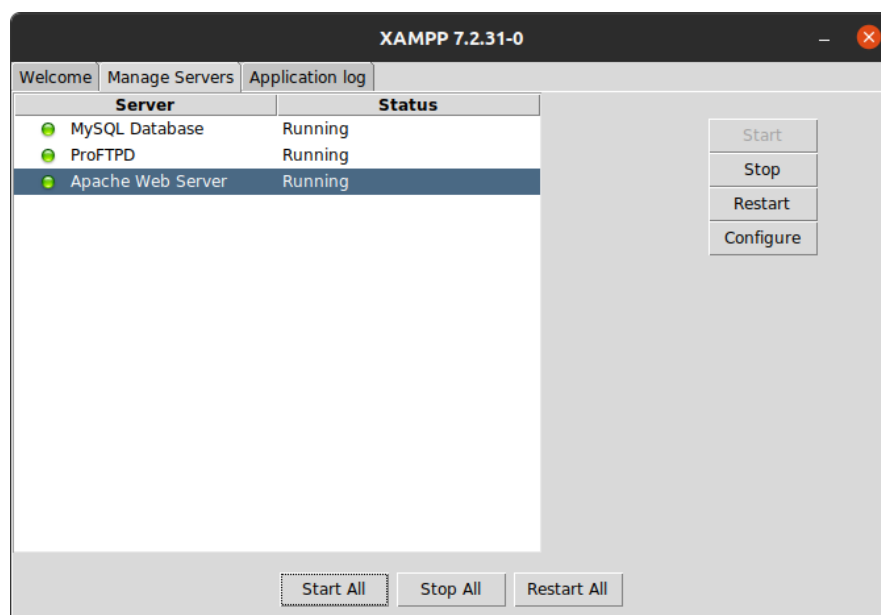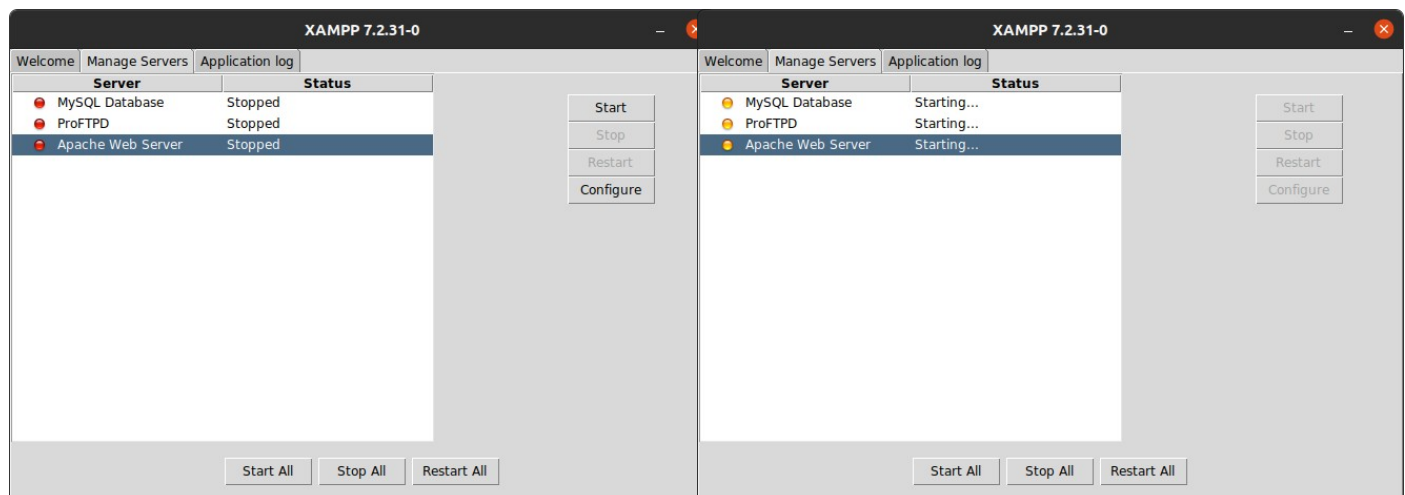
<u>Output:</u>

EXPERIMENT-4
Setting up and configuration of XAMPP server.

Procedure:
- Open XAMPP after installation and click on general tab in the navigation menu.
- Click on the start option to start the XAMPP server. A green light would appear in the top right side of the application, it means XAMPP has been successfully started in your computer.
- Go to services tab in the navigation menu and click on start all at bottom.
- Red light would become green in Apache, MySQL, and ProFTPD, which means all the service shave been started successfully.
- Go to network tab in navigation menu and enable localhost servers.
- You can now mount the volumes from the volumes tab in navigation menu, to see all your files in a file explorer in your pc.

Output:

EXPERIMENT-5
Understanding modification ofWeb.XML

Go through the file and study the Web.XML file.

Web.XML
The web.xml file is derived from the Servlet specification, and contains information used to deploy and configure our web applications.

When configuring Tomcat, this is where we can define servlet mappings for central components. Within Tomcat, this file functions in the same way as described in the Servlet specification.

