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Date __/__/__ WT Assignment No-1

- Problem Statement:- Installation of TOMCAT server & configuration of it.

- Theory:- • Web Application:- It runs over the internet. Webapp contains five components-
i) HTTP Server - e.g. Google web server, Apache TOMCAT, Apache HTTP server, etc.
ii) HTTP Client (web browser) - Firefox, Chrome, etc.
iii) Database - MySQL, Salite, Oracle, etc.
iv) Client Side Programs - It can be written in HTML form, Javascript etc
v) Server Side Program - Could be written in Java Servlet JSP, PHP, Python etc

- Apache TOMCAT:- It is an open source project under the Apache Software foundation.

- Execution Steps:- i) Goto http://tomcat.apache.org
ii) Select tomcat version.
iii) Download & run .exe file.
iv) Use default setting provide a password you will remember.

- How to run tomcat:- i) Find the start program in programs menu look under Apache tomcat & select 'start TOMCAT'.
ii) Open any web browser & type given 'URL'
http://localhost:8080/
Now, you will see TOMCAT HOMEPAGE.

Q. What is servlet container life cycle?

→ A servlet lifecycle consist of series of events which defines how the servlet is loaded & instantiated, initialized, how it handles request from client & how is taken out of services.

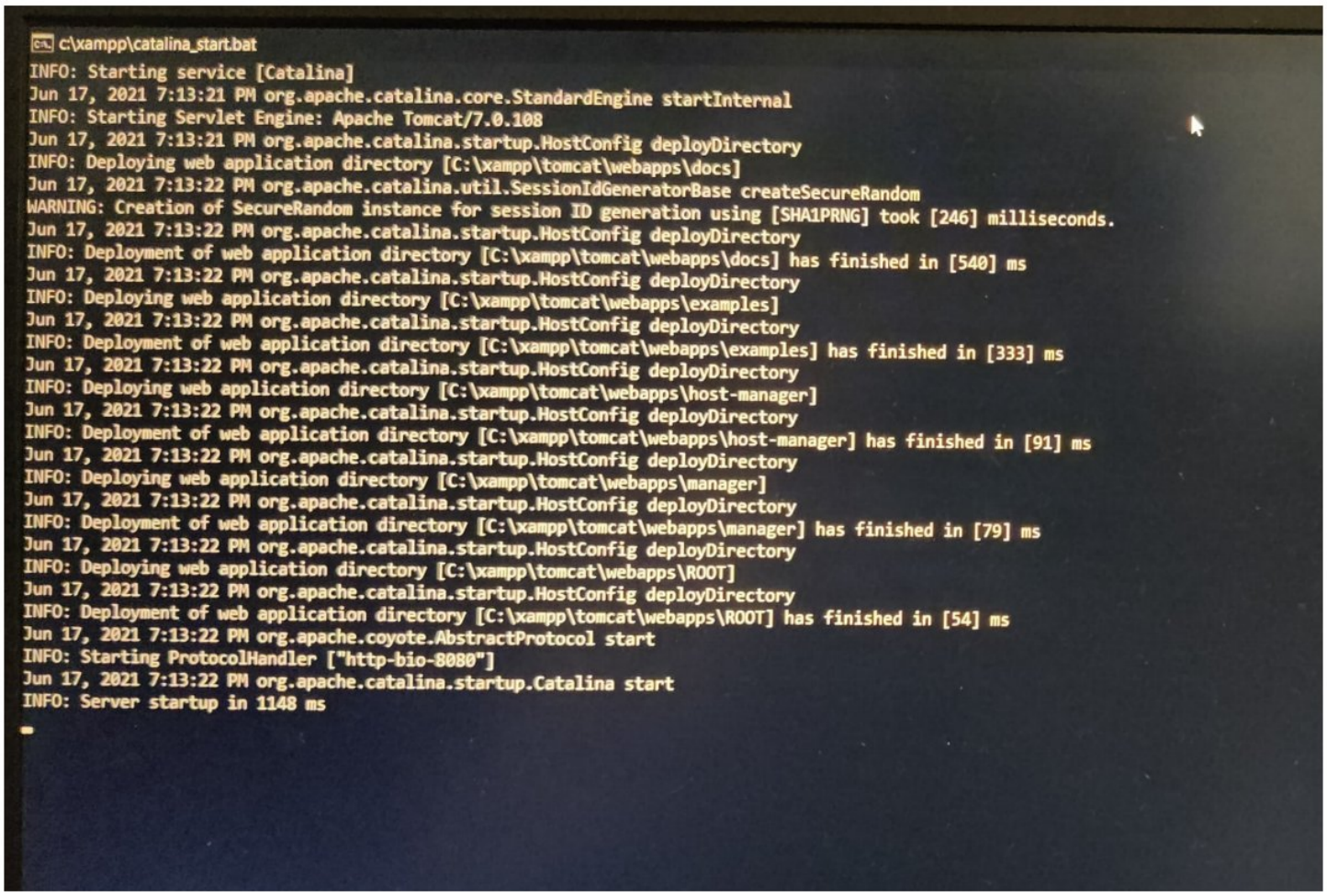
Q. What services are provided by TOMCAT?

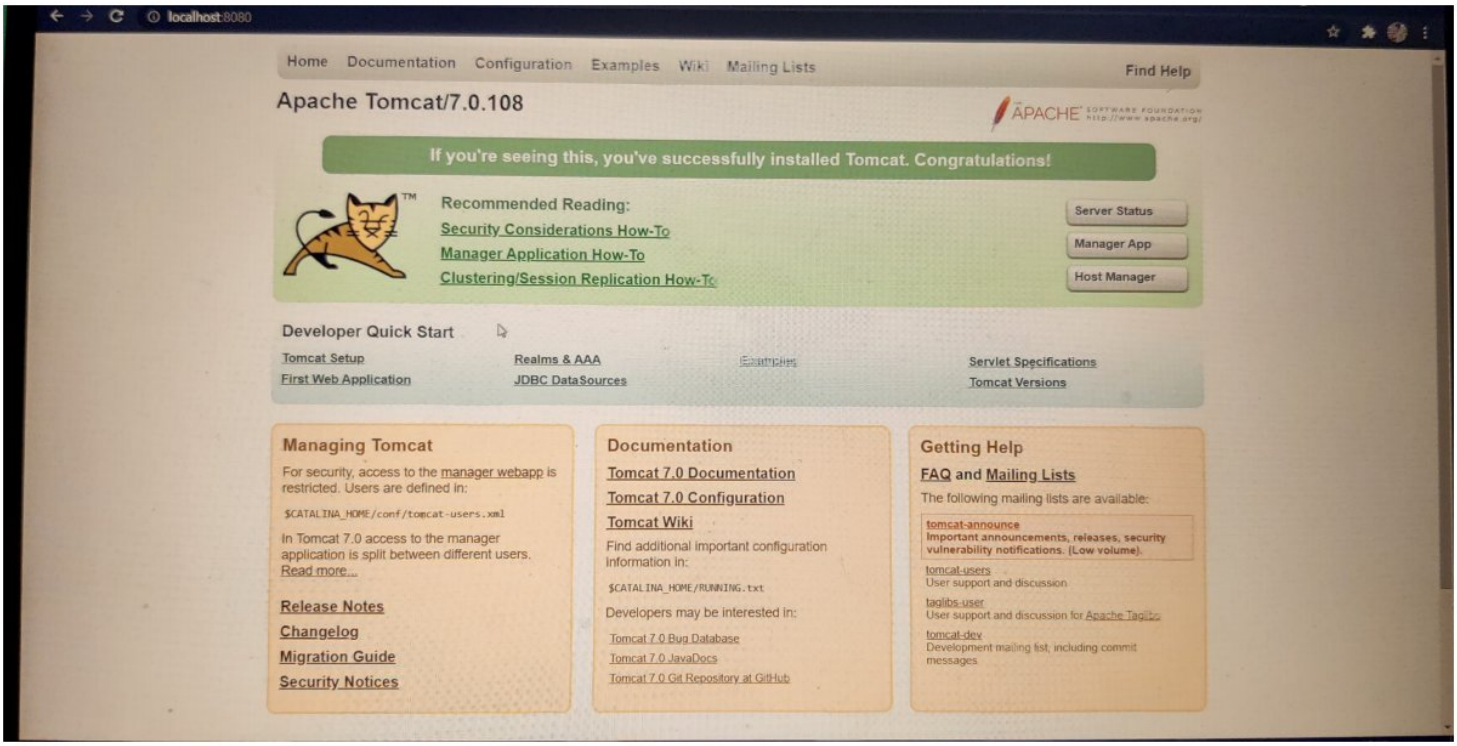
→ i) Servlet life cycle.
ii) Handle web Requests.
iii) Database Connection Pooling.
iv) Clustering.
v) High availability.

Q. Explain the directory structure of TOMCAT?

→ i) bin directory - contains the binaries & script
ii) conf :- It contains the system wide configuration files, such as server.xml, web.xml
iii) webapps:- Contains the webpages to be deployed JAR files accessible by all webapps
iv) logs - contains TOMCAT's log files.
v) work - TOMCAT's working directory used by JSP for JSP to servlet connection.

- Conclusion:- Hence, we have learned how to install & configure TOMCAT's server.





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Date __/__/__ WT Assignment NO-2

- Title:- HTML, CSS, XML.
- Problem Statement:- Write a program to design registration form for students by using HTML & CSS.
- Theory:- • HTML:- i) It is a markup language for creating webpages.
ii) HTML - Hypertext Markup language.
iii) HTML elements are building blocks of HTML pages
iv) HTML elements represented by a tag.
v) Browsers don't display the HTML tags, but use them to render the content of page.

• CSS:- i) Cascading style sheets.
ii) It handles the feel & look part of a webpage
By CSS, one can control the color of text, styles of fonts, spacing bet^n paragraphs, layout designs.

• CSS Modules:- i) Box Model
ii) Selectors
iii) Background
iv) Borders
v) Image values & replaced content.
vi) Text Effects
vii) Animations
viii) 2D | 3D Transformations.
ix) User Interface.

- Technology / Tool :- i) The <!DOCTYPE html> declaration defines this document to be HTML5.
ii) The <HTML> element is root element of HTML Page.
iii) The <Head> element contains meta Information about document.
iv) <title> specifies the title.
v) <body> element contains the visible page content.

- CSS can be added in three ways to HTML Pages :-

i) Inline - By using style attribute in HTML element
ii) Internal - By using <style> element in header sect.
iii) External - By using separate .css file & link to .html file in head.

- Conclusion :- Hence, we have designed static web pages using HTML & CSS.

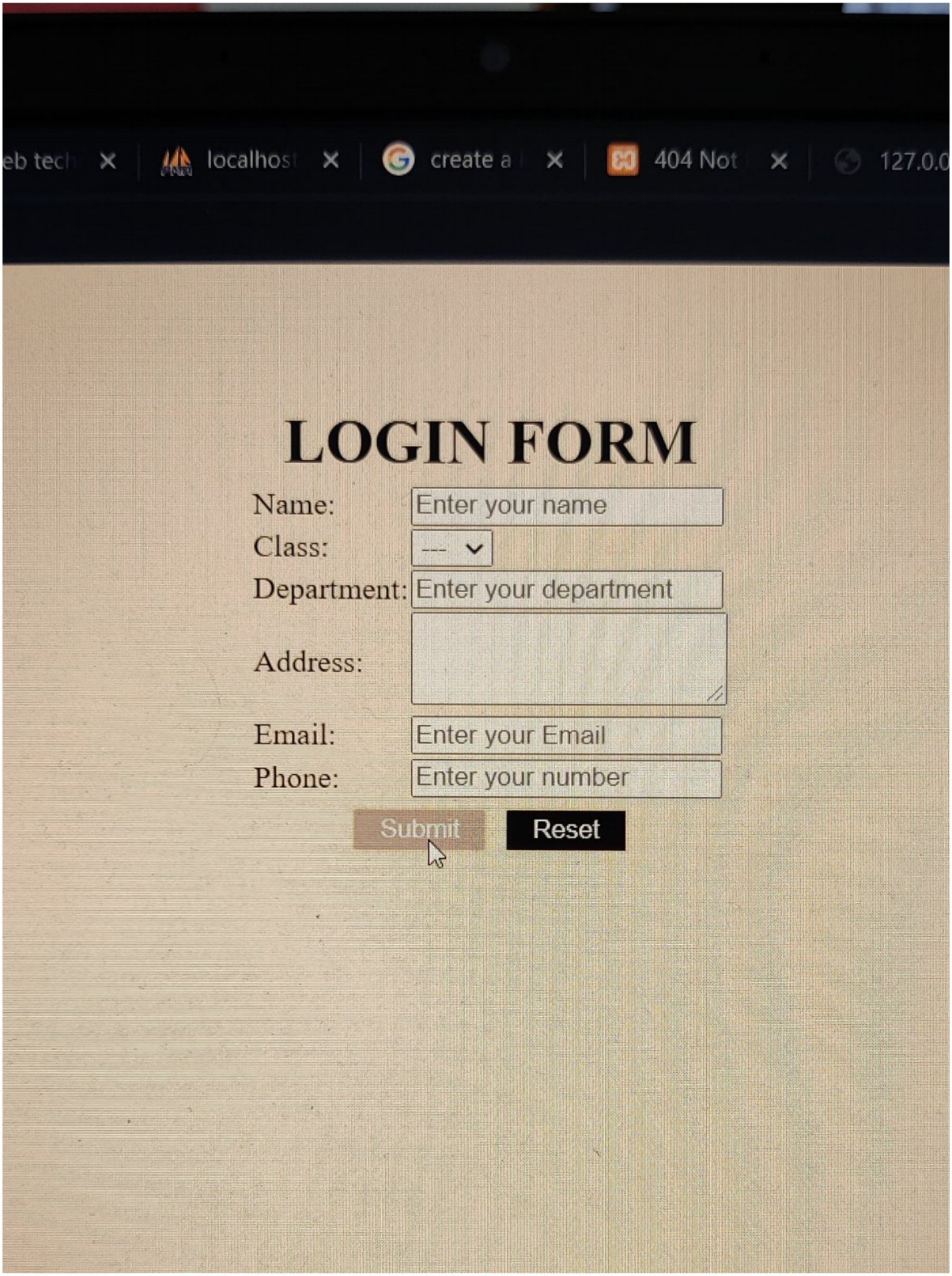
Problem Statement: write a program to design registration form for students By using HTML , CSS.

