

# **SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING**

**(AN AUTONOMOUS INSTITUTION,  
AFFILIATED TO ANNA UNIVERSITY)**

**Rajiv Gandhi Salai (OMR), Kalavakkam - 603 110.**

## **LABORATORY RECORD**

NAME : ..... SHREYA SRIRAM .....

Reg. No. : ..... 195001106 .....

Dept. : ..... CSE ..... Sem. : ..... VI ..... Sec. : ..... B .....

**SSN**

**SRI SIVASUBRAMANIYA NADAR  
COLLEGE OF ENGINEERING, CHENNAI**

(AN AUTONOMOUS INSTITUTION, AFFILIATED TO ANNA UNIVERSITY)

**BONAFIDE CERTIFICATE**

Certified that this is the bonafide record of the practical work done in the  
UCS1611 - INTERNET PROGRAMMING Laboratory by

Name ..... SHREYA ..... SRIRAM .....

Register Number ..... 195001101 .....

Semester ..... 1 .....

Branch ..... CSE .....

Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam.

During the Academic year ..... 2021 - 2022 .....

Faculty

Head of the Department

Submitted for the End Semester Practical Examination held at SSNCE  
on 20.6.2022

Internal Examiner

External Examiner

## INDEX

Name : SHREYA SRIRAM Reg. No. 195001106

Sem : VI Sec : B

## **ASSIGNMENT 1**

## **OBJECTIVE:**

To develop a personal website using the HTML5 framework.

## **METHODS, TECHNIQUES AND TECHNOLOGIES USED:**

HTML5 is used to develop the website

## SOURCE CODE:

## **1. Homepage/ Personal Information page**

## 2. My Interests

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <meta name = "viewport" content = "width-device-width">
```



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam ante nibh, ultricies quis molestie imperdiet, laoreet eu lectus. Pellentesque non odio id enim varius condimentum sit amet eget augue. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Integer vel suscipit tellus. Mauris porttitor risus ipsum, ac ultricies erat porta vel. Sed volutpat in nisi non rutrum. Sed euismod dolor sed libero imperdiet porta. Curabitur ac nisi ex. Nam ac commodo libero. Etiam molestie ultricies imperdiet. Donec ipsum orci, tempor in tempus et, rhoncus ac lorem. Fusce quis lacus id mauris laoreet tempor et id urna. Aenean volutpat dolor libero, quis viverra ipsum scelerisque tempor. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

  </p>  
  </details>  
  <li><h2><strong>Crochet</strong></h2></li>  
  <p>

  Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus. </p>

  <li><h3><strong>Coding</strong></h3></li>  
  <p>

  Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.

  </p>  
  </ul>

<footer style = "margin-bottom: 20px; margin-left: 20px;">

  <address>

    Written by Shreya Sriram.<br>  
    Mobile: +91 73580 03061<br>

Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br></address>

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

### **3. Academic Proficiency details**

```

<header>
    <h1 align = "center">ACADEMIC PROFICIENCY</h1>
</header>
<!--to insert table -->
<br>
<br>
<table style = "width:500px" border = "1">
    <caption>
        ACADEMIC QUALIFICATIONS
    </caption>
    <thead>
        <tr>
            <th>Class</th>
            <th colspan = "2">CGPA/ Percentage</th>
            <th>Institution</th>
            <th>Year of Passing</th>
        </tr>
    </thead>
    <tbody>
        <tr>
            <td>School (5-8) </td>
            <td>-</td>
            <td>95%</td>
            <td rowspan = "2">ADIS</td>
            <td>2015</td>
        </tr>
        <tr>
            <td>10th Board</td>
            <td>10 CGPA</td>
            <td>100%</td>
            <td>2017</td>
        </tr>
        <tr>
            <td>12th Board</td>
            <td> - </td>
            <td>96.8%</td>
            <td>IHS</td>
            <td>2019</td>
        </tr>
    </tbody>
</table>

```