Tomcat has two web.xml files one in the conf directory and the other in the web-inf. The only divergence in Tomcat's handling of this file is that a user has the option of utilizing TOMCAT-PATH/conf/web.xml to define default values for all contexts. If this method is utilized,Tomcat will use TOMCAT-PATH/conf/web.xml as a base configuration, which can be overwritten by application-specific WEB-INF/web.xml files. That is, web.xml in confdefines parameters for all web applications whereas the web.xml in web-inf is applicable to current web applications only.

web-app
The root element of this XML deployment descriptor is 'web-app'; its elements are shown in the table below. There are no required elements, but you should always have at least a'display-name' element for identification. As of the Servlet specification version 2.4, the elements nested directly under the web-app element may be listed in any order. In cases where more than one of the same element is used and it is unclear which element takes precedence, the servlet container will use them in the order they are listed in the web.xml file.

The table below contains the elements and what they represent.

Element	Meaning
display-name	A name for the web-app in the GUI admin tools
description	A description for the web application
context-params	Context parameters whose values do not change very often
servlet	Servlet definitions for the servlets that make up out web application
session-config	Defines the default session timeout for our application

EXPERIMENT-6
Creating web sites using PHP

1.Create the basic HTML structure with title CodeBook.
2. Create the main container. Put a form tag inside it.
3. Write different input elements, and add proper validation using HTML tables.
4. Add adequate PHP for server side scripting and validation.
5. Echo appropriate message on successful registration.

Code:

```html
<html>
<head>
<title>CodeBook</title>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<style>
body{
background-image: url("image.jpg");
background-repeat: no-repeat;background-size: cover;
}
#head{
color: white;
opacity: 0.8;
font-size: 7vw;
text-align: center;
margin-bottom: 0px;
padding-bottom: 0px;
}
#subhead{
margin-top: 0px;
padding-top: 0px;
padding-top: 3%;
padding-bottom: 4%;
float: up;
color: white;
opacity: 0.5;
font-size: 2vw;
text-align: center;
}
.container{
position: fixed;
```

```css
top: 50%;
left: 50%;
transform: translate(-50%, -50%);
}
input{
background: white;
opacity :0.6;
}
span{
color: greenyellow;
opacity:0.8;
}
label{
color:white;
}
.col1 ,.col2{
width: 47%;
float: left;
}
.col1{
padding-right: 6%;
}
.row{
padding-bottom: 2%;
}
input[type=text], input [type=checkbox] ,input[type=password]
{
width: 100%;
font-size:20px;
padding: 14px;
border: 1px solid green;
border-radius: 4px;
box-sizing: border-box;resize: vertical;
cursor: text;
}
.row:after
{
content: "";
display: table;
clear: both;
}
input[type=submit] {
opacity: 1;
```

```
background-color: green;
color: white;
padding: 12px 20px;
border: none;
border-radius: 4px;
cursor:pointer;
width: 100%;
}
#error{
color: white;
}
@media screen and (max-width: 600px)
{
.col-25, .col-75, input[type=submit] {
width: 100%;
margin-top: 0;
}
}
</style>
<?php
$error = $fname= $lname=$email="";
if ($_SERVER["REQUEST_METHOD"] == "POST") {
$fname=$_POST["fname"];
$lname=$_POST["lname"];
$email=$_POST["email"];
if ($_POST["password"]==$_POST["confirm-password"]){
$error=$_POST["fname"].", you have been succesfully registered with email
address ".
$_POST["email"].".";
// $error = $fname= $lname=$email="";
}
else {
$error="Password and Confirm Password should be same.";
}
}
?>
</head>
<body>
<div class="container">
<form method="post" action="<?php echo
htmlspecialchars($_SERVER["PHP_SELF"]);?>">
<div id ="head">Register</div>
```

```html
<div id ="subhead">Create your account. It's free and only takes a
minute.</div>
<div class="row">
<div class="col1">
<input type="text" id="fname" name="fname" placeholder="First Name"
autofocus required
pattern="[a-zA-Z]+" value= "<?php echo $fname;?>" ></div>
<div class="col2">
<input type="text" id="lname" name="lname" placeholder="Last Name"
pattern="[a-zA-Z]+"required value= "<?php echo $lname;?>" >
</div>
</div>
<div class="row">
<input type="text" id ="email" name="email" placeholder="Email" required
pattern="[a-z0-9._%+-]
+@[a-z0-9.-]+\.[a-z]{2,}$" value= "<?php echo $email;?>" >
</div>
<div class="row">
<input type="password" id ="password" name="password"
placeholder="Password" required>
</div>
<div class="row">
<input type="password" id ="confirm-password" name="confirm-password"
placeholder="Confirm
Password" required >
</div>
<div class="row">
<input type="checkbox" id ="terms" name="terms" value = "yes" required>
<label for="accept">I accept the <span >Terms of Use</span> & <span
>Privacy Policy</span>
</label>
</div>
<div class="row">
<input type="submit" value="Submit">
</div>
</form>
<div id=error><?php echo $error ; ?></div>
</div>
</body>
</html>
```

EXPERIMENT-7
Understanding JavaScript

1.Create the basic HTML structure with script tag in head of the page.
2. Create two functions, viz. over and out, for mouse over and mouse out respectively.
3. Create a heading and further create a division, write some contents inside this division.
4. In the div tag write events mouseover and mouseout and equal them to the corresponding functions.

Code:

```
<html>
<head>
<script>
function over()
{
document.write("Over");
}
function out(){
document.write("Out");
}
</script>
</head>
<body>
<p>Bring your mouse in this division</p>
<div onmouseover="over()" onmouseout="out()">
<h2>This is inside the division</h2>
</div>
</body>
</html>
```

Output:

Before mouse over

Bring your mouse in this division

This is inside the division

On mouse over

Over

EXPERIMENT-8
Creating a web page with back end in PHP and front end in JavaScript