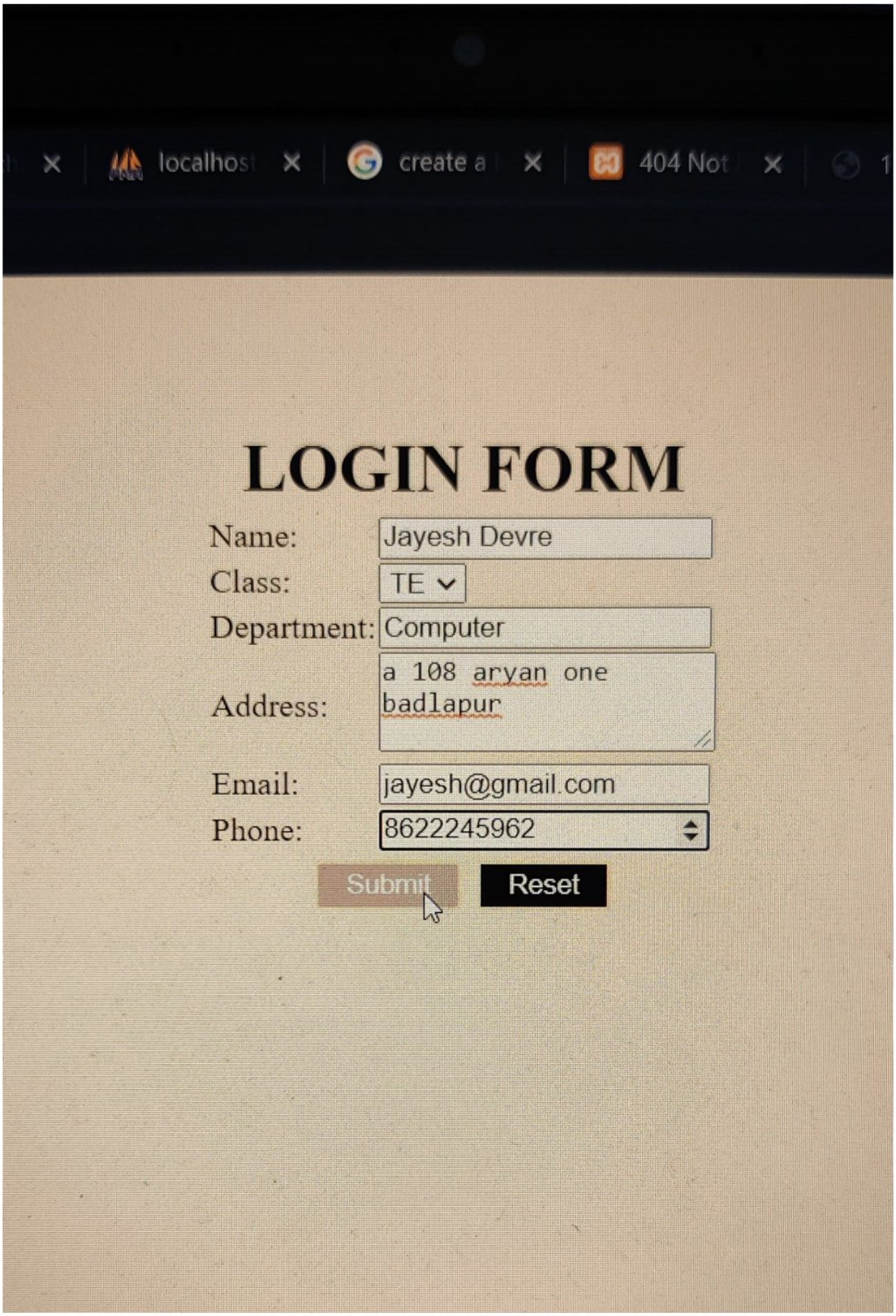
Program:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>FORM</title>
    <style>
        *{
            margin: 0;
            padding: 0;
        }

        .container{
            border: 2px solid red;
            display: flex;
            justify-content: center;
            align-content: center;
            /* width: 50%; */
            height: 50vh;
            height: 50vh;
            align-items: center;

        }

        #sub{
           display: flex;
           justify-content: center;

        }
        .btn{
            border: 2px solid navajowhite;
            text-decoration: none;
            background-color: black;
            color:white;
            margin: 2px 3px;
            padding: 2px 13px;
```

```
        }
        .heading{
            border: 2px solid blue;
            display: flex;
            justify-content: center;
        }
    </style>
</head>
<body>
    <div class="container">
      <form action="html.php">
        <table class="heading">
          <tr>
            <td><h1>LOGIN FORM</h1></td>
          </tr>
        </table>

        <table>
          <tr>
            <td>Name:</td>
            <td>
              <input type="text" placeholder="Enter your name" required />
            </td>
          </tr>
          <tr>
            <td>Class:</td>
            <td>
              <select>
                <option value=" ">---</option>
                <option value="FE">FE</option>
                <option value="SE">SE</option>
                <option value="TE">TE</option>
                <option value="BE">BE</option>
              </select>
            </td>
          </tr>
          <tr>
            <td>Department:</td>
            <td>
              <input type="text" placeholder="Enter your department" required
/>

            </td>
          </tr>
          <tr>
            <td>Address:</td>
            <td>
              <textarea
                name="Adress"
```

```
            id="address"
            cols="20"
            rows="3"
          ></textarea>
        </td>
      </tr>
      <tr>
        <td>Email:</td>
        <td><input type="email" placeholder="Enter your Email" /></td>
      </tr>
      <tr>
        <td>Phone:</td>
        <td><input type="number" placeholder="Enter your number" /></td>
      </tr>
    </table>
    <table id="sub">
      <tr>
        <td><input type="submit" value="Submit"class="btn" /></td>
        <td><input type="reset" value="Reset" class="btn" /></td>
      </tr>
    </table>
  </form>
 </div>
</body>
</html>
```





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Date __/__/__ WT Assignment No-3

- **Title:-** XML & CSS.

- **Problem Statement:-** Write a program to design a book catalog by using XML & CSS to display title author, price & year of the book

- **Theory:-** XML stands for Extensible Markup lang. It is nothing but textbased markup language which is derived from SGML.

There are 3 important characteristics of XML that make it useful in variety of systems & soln.

i) XML extensible - XML allows you to ask your own self descriptive tags or language that suits your applicatn.

ii) XML carries the data, doesn't present it - XML allows you to store the data irrespective of How it will be prepared.

- **Design / Execution steps:-** i) Write the XML code & save with .XML extension.

ii) Write .CSS code

iii) Import CSS file in XML page.

iv) Open XML page in browser.

- **Conclusion:-** Hence, we have designed static web pages using XML & CSS.

Problem Statement: write a program to design a book catalog by using XML And CSS to display title , author ,price, and year of the book.

Program:

1.XML code

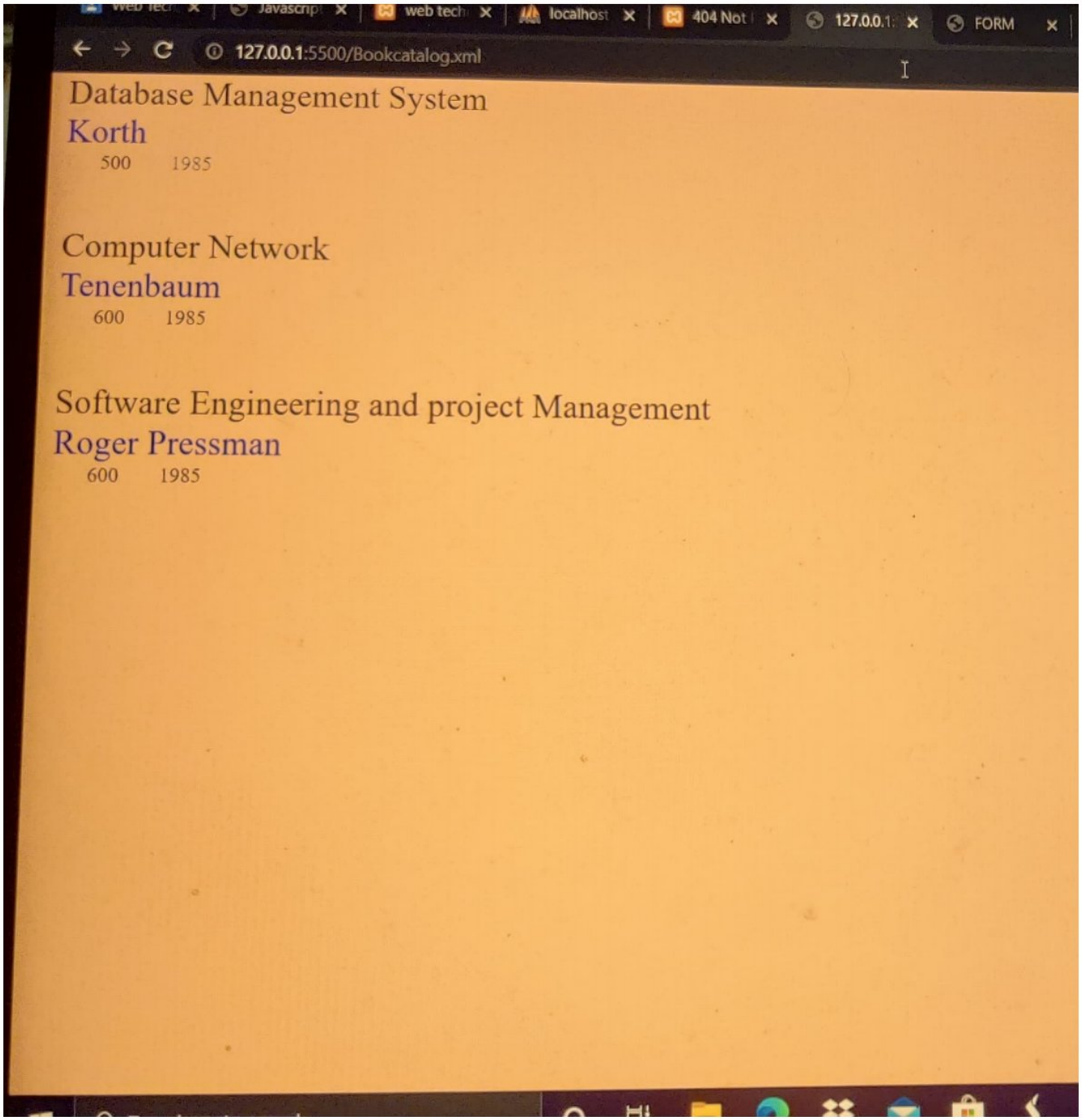
```
<?xml-stylesheet type="text/css" href="book_catalog.css"?>
<CATALOG>
<BOOK>
<TITLE>Database Management System</TITLE>
<AUTHOR>Korth</AUTHOR>
<PRICE>500</PRICE>
<YEAR>1985</YEAR>
</BOOK>
<BOOK>
<TITLE>Computer Network</TITLE>
<AUTHOR>Tenenbaum</AUTHOR>
<PRICE>600</PRICE>
<YEAR>1985</YEAR>
</BOOK>
<BOOK>
<TITLE>Software Engineering and project Management</TITLE>
<AUTHOR>Roger Pressman</AUTHOR>
<PRICE>600</PRICE>
<YEAR>1985</YEAR>
</BOOK>
</CATALOG>
```

2.CSS

```
*{
    margin: 0;
    padding: 0;
}
BOOK {
Display: block;
margin-left:10pt;
margin-bottom: 30pt;
}
CATALOG {
Width:100%;
background-color: rgb(255, 194, 194);
}
TITLE {
Color: #273327;
```

```
display: block;
font-size: 20pt;
}
AUTHOR {
Display: block;
color: #0000ff;
font-size: 20pt;
}
YEAR, PRICE {
color: rgb(65, 79, 92);
margin-left:20pt ;