```

</tr>
<tr>
    <td>College</td>
    <td>9.339</td>
    <td> - </td>
    <td>SSN</td>
    <td>2023</td>
</tr>
</tbody>
</table>

<h3>Technical Skills</h3>
<ol type = "A">
    <li>Languages</li>
    <ul>
        <li>C/C++</li>
        <li>Java</li>
        <li>Python</li>
        <li>HTML,CSS,JS</li>
        <li>Flask</li>
        <li>C++</li>
    </ul>
    <li>Frameworks</li>
    <ul>
        Flask
    </ul>
</ol>
<footer style = "margin-bottom: 20px; margin-left: 20px;">
    <address>
        Written by Shreya Sriram.<br>
        Mobile: +91 73580 03061<br>
        Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br>
    </address>
</footer>
</body>
</html>

```

#### **4. Events organised**

```
<!DOCTYPE html>
```

parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet,

lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus. </p></h2></article>

```
<footer>
  <address>
    Written by Shreya Sriram.<br>
    Mobile: +91 73580 03061<br>
    Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br>
  </address>
</footer>
</body>
</html>
```

## 5. Feedback

```

    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
        <a href = "feedback.html">Feedback</a>
    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
        <a href = "journey.html">Journey to SSN</a>
    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

    </ul>
    </nav>
    <br>

    <header>
        <h1 align = "center">FEEDBACK</h1>
    </header>
    <br>
    <form>
        <label for="fname">First Name</label> <br>
        <input type = "text" id="fname" name="fname"><br>
        <label for="lname">Last Name</label> <br>
        <input type = "text" id="lname" name="lname"><br>
        <label for="email">Email</label> <br>
        <input type = "email" id="email" name="email"><br>
        <label for="comment">Comments</label> <br>
        <textarea id="text" name="comment" rows="4" cols="50"></textarea>
    </form>

    <footer style = "margin-bottom: 20px; margin-left: 20px;">
        <address>
            Written by Shreya Sriram.<br>
            Mobile: +91 73580 03061<br>
            Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br>
        </address>
    </footer>
</body>
</html>

```

## 6. My Journey to SSN