}
```



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Saathi

Date __/__/__ WT

Assignment NO-4

- **Title:-** HTML & Javascript.

- **Problem Statement:-** Write a program to design registration form for students by using HTML,CSS & Javascript & perform following validations all fields mandatory phone number & email address validation.

- **Theory:-** Javascript is a programming language of HTML as well as web. It is ~~performed~~ preferred for creating Network centric applications. It integrated & complimentary with Java.

Advantage of using Javascript are-

i) It requires a less server interaction.
ii) Immediate feedback to the visitors.
iii) Increased interactivity.
iv) Richer Interfaces.

- **Validation:-** When circuit client enters all necessary data and submit button form validation is done at server side if data entered by a client is incorrect or missing the server needs to send all data back to client and request for resubmission of form with correct information.

- **Design & Execution steps:-** i) Write an HTML code in notepad with HTML extension.
ii) Write the function for validation of email id and phone no. & enclosed this function in script.
iii) Call this function on 'onclick' event of submit button.
iv) Open html page in browser.

- Conclusion:- Hence, we applied validate the data using Javascript.

Problem Statement: Write a program to design registration form using HTML ,CSS ,JavaScript program and perform following validation

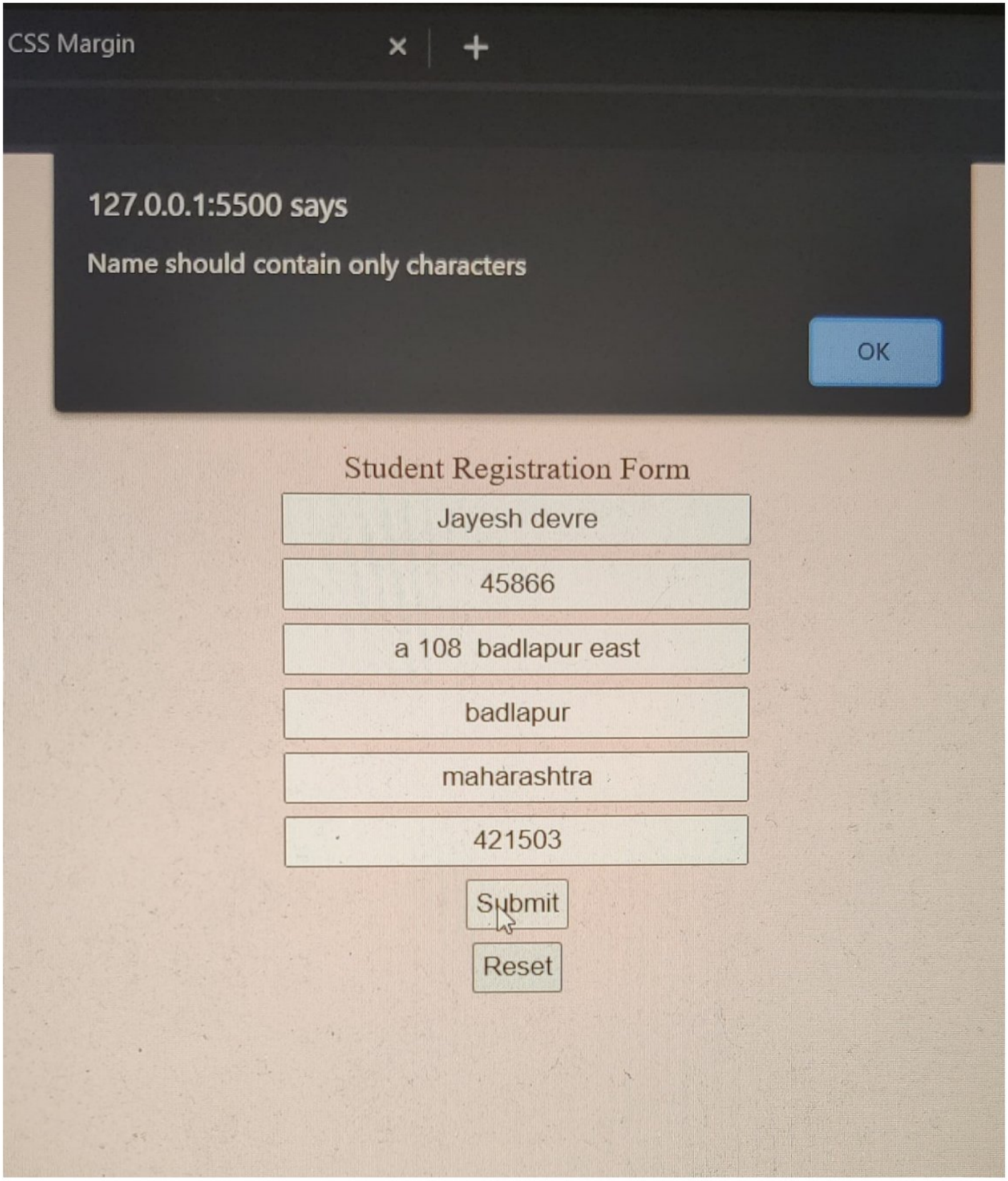
Program:

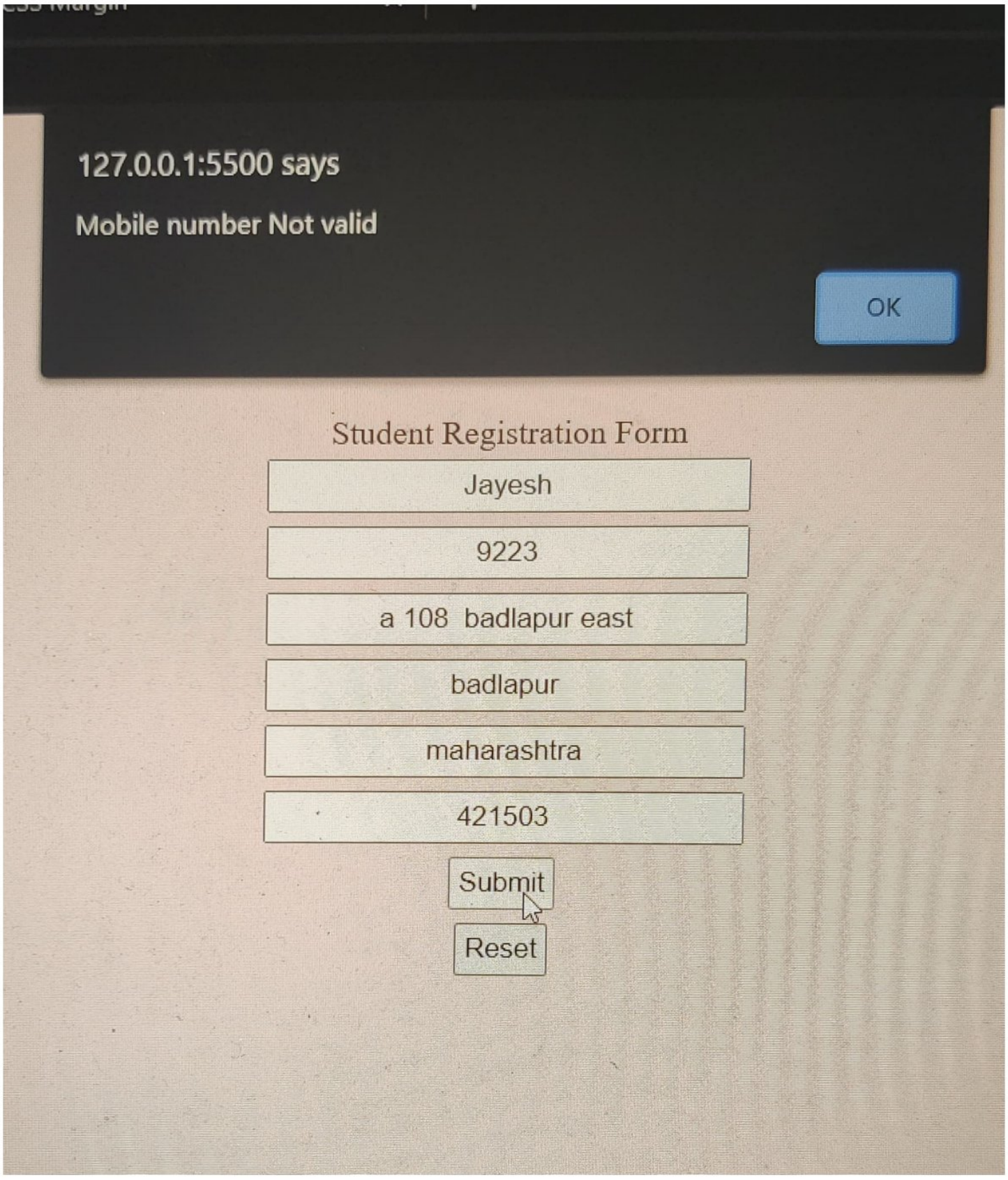
1.HTML

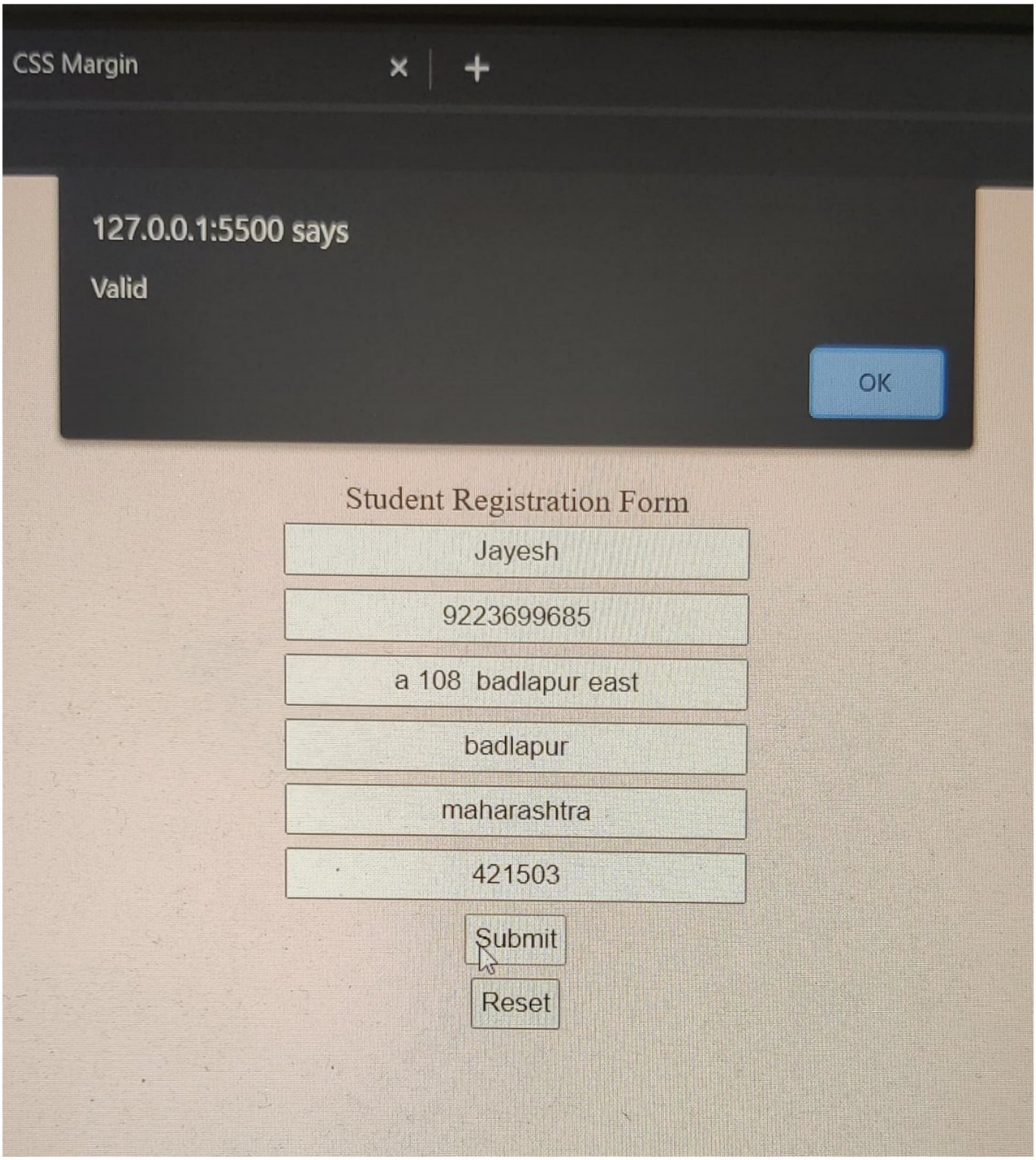
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Javascript Validation</title>
    <link rel="stylesheet" href="index.css">
</head>
<body>
    <div class="container">
    <form class="form" name="frmStudent">
    <tr><th colspan=2>Student Registration Form</th></tr>
    <br>
    <tr><td><input type=text name=txtSname id=nm size=30 placeholder="Name of
Student"></td>
    <tr><td><input type=text name=txtSmobile id=mb size=30 placeholder="Mobile
 No"></td>
    <tr><td><input type=text name=txtSaddress id=add size=30 placeholder="Addr
ess Line"></td>
    <tr><td><input type=text name=txtScity id=ct size=30 placeholder="City"></
td>
    <tr><td><input type=text name=txtSstate id=st size=30 placeholder="State">
</td>
    <tr><td><input type=text name=txtSpin id=pin size=30 placeholder="Pincode"
></td>
    <tr><td><input type=submit value="Submit" onClick="return validate()"></td
><td>
        <input type=reset value="Reset"></td></tr>
    </table>
    </form>
    </div>
    <script src="index.js"></script>
    </body>
</html>
```

```
//2.JAVASCRIPT
Function validate()
{

sname=document.getElementById("nm").value;
smobile=document.getElementById("mb").value;
saddress=document.getElementById("add").value;
scity=document.getElementById("ct").value;
sstate=document.getElementById("st").value;
spin=document.getElementById("pin").value;
if(sname==""||smobile==""||saddress==""||scity==""||sstate==""||spin=="")
{
alert("Fields should not be empty");
return false;
}
else if(!sname.match(/^[A-Za-z]+$/))
{
alert("Name should contain only characters")
return false;
}
else if(!smobile.match(/^\d{10}$/))
{
alert("Mobile number Not valid")
return false;
}
else if(!spin.match(/^\d{6}$/))
{
alert("Pin number Not valid")
return false;
}
alert("Valid");
return false;
}
```

```css
//3.CSS
*{
    margin: 0;
    padding: 0;
}
body{
    background-color: rgb(248, 223, 223);
}
.container{
    margin-top: 140px;
}

.form{
    display: flex;
    flex-direction: column;
    text-align: center;
    margin: 30px auto;
    align-items: center;
    padding: 2px;


}
.form ,input{
 text-align: center;
 margin: 3px auto;
 padding: 3px;

}
```







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Date __/__/__ WT Assignment NO-5

- Title :- JSP, Servlet & MySQL (Backend).
- Problem Statement :- i) Design & build login page using JSP, Servlet & MySQL.
ii) Design & build employee login page using JSP, Servlet & MySQL.
- Theory :- • Java Server Pages :- It is a server side programming technology that is used to create dynamic - web based applications. JSP have right to use compute Java APIs, Including the JDBC API to access database.

• Why we need JSP?

JSP is used for design dynamic webpage & servlet is used ~~for~~ to code the logic that is present.

- Architecture of JSP :- i) The request / response part of a JSP is defined in below architecture.
ii) The client initiate the request using for JSP file using browser.
iii) Webserver invokes the jsp file & interpret the JSP file produce a java code.
iv) One servlet is created. JSP engine compiles the servlet.
v) Now servlet class is loaded by container & executes it.
vi) Engine send response back to client.
- Syntax of JSP :- <%. text %.>

- Design & Execution steps:- i) Design HTML & JSP files with an extension as HTML & JSP.
ii) Write database connection page using servlet.
iii) Set MySQL username, password & database name in database connection page.
iv) Start the TOMCAT server with port number
v) Open browser & type localhost 8084.

- Conclusion:- Hence, we have performed the dynamic web application using JSP, servlet & MySQL.

Problem Statement: Design and Build login page using JSP,SERVLET and MYSQL.