```

<!DOCTYPE html>
<html>
    <head>
        <meta charset = "utf-8">

```



SSN COLLEGE OF ENGINEERING<br></figception><br>

<!--to write details-->  
<ul>

<blockquote>  
    Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam ante nibh, ultricies quis molestie imperdiet, laoreet eu lectus. Pellentesque non odio id enim varius condimentum sit amet eget augue. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Integer vel suscipit tellus. Mauris porttitor risus ipsum, ac ultricies erat porta vel. Sed volutpat in nisi non rutrum. Sed euismod dolor sed libero imperdiet porta. Curabitur ac nisi ex. Nam ac commodo libero. Etiam molestie ultricies imperdiet. Donec ipsum orci, tempor in tempus et, rhoncus ac lorem. Fusce quis lacus id mauris laoreet tempor et id urna. Aenean volutpat dolor libero, quis viverra ipsum scelerisque tempor. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

</blockquote>  
<h4>

    Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus. </h4>

<h5>

        Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.

</h5>  
</ul>

<footer style = "margin-bottom: 20px; margin-left: 20px;">

<address>

    Written by Shreya Sriram.<br>

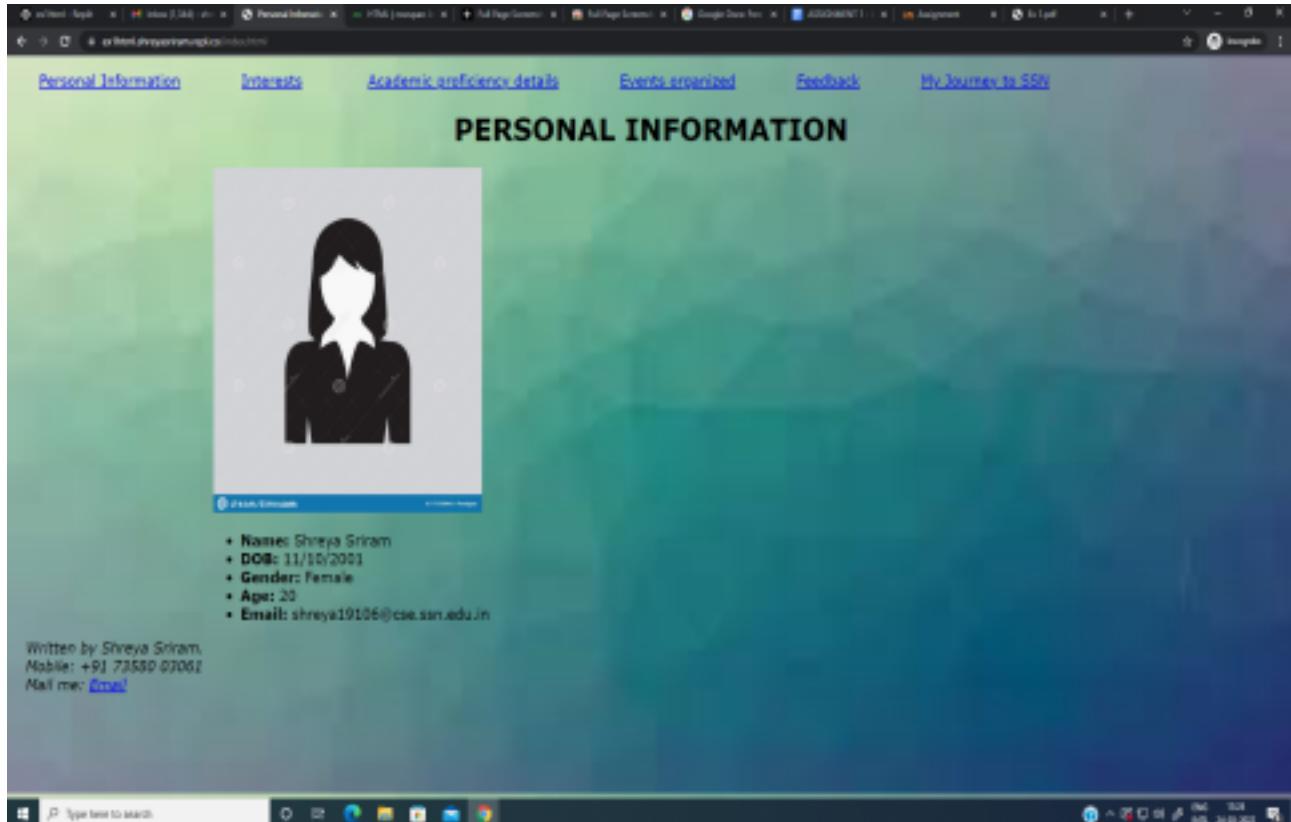
    Mobile: +91 73580 03061<br>

    Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br>

```
</address>
</footer>
</body>
</html>
```

## **OUTPUT SCREENSHOTS**

### **1. Homepage/ Personal information page**



### **2. My Interests**

Personal Information   Interests   Academic proficiency details   Events organized   Feedback   My Journey to SSN

## MY INTERESTS

**Singing**

▼ Singing

"Hello world!!"

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam ante nibh, ultricies quis molestie imperdiet, lacus eu lectus. Pellentesque non odio id enim varius condimentum sit amet eget augue. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Integer vel suscipit tellus. Mauris porttitor risus ipsum, ac ultrices erat porta vel. Sed volutpat in nisi non rutrum. Sed euismod dolor sed libero imperdiet porta. Curabitur ac nisi ex. Nam ac commodo libero. Etiam molestie ultricies imperdiet. Donec paucum arcu, tempor in tempus et, rhoncus ac lorem. Fusce quis lacus id mauris lacus tempor et id urna. Aenean volutpat dolor libero, quis viverra ipsum scelerisque tempor. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

**Crochet**

Proin erat nulla, rhoncus vehicula nisi sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In lacreet molestie ipsum, sed consectetur enim laculis at. Mauris tristique nisi eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficiunt aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros laculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus.

**Coding**

Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.

Written by Shreya Sriram.  
Mobile: +91 73580 03061  
Mail me: [Email](mailto:Email)

Personal Information   Interests   Academic proficiency details   Events organized   Feedback   My Journey to SSN

## ACADEMIC PROFICIENCY

**ACADEMIC QUALIFICATIONS**

Class	CGPA/ Percentage	Institution	Year of Passing
School (5-8)	-	95%	2015
10th Board	10 CGPA	100%	ADIS
12th Board	-	95.5%	DHS
College	9.339	-	SSN
	-		2023

**Technical Skills**

A. Languages

- C/C++
- Java
- Python
- HTML,CSS,JS
- React
- C++

B. Frameworks

- React