Program:

Login page (login.jsp):

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-
1" pageEncoding="ISO-8859-1" %>
<!DOCTYPE html PUBLIC "-
//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
    <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
    <title>Insert title here</title>
</head>
<body>
Simple login Example using servlet jsp and mysql(mariadb) database connectivit
y
<br> Create a test database, student table and insert some user
information in it.
<br>
<br>

<form action="LoginController" method="post">
    Enter username :<input type="text" name="username"> <br>
    Enter password :<input type="password" name="password"><br>
    <input type="submit" value="Login">
</form>

</body>
</html>
```

Login controller (LoginController.java)

```
package com.candid;

import java.io.IOException;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;


@WebServlet("/LoginController")
public class LoginController extends HttpServlet {

    protected void doPost(HttpServletRequest request, HttpServletResponse resp
onse) throws ServletException, IOException {
        String un = request.getParameter("username");
        String pw = request.getParameter("password");

// Connect to mysql(mariadb) and verify username password

        try {
            Class.forName("org.mariadb.jdbc.Driver");
// loads driver
            Connection c = DriverManager.getConnection("jdbc:mariadb://localho
st:3306/test", "root", "root"); // gets a new connection

            PreparedStatement ps = c.prepareStatement("select userName,pass fr
om student where userName=? and pass=?");
            ps.setString(1, un);
            ps.setString(2, pw);

            ResultSet rs = ps.executeQuery();

            while (rs.next()) {
                response.sendRedirect("success.html");
                return;
            }
            response.sendRedirect("error.html");
            return;
        } catch (ClassNotFoundException | SQLException e) {
```

```
            e.printStackTrace();
        }
    }

}
```

success page (success.html):

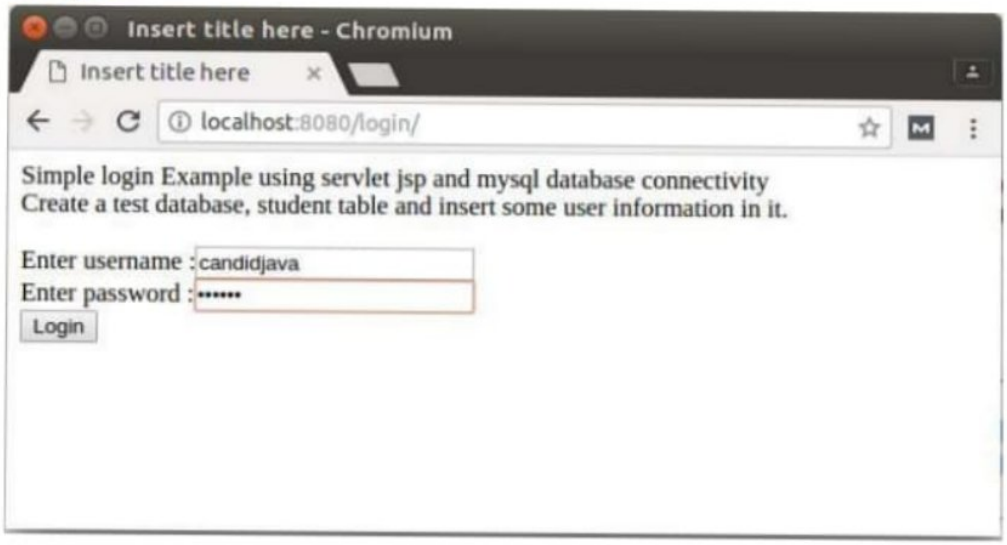
```
<!DOCTYPE html>
<html>
<head>
    <meta charset="ISO-8859-1">
    <title>Insert title here</title>
</head>
<body>
Login success
</body>
</html>
```

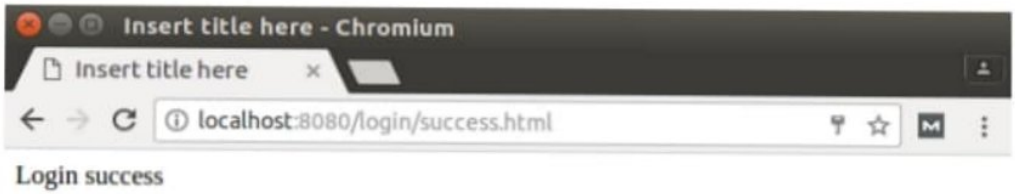
error page (error.html):

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="ISO-8859-1">
    <title>Insert title here</title>
</head>
<body>
Invalid username or password, Please try again with valid

</body>
</html>
```

Output:





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Date __/__/__ WT Assignment NO-6

- Title :- Add dynamic web application essence using PHP, HTML & MySQL.

- Problem Statement :- Design & develope dynamic web app. using PHP & MySQL as a backend for employee data with insert, delete, view & update operations.

- Theory :- i) PHP :- PHP is a hypertext preprocessor began as little open source venture that advanced as an ever increasing number of individuals discovered o how valuable it was. PHP is a server side scripting dialed that is installed in HTML. It is utilize to oversee dynamic substance, databases. It is incorporated with various prevalent databases including MySQL PortgreSQL, Oracle, sybase server.

ii) MySQL :- It is most famous open source relational database management system.

- What is database ?

A database is different application that stores a gathering of information. Every database has atleast one unmistakable API's for making, getting to overseeing & reacting the information it holds.

- Conclusion :- In this assignment we have studied how to design & develope small web application using PHP script, XAMPP server with apache server & MySQL as backend.

Problem Statement: Design and develop web application using PHP and Mysql as a backend for employee data with insert ,delete ,view,and update operations.

Program:

Index.php:

```php
<?php  include('server.php'); ?>
<?php
    if (isset($_GET['edit'])) {
        $id = $_GET['edit'];
        $update = true;
        $record = mysqli_query($db, "SELECT * FROM info WHERE id=$id");

        if (count($record) ==1 ) {
            $n = mysqli_fetch_array($record);
            $name = $n['name'];
            $address = $n['address'];
        }
    }
?>
<!DOCTYPE html>
<html>
<head>
    <title>web technology Practical-6</title>
    <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
<?php if (isset($_SESSION['message'])): ?>
    <div class="msg">
        <?php
            echo $_SESSION['message'];
            unset($_SESSION['message']);
        ?>
    </div>
<?php endif ?>
<?php $results = mysqli_query($db, "SELECT * FROM info"); ?>

<table>
    <thead>
        <tr>
            <th>Name</th>
```

```
            <th>Address</th>
            <th colspan="2">Action</th>
        </tr>
    </thead>

    <?php while ($row = mysqli_fetch_array($results)) { ?>
        <tr>
            <td><?php echo $row['name']; ?></td>
            <td><?php echo $row['address']; ?></td>

            <td>
                <a href="index.php?edit=<?php echo $row['id']; ?>" class="edit
_btn" >Edit</a>
            </td>
            <td>
                <a href="server.php?del=<?php echo $row['id']; ?>" class="del_
btn">Delete</a>
            </td>
        </tr>
    <?php } ?>
</table>

    <form method="post" action="server.php" >
        <div class="input-group">
            <input type="hidden" name="id" value="<?php echo $id; ?>">
        </div>
        <div class="input-group">
            <label>Name</label>
            <input type="text" name="name" value="<?php echo $name; ?>">
        </div>
        <div class="input-group">
            <label>Address</label>
            <input type="text" name="address" value="<?php echo $address; ?>">
        </div>
        <div class="input-group">
        <?php if ($update == true): ?>
          <button class="btn" type="submit" name="update" style="background: #
556B2F;" >update</button>
         <?php else: ?>
           <button class="btn" type="submit" name="save" >Save</button>
        <?php endif ?>
        </div>
    </form>
</body>
</html>
```

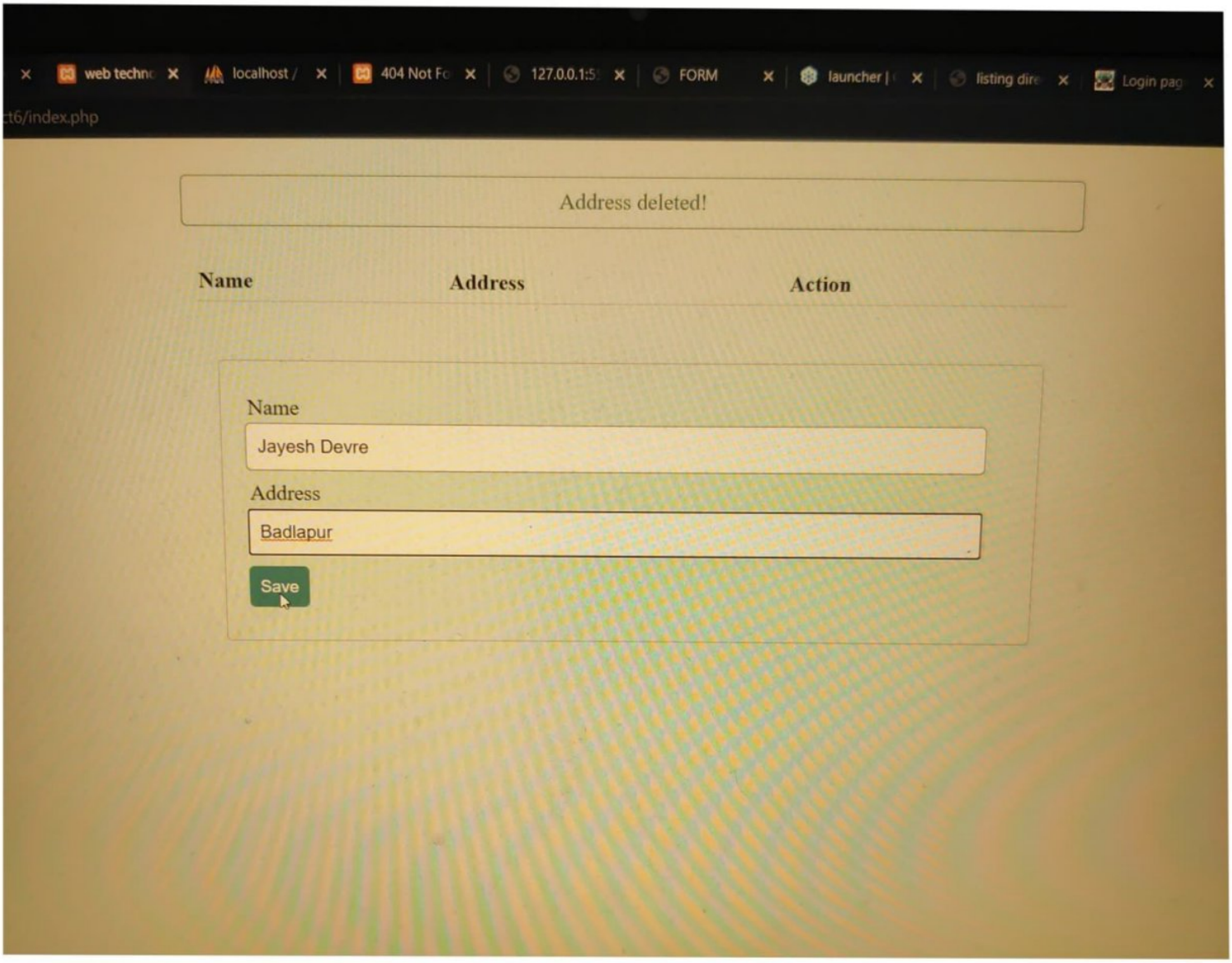
```php
//2.SERVER.PHP
<?php
    session_start();
    $db = mysqli_connect('localhost', 'root', '', 'crud');

    // initialize variables
    $name = "";
    $address = "";
    $id = 0;
    $update = false;

    if (isset($_POST['save'])) {
        $name = $_POST['name'];
        $address = $_POST['address'];

        mysqli_query($db, "INSERT INTO info (name, address) VALUES ('$name', '
$address')");
        $_SESSION['message'] = "Address saved";
        header('location: index.php');
    }
    if (isset($_POST['update'])) {
        $id = $_POST['id'];
        $name = $_POST['name'];
        $address = $_POST['address'];

        mysqli_query($db, "UPDATE info SET name='$name', address='$address' WH
ERE id=$id");
        $_SESSION['message'] = "Address updated!";
        header('location: index.php');
    }
    if (isset($_GET['del'])) {
        $id = $_GET['del'];
        mysqli_query($db, "DELETE FROM info WHERE id=$id");
        $_SESSION['message'] = "Address deleted!";
        header('location: index.php');
    }
?>
```

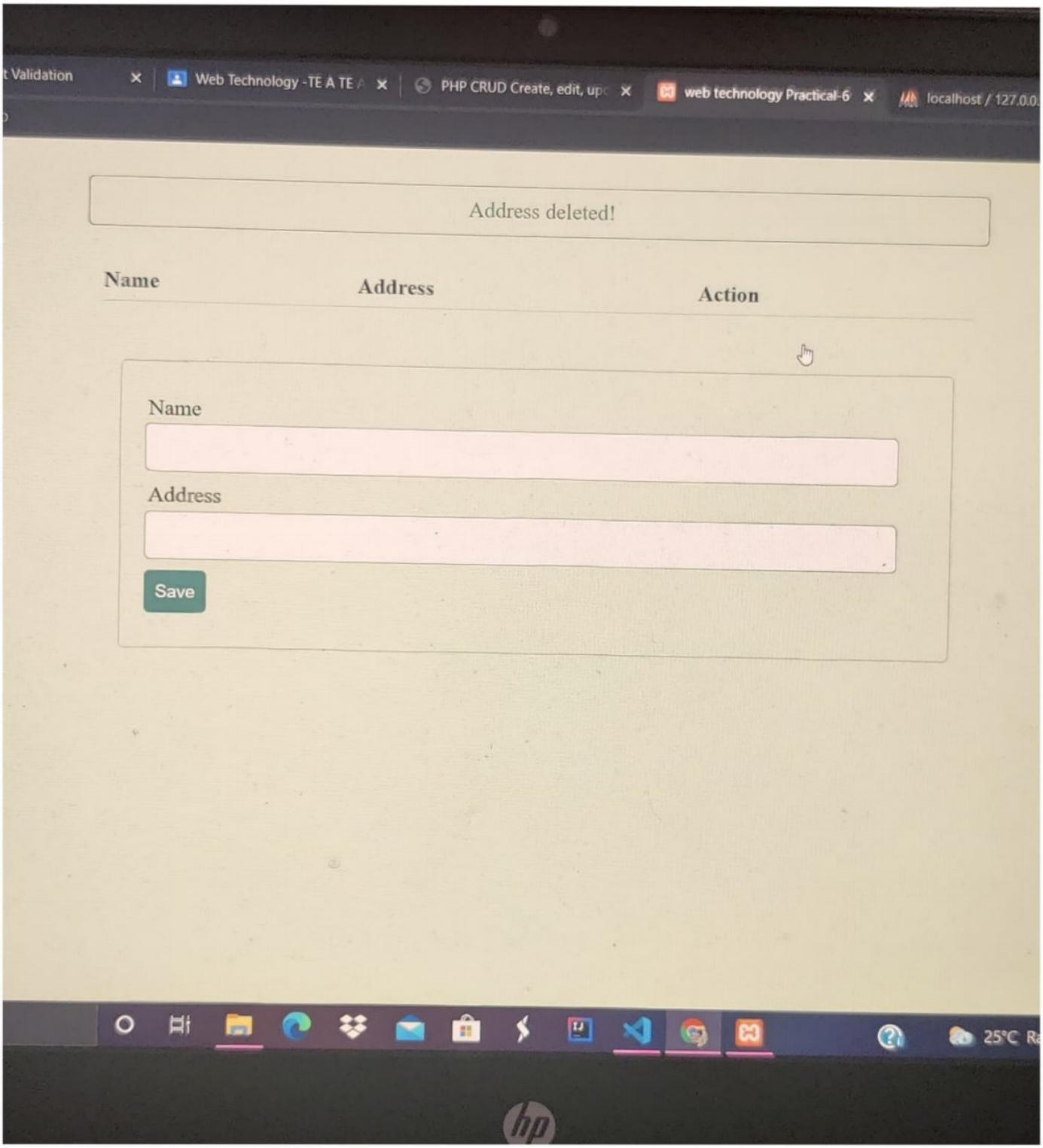
3.CSS:

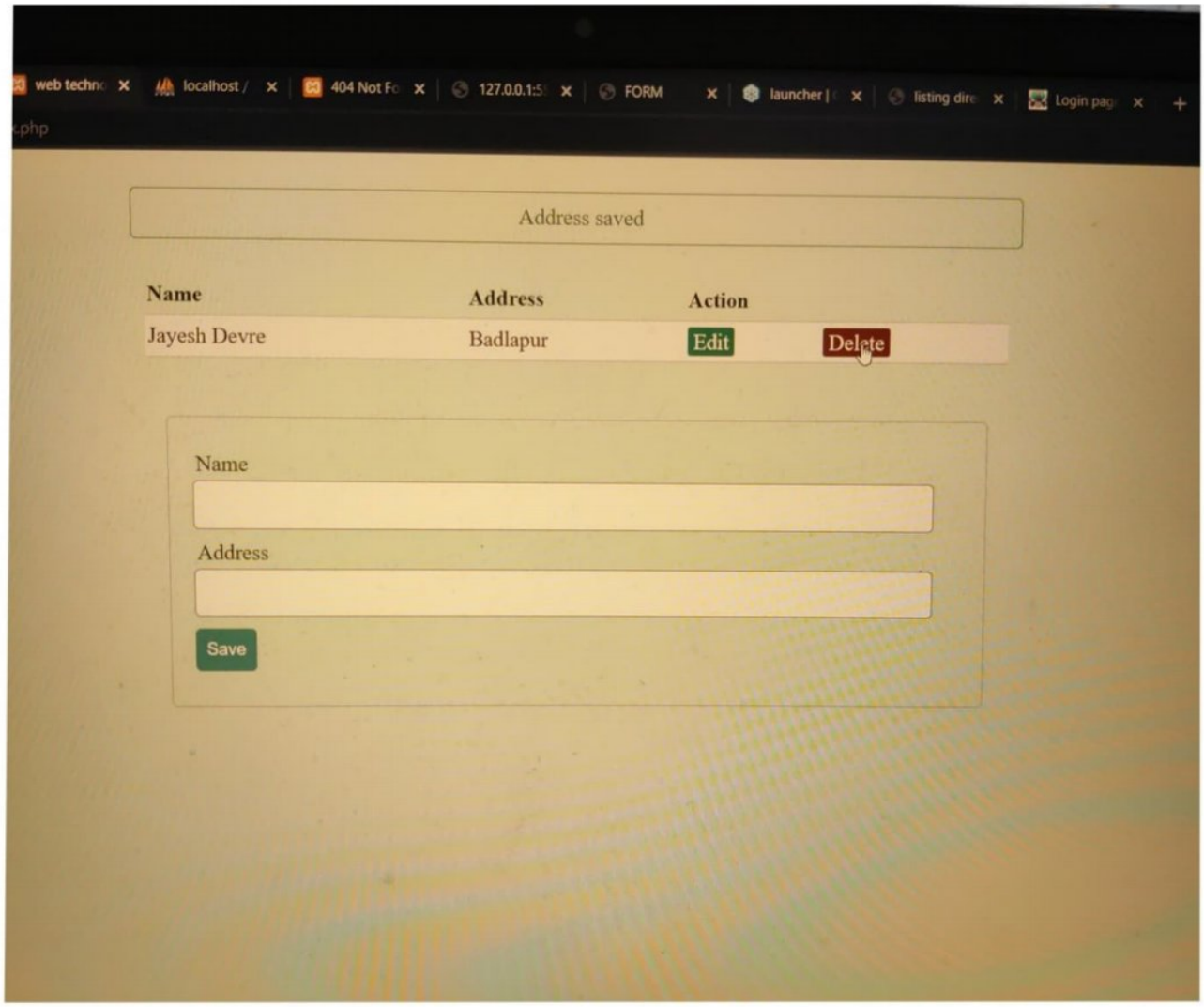
```css
body {
    font-size: 19px;
    background-color: #dff0d8;
}
table{
    width: 50%;
    margin: 30px auto;
    border-collapse: collapse;
    text-align: left;
```

```
    padding: 2px 5px;
    background: #2E8B57;
    color: white;
    border-radius: 3px;
}

.del_btn {
    text-decoration: none;
    padding: 2px 5px;
    color: white;
    border-radius: 3px;
    background: #800000;
}
.msg {
    margin: 30px auto;
    padding: 10px;
    border-radius: 5px;
    color: #3c763d;
    background: #dff0d8;
    border: 1px solid #3c763d;
    width: 50%;
    text-align: center;
}
```

```
}
tr {
    border-bottom: 1px solid #cbcbcb;
}
th, td{
    border: none;
    height: 30px;
    padding: 2px;
}
tr:hover {
    background: #F5F5F5;
}

form {
    width: 45%;
    margin: 50px auto;
    text-align: left;
    padding: 20px;
    border: 1px solid #bbbbbb;
    border-radius: 5px;
}

.input-group {
    margin: 10px 0px 10px 0px;
}
.input-group label {
    display: block;
    text-align: left;
    margin: 3px;
}
.input-group input {
    height: 30px;
    width: 93%;
    padding: 5px 10px;
    font-size: 16px;
    border-radius: 5px;
    border: 1px solid gray;
}
.btn {
    padding: 10px;
    font-size: 15px;
    color: white;
    background: #5F9EA0;
    border: none;
    border-radius: 5px;
}
.edit_btn {
    text-decoration: none;
```







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Date __/__/__ WT Assignment No-7 (1)

- Title :- Add dynamic web ~~development~~ application using PHP, AJAX & MySQL.

- Problem Statement :- Design & develope web application using PHP, AJAX and MySQL as a backend for employee data with insert and view operations.

- Theory :- Ajax remains asynchronous Javascript & XML. ajax is another procedure for making better, speedier and more intelligent dynamic web developem -ent with the distance of XML, HTML, CSS & Javascript Ajax utilizes XHTML, for content, CSS for introduction alongside. Document Object Model and Javascript for dynamic substance show.
AJax instructional exercise covers ideas & cases of AJAX innoration for apprentices & experts.
AJAX is an acronym for Asynchronous Javascript & XML. It is gathering of bet^n related innovation like Javascript, DOM, XML, HTML, CSS & so forth.

- Technology/Tool :- AJAX, PHP & MySQL.

- Execution Steps :- For the design purpose Html & CSS is to be used, for this design port contains the GUI of web applications.

- Conclusion :- In this assignment, we have studied have to design and develope small web application using PHP, javascript, ajax, XAMPP server with apache server.

Page No.

Program and Code:

Here we have created "emp" directory in htdocs directory contain following files 1. index.html

2. insert.php

3. display.php

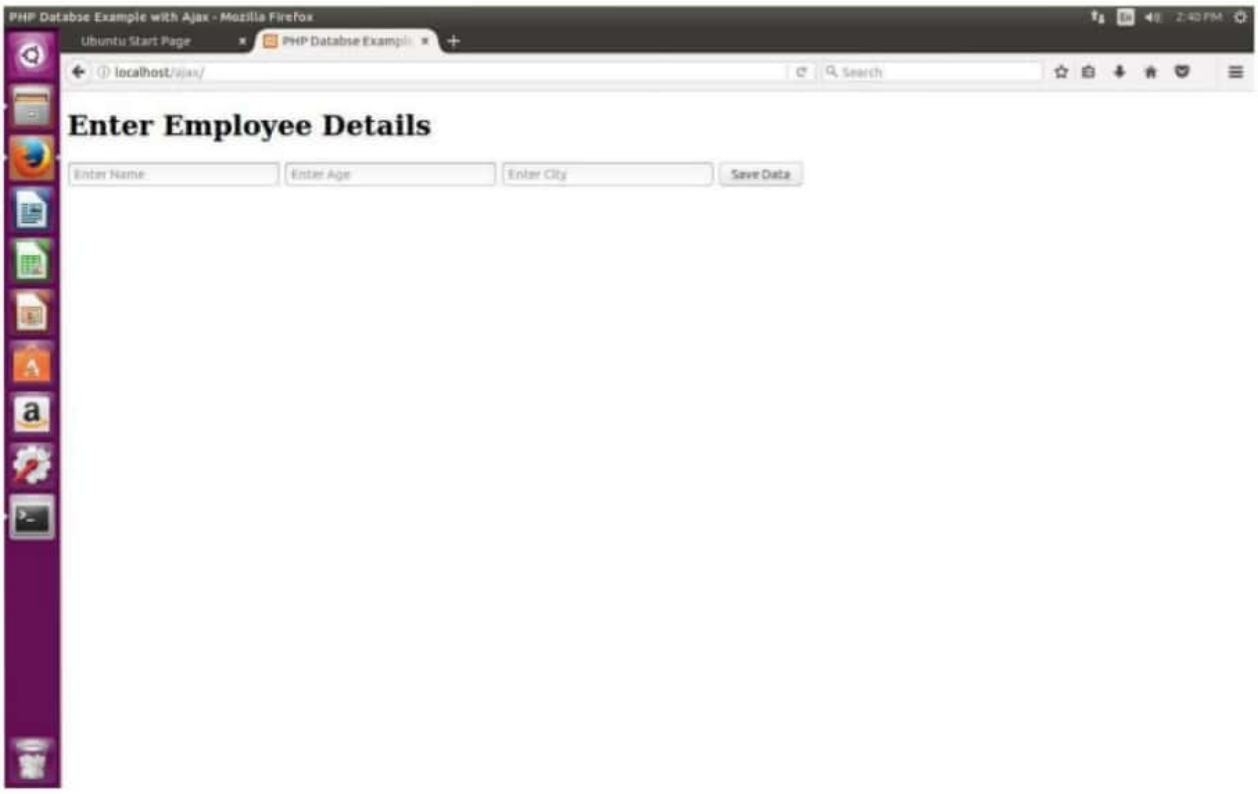
4. config.php

1.index.html

```
<!DOCTYPE html>
<html>
<head>
<title>PHP Databse Example with Ajax </title>
<script
src="https://code.jquery.com/jquery-3.2.1.min.js"
```

```
integrity="sha256-
hwg4gsxgFZhOsEEamdOYGBf13FyQuiTwlAQgxVSNgt4="
crossorigin="anonymous">

</script>
</head>
<body>
<h1> Enter Employee Details </h1>
<form method="post" action="insert.php">
<input type="text" id="name" name="name" placeholder="Enter
Name" /> <input type="text" id="age" name="age" placeholder="Enter
Age" /> <input type="text" id="city" name="city" placeholder="Enter
City" /> <button> Save Data </button>

</form>
<p id="result">
</p>
<p id="result"></p>
<a href="display.php">Display</a>
<!--jquery and ajax code-->
<script>
$("form").submit(function(e){
e.preventDefault();

$.post(
"insert.php",
{
name: $("#name").val(),
age: $("#age").val(),
city: $("#city").val()
},
function(result)
```

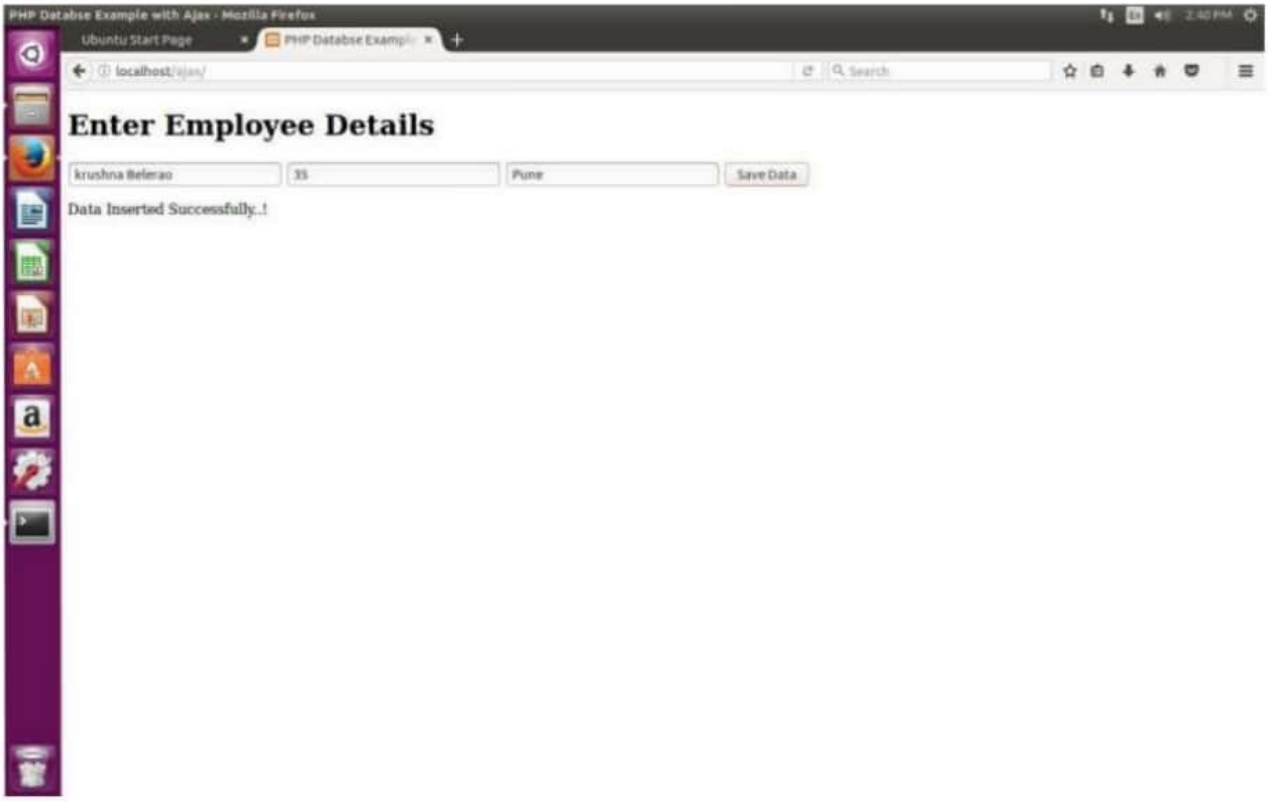
```
{
if(result == "success")
{
$("#result").html("Data Inserted Successfully..!");
}
else
{
$("#result").html("Error Occured!");
}
}
);
});
</script>
</script>
</body>
<html>
```



2. insert.php

```
<?php
$name = $_POST['name'];
$age = $_POST['age'];
$city = $_POST['city'];

$con = new mysqli('localhost', 'root', '', 'emp');
if($con->connect_error)
{
echo("Error");
}

$stmt = $con->prepare("insert into users(name,age,city)
values (?,?,?)"); $stmt-
>bind_param("sis",$name,$age,$city);


if($stmt->execute())
{
echo("success");
}
else
{
echo("fail");
}

?>
```