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Mail me: [Email](mailto:Email)

## 4. Events Organized

Personal Information   Interests   Academic proficiency details   Events organized   Feedback   Journey to SSN

### EVENTS ORGANISED



**Event 1**

Proin erat nulla, rhoncus vehicula nisi sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, convallis lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim laculis ac. Mauris blandit nisi eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eras laculis et. Duis cursus curvus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus.

Written by Shreya Srivastava  
Mobile: +91 73580 03061  
Mail me: [Email](#)

## 5. Feedback

Personal Information   Interests   Academic proficiency details   Events organized   Feedback   Journey to SSN

### FEEDBACK

First Name

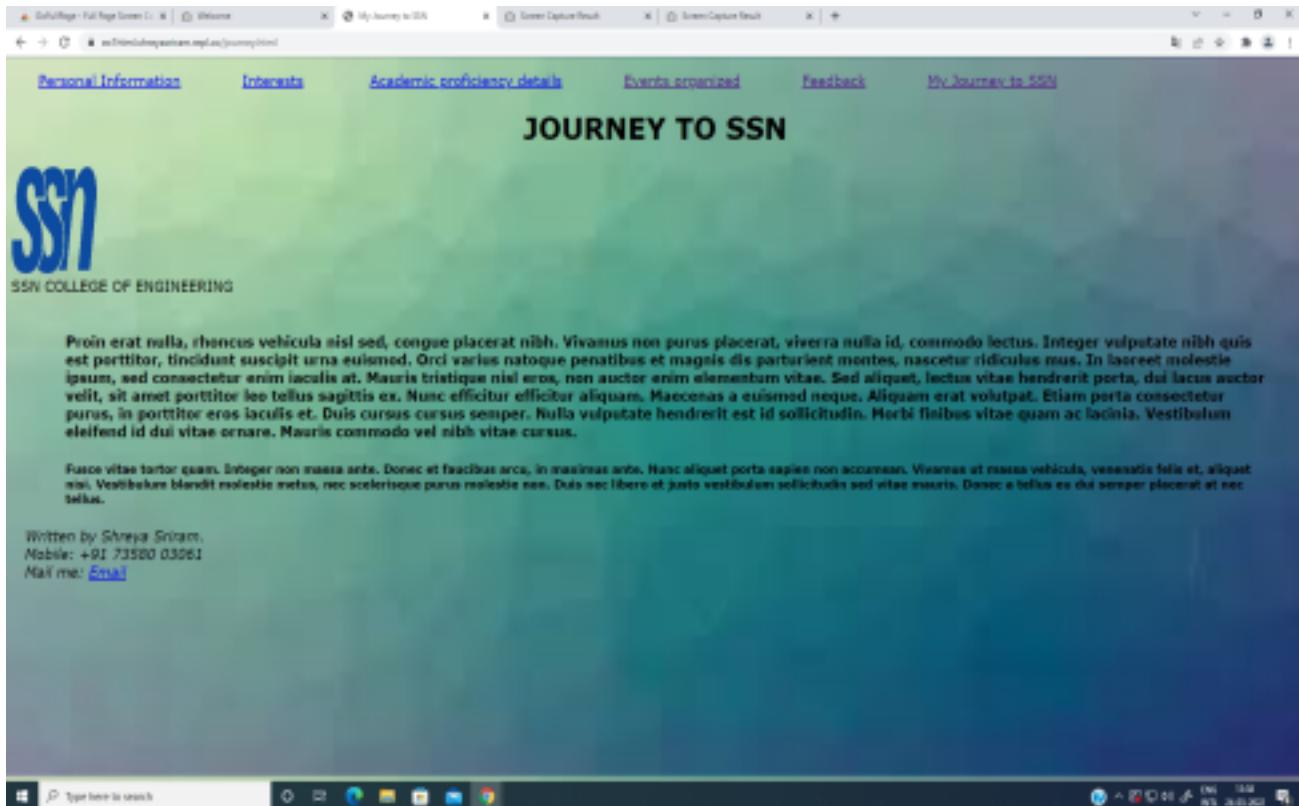
Last Name

Email

Comments

Written by Shreya Srivastava  
Mobile: +91 73580 03061  
Mail me: [Email](#)

## 6. Journey To SSN



### **BEST PRACTISES:**

Formatting for code readability, commenting code for details and versioning were used.

### **LEARNING OUTCOME**

1. Learnt to use HTML5 tags in a webpage
2. Developed a basic portfolio page using the above tags

## ASSIGNMENT 2

### DESIGN A PERSONAL WEBSITE USING HTML5 AND CSS3

## **OBJECTIVE:**

To develop a personal website using the HTML5 and CSS3 framework.

### **METHODS, TECHNIQUES AND TECHNOLOGIES USED:**

HTML5 and CSS3 are used in developing the website

## **SOURCE CODE:**

## **1. Homepage/ Personal information page**

## 2. Interests

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <meta name = "viewport" content = "width=device-width">
    <link rel = "stylesheet" type = "text/css" href = "style.css">
    <title>My Interests</title>
```

```
<br>
<header>
  <h1 class = "headings">MY INTERESTS</h1>
</header>
<!--to write details-->
<div class = "interest">
  <ul class = "interests-list">
    <li><strong><h1>Singing</strong></h1></li>
    <details>
      <summary>Singing</summary>
      <p>
```

<q>Hello world!!</q><br>

  Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam ante nibh, ultricies quis molestie imperdiet, laoreet eu lectus. Pellentesque non odio id enim varius condimentum sit amet eget augue. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Integer vel suscipit tellus. Mauris porttitor risus ipsum, ac ultricies erat porta vel. Sed volutpat in nisi non rutrum. Sed euismod dolor sed libero imperdiet porta. Curabitur ac nisi ex. Nam ac commodo libero. Etiam molestie ultricies imperdiet. Donec ipsum orci, tempor in tempus et, rhoncus ac lorem. Fusce quis lacus id mauris laoreet tempor et id urna. Aenean volutpat dolor libero, quis viverra ipsum scelerisque tempor. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

    </p>  
    </details>  
    <li><h2><strong>Crochet</strong></h2></li>  
    <p>

      Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus.

    </p>  
    <li><h3><strong>Coding</strong></h3></li>  
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      Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.

    </p>  
    </ul>  
  </div>

<footer class = "footer-class">

  <address>

    Written by Shreya Sriram.<br>

Mobile: +91 73580 03061  
 Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a>  
 </address>  
 </footer>  
 </body>  
 </html>

### 3. Academic proficiency details

```

<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <meta name = "viewport" content = "width-device-width">
    <title>Academic Proficiency</title>
    <link rel = "stylesheet" type = "text/css" href = "style.css">
  </head>
  <body>

    <!--to create navigation bar-->
    <section>
      <nav class = "nav-bar">
        <ul>
          <a href = "index.html">Personal
Information</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
          <a href = "interest.html">Interests</a>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
          <a class = "current-link" href = "academic.html">Academic proficiency
details</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
          <a href = "events.html">Events
organized</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
          <a href =
"feedback.html">Feedback</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
          <a href = "journey.html">My Journey to
SSN</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
        </ul>
      </nav>
    </section>
  </body>

```

```

        </ul>
    </nav>
</section>

<header>
    <h1 class = "headings">ACADEMIC PROFICIENCY</h1>
</header>
    <!--to insert table -->
<br>
<br>
    <table>
        <caption class = "headings">
            ACADEMIC QUALIFICATIONS
        </caption>
    <thead>
        <tr>
            <th>Class</th>
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            <td>100%</td>
            <td>2017</td>
        </tr>
        <tr>
            <td>12th Board</td>
            <td> - </td>
        </tr>
    </tbody>
</table>

```

```

<td>96.8%</td>
<td>IHS</td>
<td>2019</td>
</tr>
<tr>
    <td>College</td>
    <td>9.339</td>
    <td> - </td>
    <td>SSN</td>
    <td>2023</td>
</tr>
</tbody>
</table>

<div class = "skill-container">
    <h3>Technical Skills</h3>
    <ol>
        <li><strong>Languages</strong></li>
        <ul>
            <li>C/C++</li>
            <li>Java</li>
            <li>Python</li>
            <li>HTML,CSS,JS</li>
            <li>Flask</li>
            <li>C++</li>
        </ul>
        <li><strong>Frameworks</strong></li>
        <ul>
            <li>Flask</li>
        </ul>
    </ol>
</div>
<footer class = "footer-class">
    <address>
        Written by Shreya Sriram.<br>
        Mobile: +91 73580 03061<br>
        Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br>
    </address>
</footer>
</body>

```

</html>

#### **4. Events organised**

```

<div id = "image-gallery">
    <img src = "event1.jfif" class = "image-events"></img>
</div>
<div id = "image-gallery">
    <img src = "event.jpg" class = "image-events"></img>
</div>
<div id = "image-gallery">
    <img src = "event1.jfif" class = "image-events"></img>
</div>
</div>
<div class = "events-container">
    <article>
        <h2>
            Event 1
        </h2>
        <p>Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non  

purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor,  

tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes,  

nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris  

tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui  

lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam.  

Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor  

eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi  

finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh  

vitae cursus.
        </p>
        </h2>
    </article>
</div>

<footer class = "footer-class">
    <address>
        Written by Shreya Sriram.<br>
        Mobile: +91 73580 03061<br>
        Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br>
    </address>
</footer>
</body>
</html>

```

## 5. Feedback

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset = "utf-8">
    <meta name = "viewport" content = "width-device-width">
    <link rel = "stylesheet" href = "style.css" type = "text/css">
    <title>Feedback</title>
  </head>
  <body>
    <nav class = "nav-bar">
      <ul>
        <a href = "index.html">Personal
Information</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
        <a href = "interest.html">Interests</a>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
        <a href = "academic.html">Academic proficiency details</a>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
        <a href = "events.html">Events organized</a>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
        <a class = "current-link" href = "feedback.html">Feedback</a>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
        <a href = "journey.html">My Journey to SSN</a>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

      </ul>
    </nav>
    <br>

    <header>
      <h1 class = "headings">FEEDBACK</h1>
    </header>
    <br>
    <form class >
      <label for="fname"></label> <br>
      <input type = "text" placeholder = "First Name" id="fname" name="fname"
required><br>
      <label for="lname"></label> <br>
```

```

<input type = "text" placeholder = "Last Name" id="lname" name="lname"
required><br>
<label for="email"></label> <br>
<input type = "email" id="email" placeholder = "Email ID" name="email"
required><br>
<label for="comment"></label> <br>
<textarea id="text" name="comment" placeholder = "Comments" rows="4"
cols="50"></textarea><br><br>
<input type="submit" class = "submit-button" value="Submit"/>
</form>