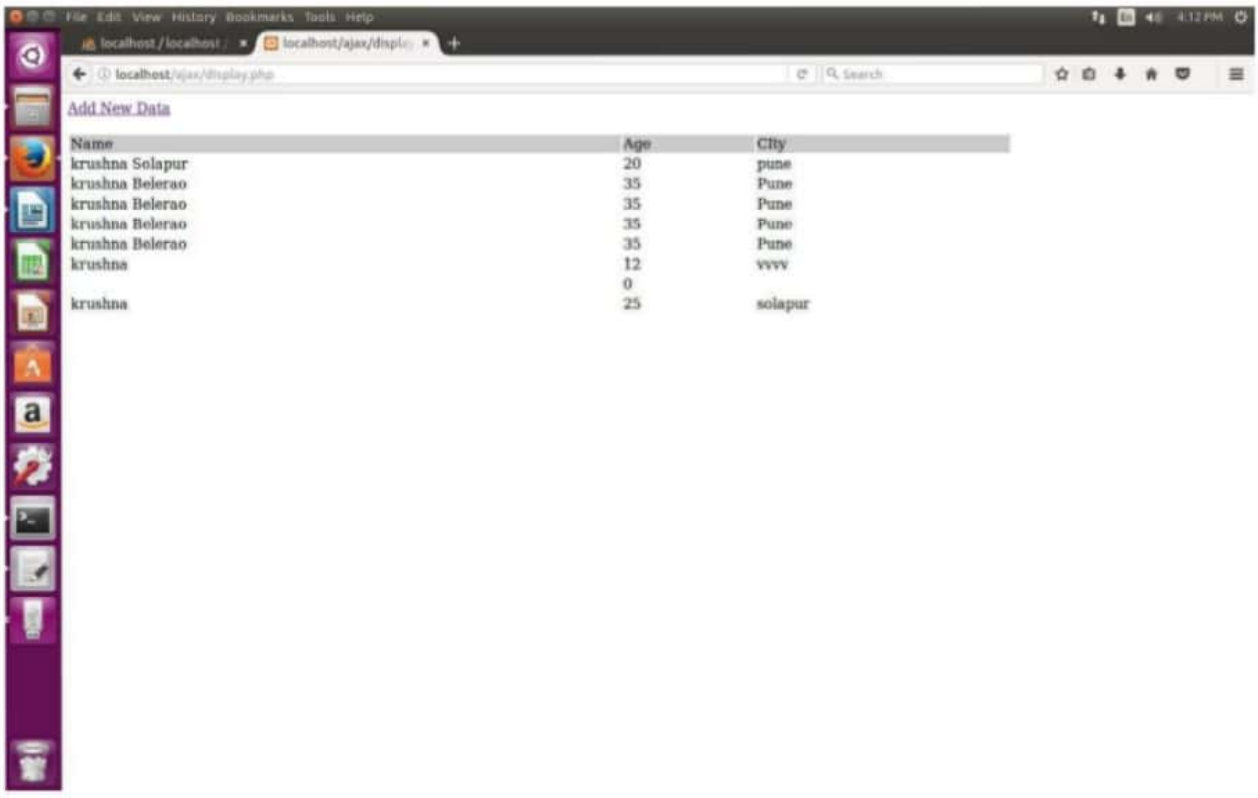
in below image URL you can see that without refreshing whole page only part of page refreshed.



3. display.php

```
<?php
include_once("config.php");

//$result = mysql_query("SELECT * FROM users ORDER BY id DESC"); //
mysql_queryis deprecated

$result = mysqli_query($mysqli, "SELECT * FROM users ORDER BY id
DESC"); // usingmysqli_query instead

?>

<html>
<body>
<a href="index.html">Add New Data</a><br/><br/>

<table width='80%' border=0>

<tr bgcolor='#CCCCCC'>
<td>Name</td>
```

```
<td>Age</td>
<td>CIty</td>

</tr>
<?php
        //while($res = mysql_fetch_array($result)) { // mysql_fetch_array is deprecated, we needto use mysqli_fetch_array
while($res = mysqli_fetch_array($result)) {
echo "<tr>";
echo "<td>".$res['name']."</td>";
echo "<td>".$res['age']."</td>";
echo "<td>".$res['city']."</td>";
echo "</tr>";
}
?>
</table>
</body>
</html>
```



4. config.php

```
<?php

$host = 'localhost';
$dbname = 'emp';
$dabUser = 'root';
$dbPass = ' ';
$mysqli = mysqli_connect($host, $dbUser, $dbPass,
$dbname); ?>
```

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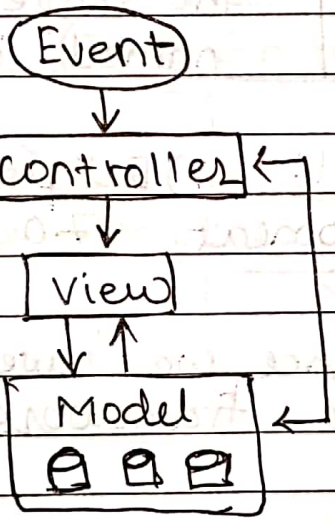
Date __/__/__ WT Assignment NO-8

- Title:- Design & develope any web application using structs framework.
- Problem Statement:- Create a login module for web application using framework.
- Theory:- • Model View Controller Architecture:-

Model view controller is a way to build application that promotes complete separation betn business logic & presentation.



- What is structs?

Structs is a framework that advances the utilized of model view controller engineering for planning of substantial scale applications. The structure incorpation an arrangement of custom. The structure label libraries & their related Java classes, alongside different utility classes.

- **Struct tags:-**

Common attributes

Attributes	Used for
Id	the name of a bean for temporary used by tag
name	the name of a pre-existing bean for use with the tag
property	the property of bean named in name attribute.
scope	the scope to search for bean named in the name attribute

- **Technology / Tool:-** i) Eclipse IDE.
ii) Apache Tomcat 7.0 or higher.

- **Conclusion:-** Hence, we have successfully tested the structs framework & tested the results.

```
// Creating a Plumber bean in the request scope
Plumber aPlumber = new Plumber();
request.setAttribute("plumber", aPlumber);

Beans can be created with the <jsp:useBean></jsp:useBean> tag:
<!-- If we want to do <jsp:setProperty ...></jsp:setProperty> or --
> <!-- <jsp:getProperty ... ></jsp:getProperty> -->
<!-- we first need to do a <jsp:useBean ... ></jsp:useBean> -->
<jsp:useBean id="aBean" scope="session" class="java.lang.String">
creating/using a bean in session scope of type java.lang.String
</jsp:useBean>

Most useful is the creation of beans with Struts tags:
<!-- Constant string bean -->
<bean:define id="greenBean" value="Here is a new constant string
bean; pun intended."/>
<!-- Copying an already existent bean, frijole, to a new bean, lima -->
<bean:define id="lima" name="frijole"/>
<!-- Copying an already existent bean, while specifying the class -->
```

```
<bean:define id="lima" name="frijole"
class="com.SomePackageName.Beans.LimaBean"/>
<!-- Copying a bean property to a different scope -->
<bean:define id="goo" name="foo" property="geeWhiz"
scope="request" toScope="application"/>
```

<bean:message ... >

```
<!-- looks up the error.divisionByZero resource -->
<!-- and writes it to the HttpResponse object -- >
<bean:message key="error.divisionByZero"/>
<!-- looks up the prompt.name resource -->
<!-- and writes it to the HttpResponse object; -- >
<!-- failing that, it writes the string -->
<!-- contained in the attribute arg0-- >
<bean:message key="prompt.name" arg0='Enter a name:'/>
```

This tag writes the string equivalent of the specified bean or bean property to
the current HttpResponse object.

<bean:write ... >

```
<!-- writes the value of customer.getStreetAddress().toString() --
> <!-- to the HttpResponse object -->
<bean:write name="customer" property="streetAddress"/>
```

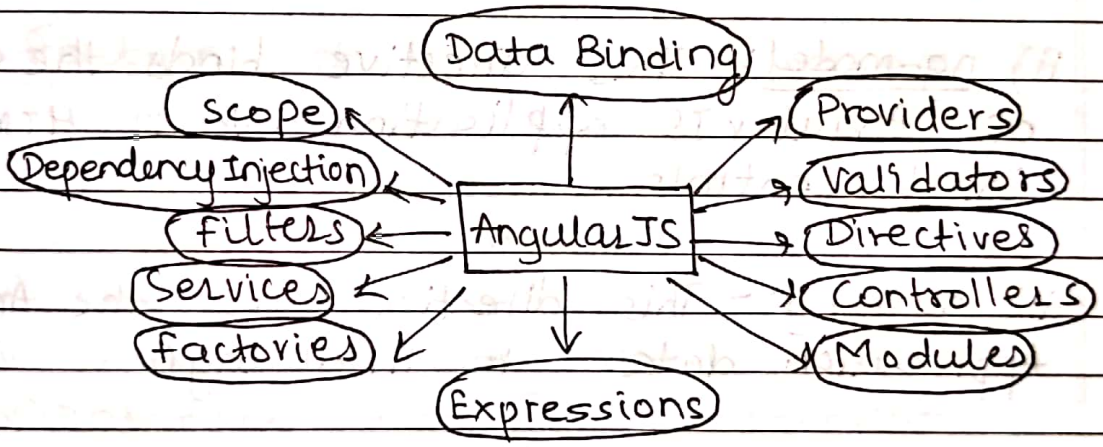
Program Code and Output:

1) Deploy the application from tomcat manager.

2) Provide the login username and password for login.

3) Test the result for correct and incorrect c

- **Title:-** Design & develope any web applications using AngularJS.
- **Problem Statement:-** Create an application for Bill payment Record using AngularJS.
- **Theory:-** AngularJS is an opensource web application framework.
  - **Core features:-**



- **Advantages of AngularJS:-** i) It gives the ability to make single page application in a spotless and visible way.
ii) AngularJS code is unit testable.
iii) AngularJS gives reusable segments.
iv) With AngularJS, the engineers can accomplish ex usefulness with short code.

- **Model View Controller:-**
i) Model:- It is most minimal level of example incharge of looking after information.

ii) View:- It is in charge of showing all or a par. of the information to client.

iii) controller:- It is product code that controls the connections between the model & view.

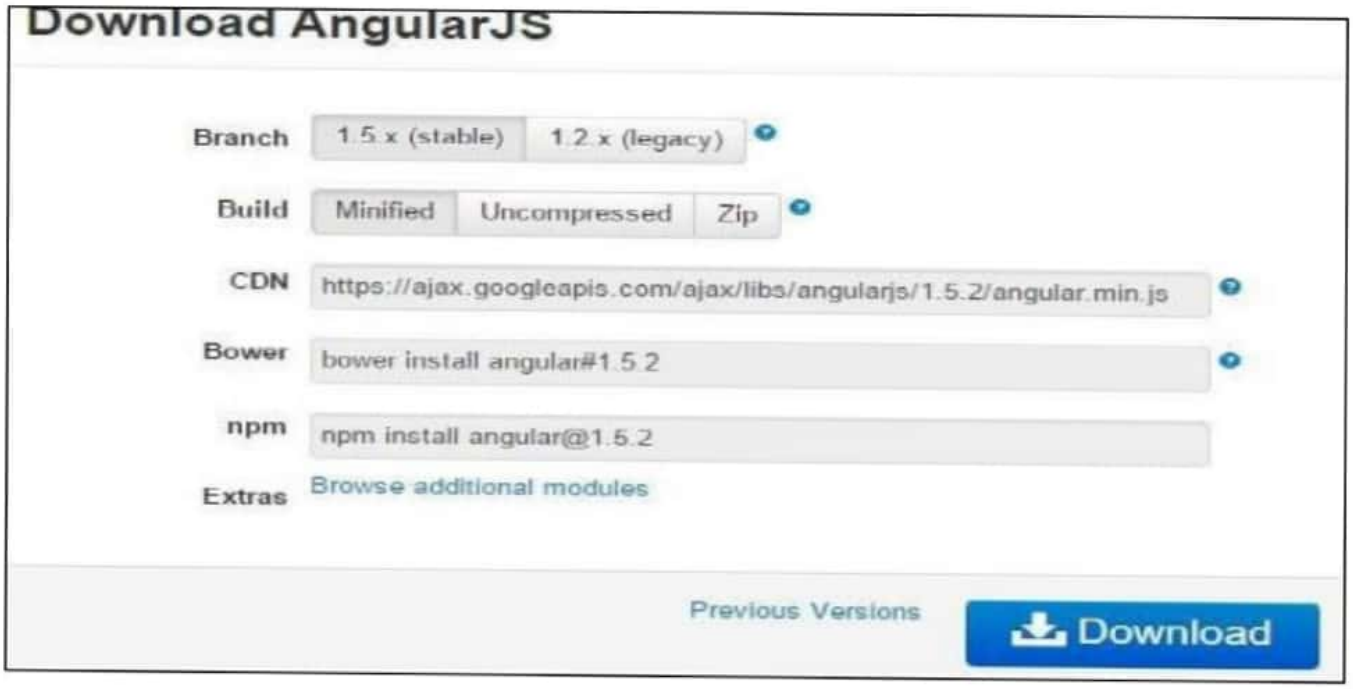
- AngularJS is a MVC based structure:-

i) An AngularJS application comprises of following three essential parts -ng-app- This directive defines and links an AngularJS application to HTML.

ii) ng-model:- This directive binds the values of AngularJS application data to HTML input controls.

iii) ng-bind:- This directive binds the AngularJS Application data to HTML tags.

- Conclusion:- With the help of assignment it is helpful to understand features of AngularJS MVC model structure & it use in advanced web programming is studied.