<footer class = "footer-class">
<address>
Written by Shreya Sriram.<br>
Mobile: +91 73580 03061<br>
Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br>
</address>
</footer>
</body>
</html>

```

## **6. My journey to SSN**

```

<!DOCTYPE html>
<html>
<head>
<meta charset = "utf-8">
<meta name = "viewport" content = "width-device-width">
<link rel = "stylesheet" type = "text/css" href = "style.css">
<title>My Journey to SSN</title>
</head>
<body style = "background: url(index.jpg); background-size: cover; font-family: Verdana;
font-size: 20px">

<!--to create navigation bar-->
<section>
<nav class = "nav-bar">
<ul>

```

```

<a href = "index.html">Personal
Information</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
<a href = "interest.html">Interests</a>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
    <a href = "academic.html">Academic proficiency
details</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nb
sp;
        <a href = "events.html">Events
organized</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&
nbsp;
        <a href =
"feedback.html">Feedback</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
;&nbsp;&nbsp;&nbsp;
            <a class = "current-link" href = "journey.html">My Journey to
SSN</a>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
;
        </ul>
    </nav>
</section>
<header>
    <h1 class = "headings">JOURNEY TO SSN</h1>
</header>

<!--to insert image -->
<img src = "ssn.png" class = "image-journey" usemap ="#ssn"></img>
<map name="ssn">
    <area shape="rect" coords="33,44,82,126" alt="Sun" title = "SSN College of
Engineering">
</map><br>
<figcaption>
    SSN COLLEGE OF ENGINEERING<br>
</figcaption>
<br>

<!--to write details-->
<ul>
    <blockquote>
        Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam ante nibh, ultricies
quis molestie imperdiet, laoreet eu lectus. Pellentesque non odio id enim varius condimentum sit

```

amet eget augue. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Integer vel suscipit tellus. Mauris porttitor risus ipsum, ac ultricies erat porta vel. Sed volutpat in nisi non rutrum. Sed euismod dolor sed libero imperdiet porta. Curabitur ac nisi ex. Nam ac commodo libero. Etiam molestie ultricies imperdiet. Donec ipsum orci, tempor in tempus et, rhoncus ac lorem. Fusce quis lacus id mauris laoreet tempor et id urna. Aenean volutpat dolor libero, quis viverra ipsum scelerisque tempor. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

</blockquote>

<h4>

Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus.

</h4>

<h5>

Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.

</h5>

</ul>

<footer class = "footer-class">

<address>

Written by Shreya Sriram.<br>

Mobile: +91 73580 03061<br>

Mail me: <a href="mailto:shreyasriram00@gmail.com">Email</a><br>

</address>

</footer>

</body>

</html>

**Style.css**

```
body {
    background: linear-gradient(#5EC2B7, #2CA6A4);
    background-size: cover;
    font-family: Verdana;
    font-size: 20px;
    text-align: center;
    height: 100vh;
    width: 100vw;
    margin: 0;
}

.nav-bar {
    text-align: center;
    position: relative;
    height: 20%;
    z-index: 3;
}

.nav-ul {
    display: flex;
    flex-direction: row;
}

.nav-bar a {
    color: black;
    text-decoration: none;
    padding: 5px;
}

.nav-bar a:hover {
    text-decoration: underline;
}

.nav-bar a:active {
    color: white;
    background-color: black;
}

.nav-bar a:visited {
    color: grey;
}
```

```
.current-link {  
    color: white !important;  
    background-color: black;  
}  
}
```

```
.headings {  
    text-align: center;  
    text-decoration: bold;  
}  
}
```

```
.personal-img {  
    height: 500px;  
    width: 500px;  
    text-align: center;  
}  
}
```