PROGRAM CODE:

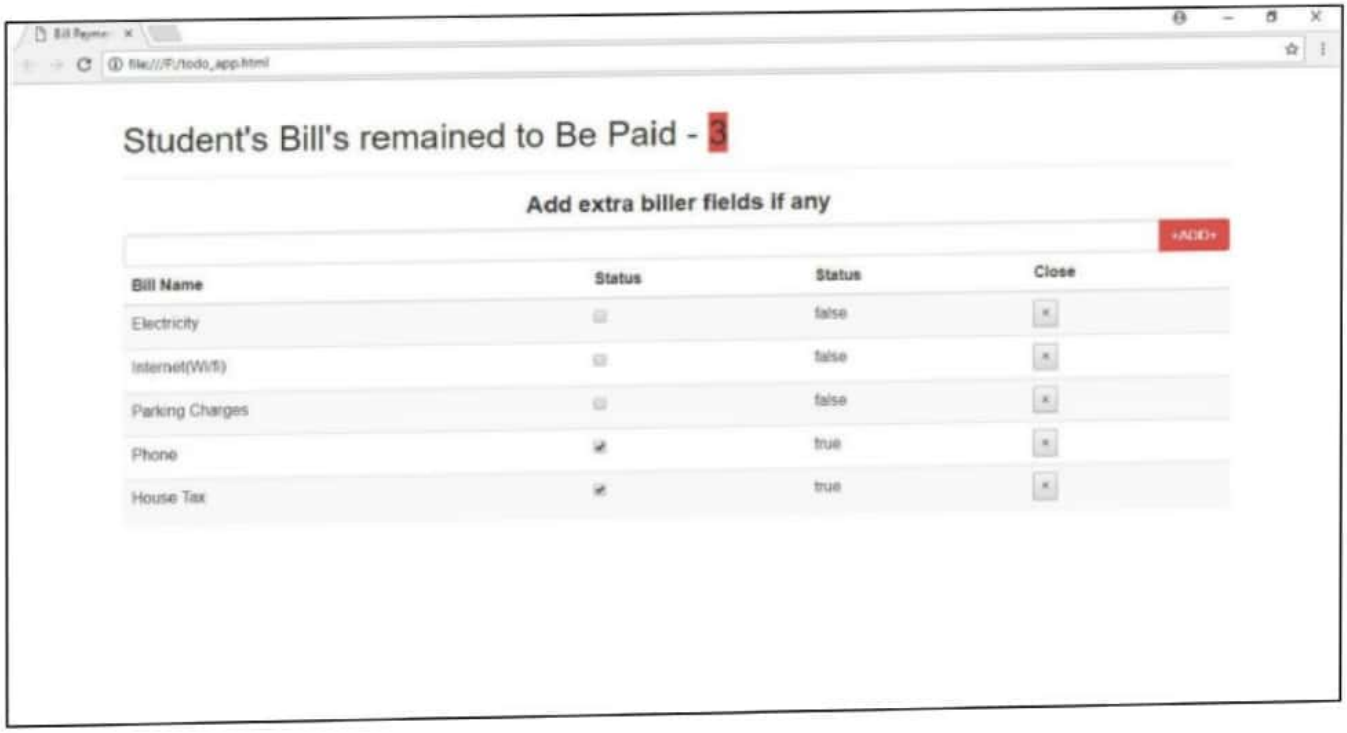
```
<html ng-app="billpayApp">
<!-- SCRIPTS TO BE ADDED IN HEAD TAG --
> <head>
<title>Bill Payment Record using angular and bootstram
framework</title>
<meta http-equiv="content-type" content="text/html; charset=utf-8" />
<!-- ACCESSING ANGULARJS BY CDN METHOD-->
<script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular.min
```

```
.js"></script>
<!-- ACCESSING STYLESHEET FOR DESIGN [OPTIONAL PART CAN BE
SKIP]-->
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.mi
n.css">
<!-- MODEL PART-->
<script>
var model = {
customer: "Student",
items: [{
bill: "Electricity",
status: false
},
{
bill: "Internet(Wi/fi)",
status: false
},
{
bill: "Parking Charges",
status: false
},
{
bill: "Phone",
status: true
},
{
bill: "House Tax",
status: true
}
]
}
varbillpayApp = angular.module("billpayApp", []);

billpayApp.controller("billpayctrl", function($scope)
{ $scope.billpay = model;
$scope.dueBills = function() {
var items = $scope.billpay.items;
var counter = 0;
items.forEach((item) => {
if (!item.status) {
counter++;
}
```

```
})
return counter;
} $
scope.redFlag =
function() {
return $scope.dueBills() <= 2 ? "label-success" : "label-danger";
}
$scope.addBills = function(billName)
{ obj = {
bill: billName,
status: false
} $
scope.billpay.items.push(obj);
} $
scope.removeBills =
function(rmvBills) {
$scope.billpay.items.splice($scope.billpay.items.indexOf(rmvBills), 1);
}
});
</script>
</head>
<!-- HTML BODY PART-->
<body ng-controller="billpayctrl">
<div class="container">
<div class="page-header">
<h1>{{billpay.customer}}'s Bill's remained to Be Paid -
<span class="lable" ng-class="redFlag()" ng-hide="dueBills()==0">
{{dueBills()}}
</span>
</h1>
</div>
<h3><center><b>Add extra biller fields if any</center></b></h3>
<div class="panel">
<div class="input-group">
<input class="form-control" ng-model="billName" />

<span class="input-group-btn">
<button class="btnbtn-danger" ngclick="
addBills(billName)">+ADD+</button>
</span>
</div>
<table class="table table-striped">
<thead>
```

```
<tr>
<th>Bill Name</th>
<th>Status</th>
<th>Status</th>
<th>Close</th>
</tr>
</thead>
<tbodyng-model="rmvBills">
<trng-repeat="item in billpay.items" ng-model="item">
<td>{{item.bill}}</td>
<td><input type="checkbox" ng-model="item.status" /></td>
<td>{{item.status}}</td>
<td>
<button type="button" ng-click="removeBills(item)">&amp;times;</button>
</td>
</tr>
</tbody>
</table>
</div>
</div>
</div>
</body>
</html>
```

Output:



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Date __/__/__ WT Assignment No-10

- **Title:-** Web application using EJB.
- **Problem statement:-** Design, develope & deploy web applicatn using EJB.
- **Theory:-** • **JavaBeans:-** J2EE application contain contains the components that can be used by clients for executing the business logic These components are known as Enterprise Java Beans (EJB)
- **Features of EJB:-** Some features of an applicatn server include following-

i) Client communication.
ii) State management.
iii) Transaction management.
iv) Database connection management.
v) Asynchronous messaging.
vi) Application server administration.

- **Types of EJB:-**

i) Session Beans.
ii) Entity Beans.
iii) Message driven Beans.

Date __/__/__

Saathi

- Design / Execution steps:- i) Design EJB project.
ii) Start JBoss & Deploy it on JBoss server.
iii) Design HTML & JSP file with an extension of html & .jsp.
iv) Run the applicatn in browser and get result.

- Conclusion:- Hence, we have created a simple EJB 3 statelers session bean & a local Java applicatn client which will call/invoke the bean to develope for performing addition of 2 numbers.

PROGRAM CODE:

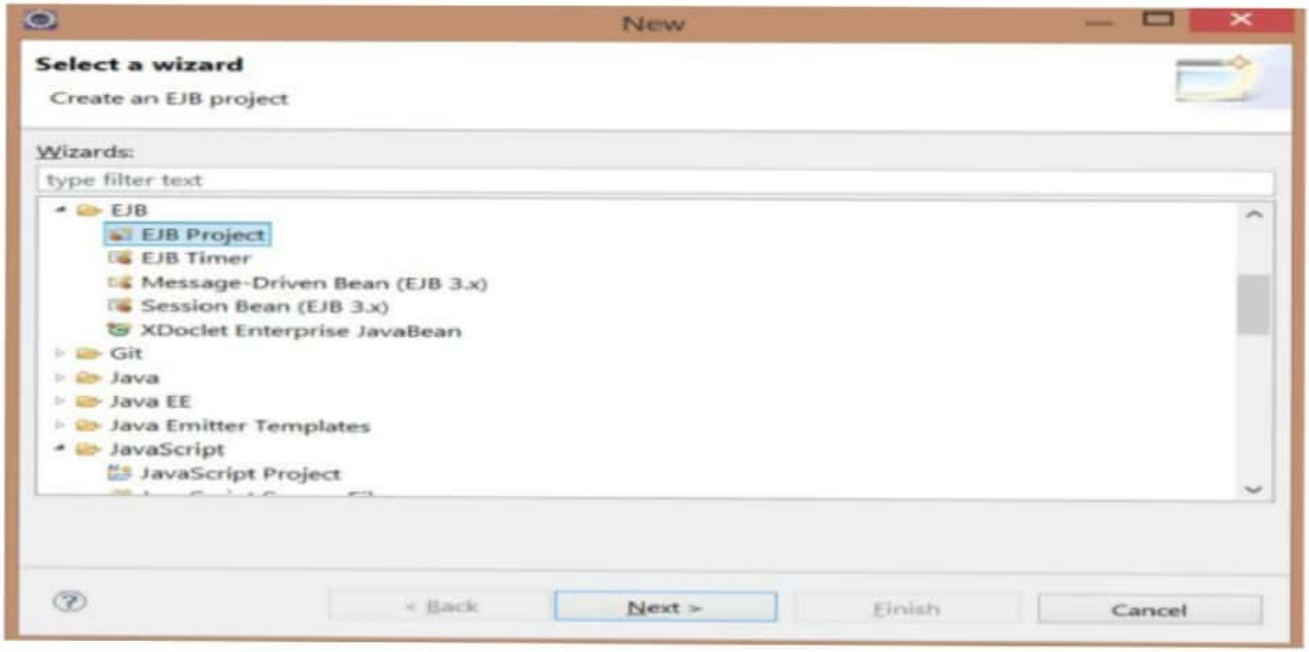
Create a new EJB Project:

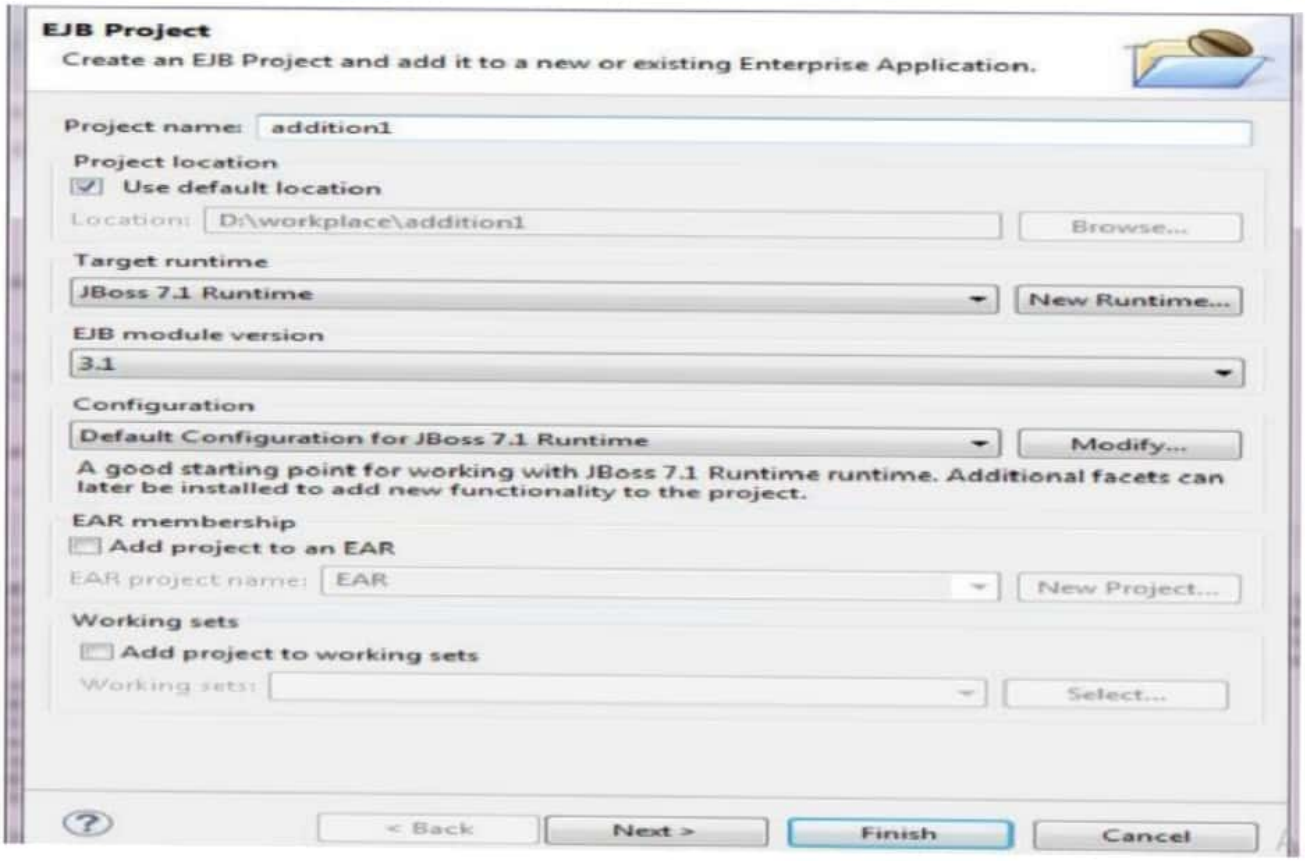
Open Eclipse IDE and create a new EJB project which can be done by clicking on,
File menu -> New ->EJB Project

Step 1:

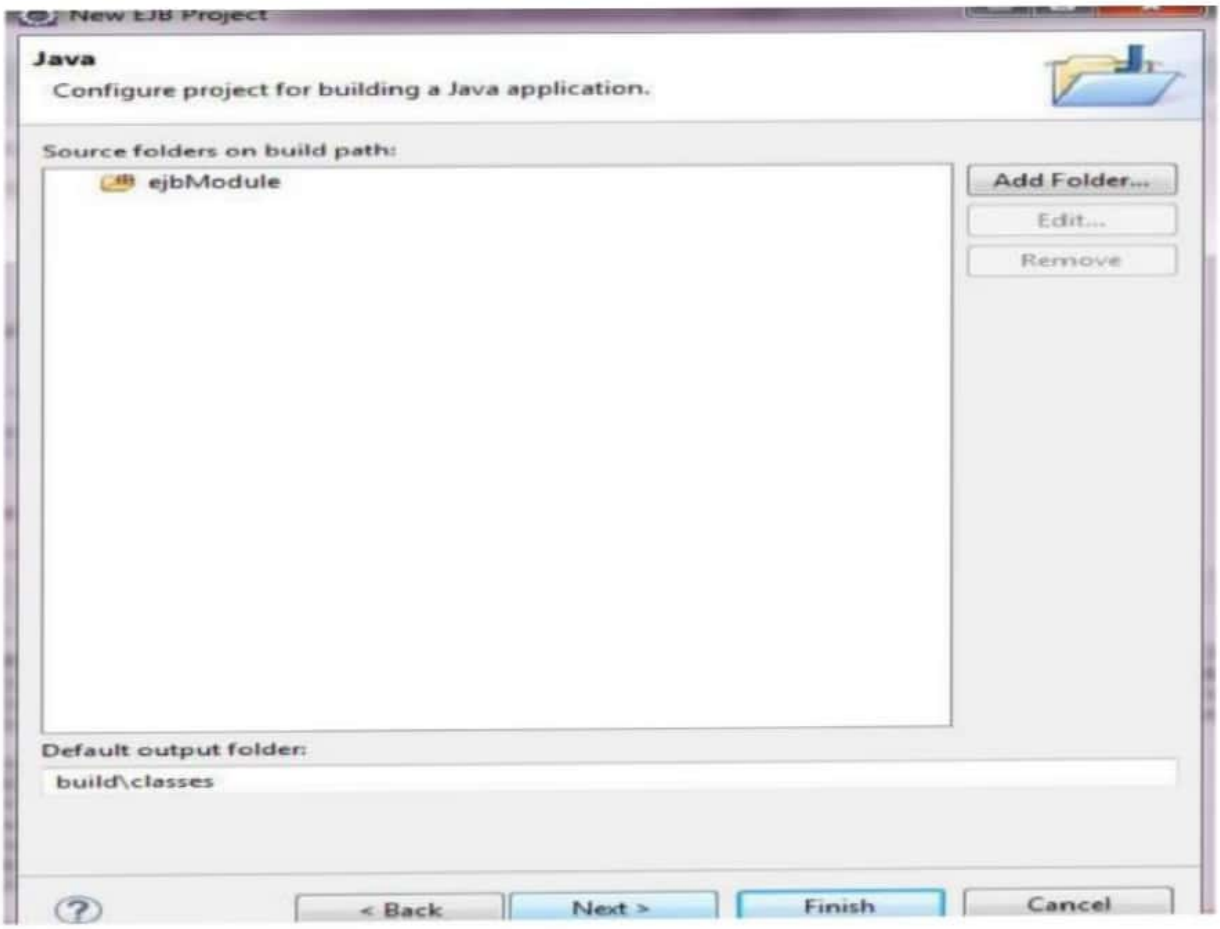
Create EJB project addition

Click File –> New –> Other –> EJB –> EJB Project –> Next

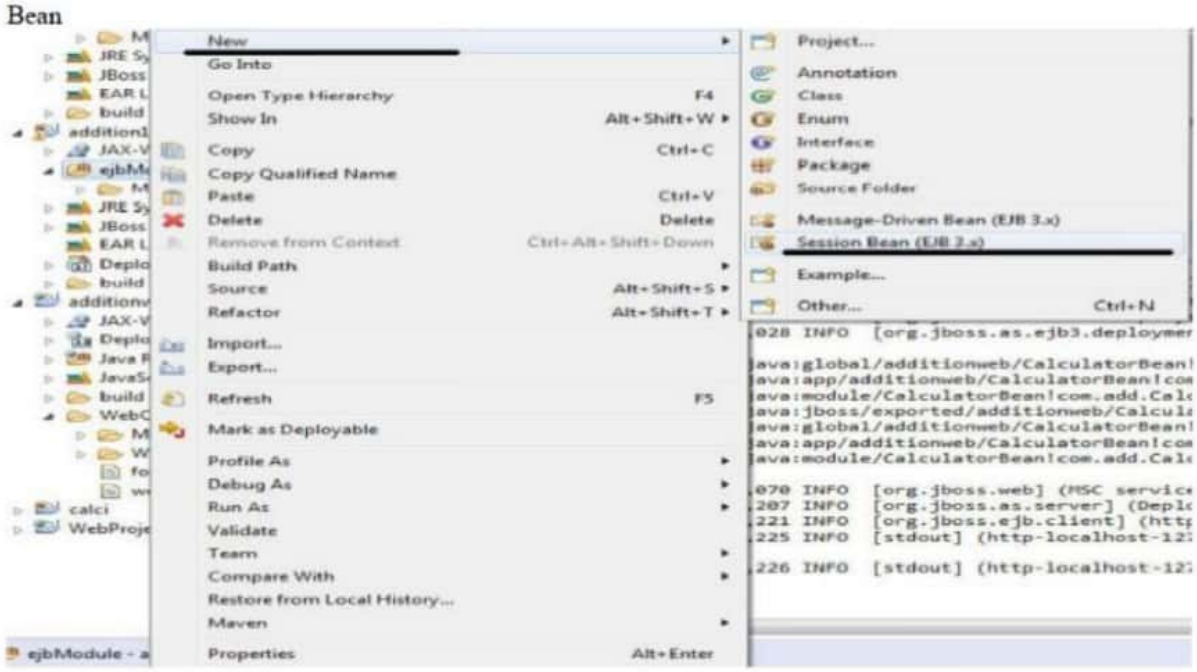




Step 2:
Now create Stateless session bean with its remote interface. Expand project –> expande
ejbModule –> Right click Session Bean –> New –> Session



Bean



Write following code in CalculatorBean.java

CalculatorBean.java | CalculatorBeanRemote.java | webappadd.jsp

```
1  package com.add;
2
3  import javax.ejb.LocalBean;
5
6  /**
7   * Session Bean implementation class CalculatorBean
8   */
9  @Stateless
10 @LocalBean
11 public class CalculatorBean implements CalculatorBeanRemote {
12
13     /**
14      * Default constructor.
15      */
16     public CalculatorBean() {
17         // TODO Auto-generated constructor stub
18     }
19
20     public float add(float a, float b)
21     {
22         return a+b;

     }

}
```

Write Following code in CalculatorBeanRemote.java

CalculatorBean.java | CalculatorBeanRemote.java

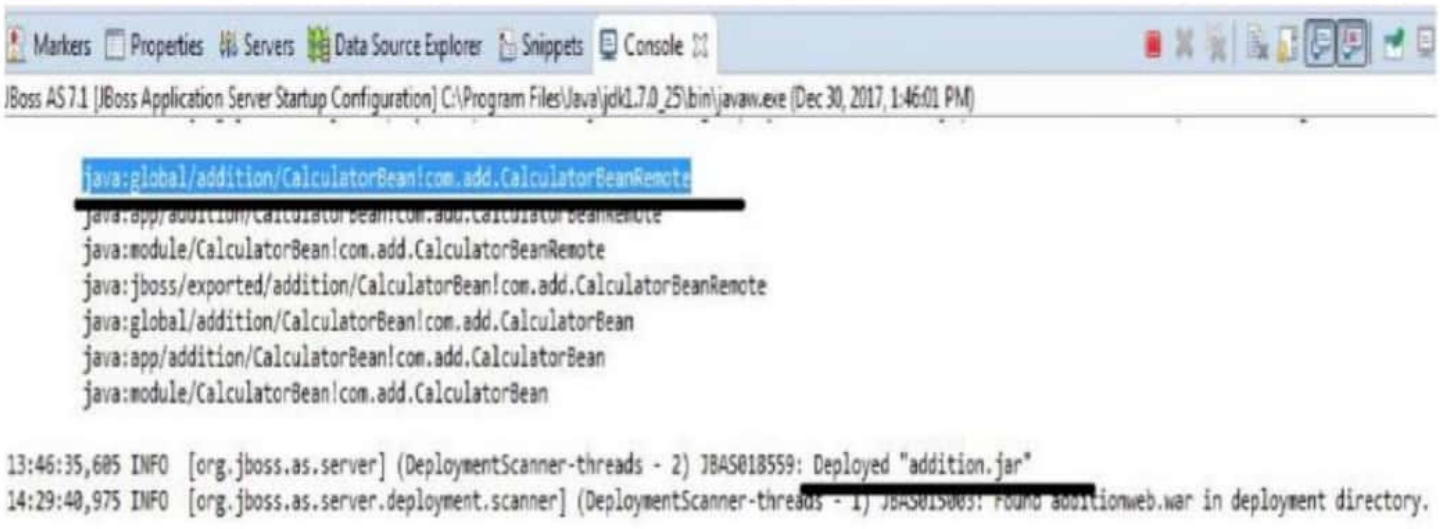
```
1  package com.add;
2
3  import javax.ejb.Remote;
4
5  @Remote
6  public interface CalculatorBeanRemote {
7
8      public float add(float a, float b);
9
10 }
11
```

Step 3:
Deploying the project :

Now we need to deploy the our EJB "addition" on server. Follow the steps mentioned bellow
to deploy this project on server.
Strat the server
Right click on "JBoss 7.1 Runtime Server" from Servers view and click on Start.

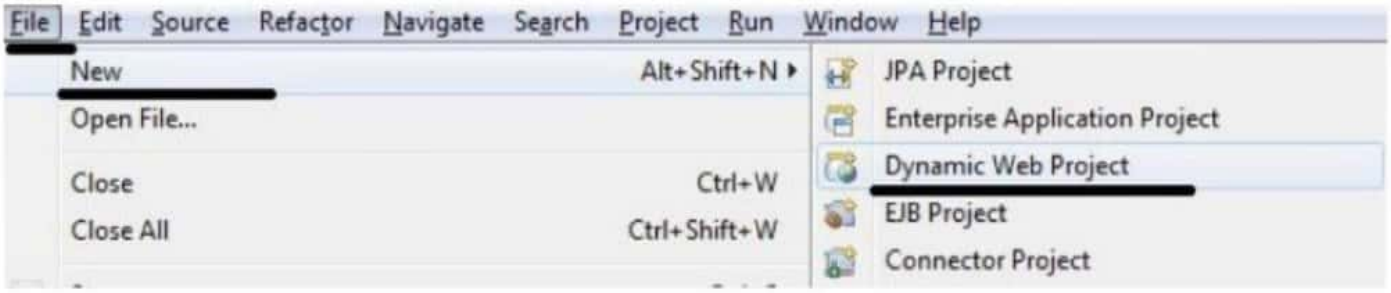
Step 4:
Now next step Go to Project-> addition -> right click -> run-> Run on server

Step 5:
After running the program you can see following message on console



Step 6:
Once this jar file is deployed to server now export EJB jar file save it in desktop -> Finish.

Step 7:
Now create another project



Write the following code in form.html

//form.html

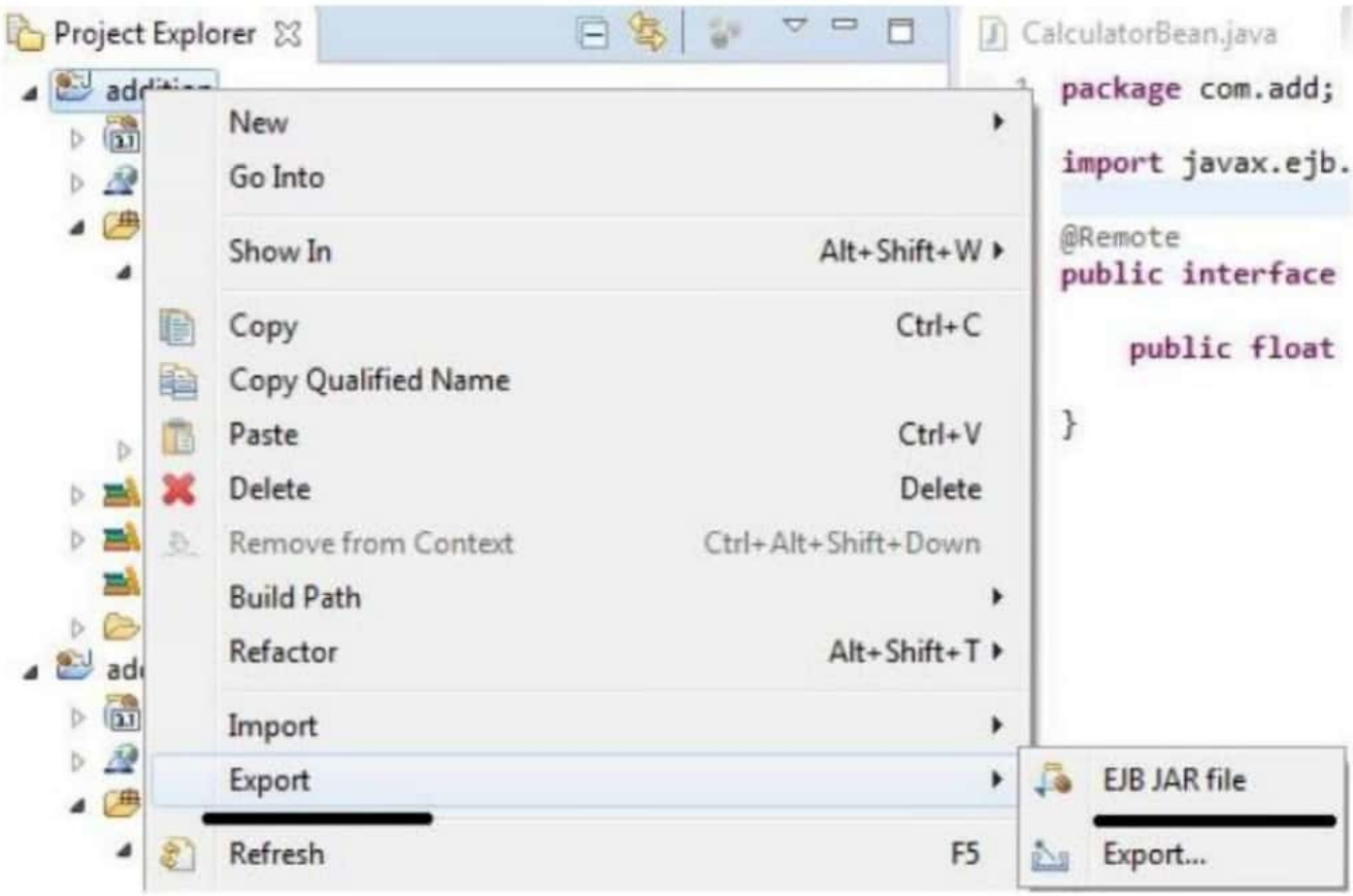
```
<html>
    <head>
        <title>Calculator</title>
    </head>

    <body bgcolor="blue">
        <h1>Calculator</h1>
        <hr>

        <form action="webappadd.jsp" method="POST">
    <p>Enter first value:
            <input type="text" name="num1" size="25"></p>
            <br>
        <p>Enter second value:
            <input type="text" name="num2" size="25"></p>
            <br>

            <b>Seclect your choice:</b><br>
    <input type="radio" name="group1" value ="add">Addition<br>

    <p>
            <input type="submit" value="Submit">
            <input type="reset" value="Reset"></p>

        </form>


    </body>
</html>
```

Write following code inwebappadd.jsp

CalculatorBean.java | CalculatorBeanRemote.java | webappadd.jsp | form.html | webclient.jsp | http://localhost:8080/additionweb/w... | CalculateBean.java

```jsp
<%@ page contentType="text/html; charset=UTF-8" %>
<%@ page import="com.add.*, javax.naming.*, javax.ejb.EJB"%>

<%

float result=0;
//  CalculatorBeanRemote calculator=null;


    try {

        InitialContext ic = new InitialContext();


          CalculatorBeanRemote  calculator = (CalculatorBeanRemote) ic.lookup("java:global/addition/CalculatorBean!com.add.CalculatorBeanRemote");

          System.out.println("Loaded Calculator Bean");
//CalculatorBean



        String s1 = request.getParameter("num1");
          String s2 = request.getParameter("num2");
          String s3 = request.getParameter("group1");

System.out.println(s3);

        if ( s1 != null && s2 != null ) {
            Float num1  = new Float(s1);
             Float num2  = new Float(s2);

             if(s3.equals("add"))
                 result=calculator.add(num1.floatValue(),num2.floatValue());


    %>
    <p>

        <b>The result is:</b> <%= result %>
        <p>

        <%
            }
          }// end of try
          catch (Exception e) {
     e.printStackTrace ();
    //result = "Not valid";
   }

%>
```

Write following code inwebappadd.jsp



OUTPUT:-