```
.personal-details {  
    list-style-type: none;  
}  
}
```

```
table, th, td {  
    border: 1px solid;  
    text-align: center;  
    width: 40%;  
    margin: auto;  
}  
}
```

```
tr:hover {  
    background-color: white;  
    color: black;  
}  
}
```

```
tr:nth-child(even) {  
    background-color: #9DD9D2;  
}  
}
```

```
.skill-container {  
    text-align: center;  
    width: 50%;  
    margin: auto;  
}
```

```
    text-shadow: 10px blue;
    list-style-type: none;
}
```

```
.footer-class {
    text-align: center;
    margin-top: 50px;
    font-size: 15px;
}
```

```
.image-journey {
    height: 20%;
    width: 30%;
    margin-left:auto;
    margin-right:auto;
}
```

```
.image-events {
    height: 30%;
    width: 30%;
    margin: auto;
}
```

```
input {
    width: 50%;
    padding: 12px 20px;
    margin: 8px 0;
    box-sizing: border-box;
    height: 20%;
    margin: auto;
}
```

```
input:focus {
    background-color: rgb(132, 190, 212);
}
```

```
textarea {
    resize: none;
    width: 50%;
    border-radius: 4px;
```

```
}

.submit-button {
    width: 10%;
    padding: 5px;
    background-color: rgb(197, 194, 194);
    border: none;
    margin: auto;
}

.interest {
    padding: 5%;
}

.interests-list {
    list-style-type: none;
    text-decoration: bold;
}

.events-container {
    width: 80%;
    margin: auto;
    padding-left: 5%;
    padding-right: 5%;
    animation-name: events;
    animation-duration: 4s;
}

@keyframes events {
    0% {background-color:red; left:0px; top:0px;}
    25% {background-color:yellow; left:200px; top:0px;}
    50% {background-color:blue; left:200px; top:100px;}
    75% {background-color:green; left:0px; top:200px;}
    100% {background-color:red; left:0px; top:0px;}
}

#gallery {
    margin: 5px;
    border: 1px solid #ccc;
    float: left;
```

```
    width: 180px;  
}  
}
```

```
#gallery img {  
    width: 100%;  
    height: auto;  
}
```

## **OUTPUT SCREENSHOTS:**

The screenshot shows a web page titled "PERSONAL INFORMATION". At the top, there is a navigation bar with tabs: "Personal Information" (which is active and highlighted in black), "Interests", "Academic proficiency details", "Events organized", "Feedback", and "My Journey to SSN". Below the navigation bar, the main content area has a heading "PERSONAL INFORMATION". In the center, there is a placeholder image of a person's face, which is a white silhouette against a dark background, surrounded by small circular icons. Below this image, the text "© dreamstime.com" and "ID 1111111112 © Fotograf" are visible. To the right of the image, the user's details are listed:  
**Name:** Shreya Sriram  
**DOB:** 11/10/2001  
**Gender:** Female  
**Age:** 20  
**Email:** shreya19106@cse.ssn.edu.in

At the bottom of the page, there is a footer bar with the text: "Written by Shreya Sriram, Mobile: +91 73580 03061 Mail me: [Email](#)".

## MY INTERESTS

### Singing

► Singing

### Crochet

Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus.

### Coding

Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.

*Written by Shreya Sriram.  
Mobile: +91 73580 03061  
Mail me: [Email](#)*

## ACADEMIC PROFICIENCY

### ACADEMIC QUALIFICATIONS

Class	CGPA/ Percentage	Institution	Year of Passing
School (5-8)	-	95%	ADIS
10th Board	10 CGPA	100%	2015
12th Board	-	96.8%	IHS
College	9.339	-	SSN
			2023

### Technical Skills

- 1.
  - o Languages
    - C/C++
    - Java
    - Python
    - HTML,CSS,JS
    - Flask
    - C++
  - o Frameworks
    - Flask
- 2.

*Written by Shreya Sriram.  
Mobile: +91 73580 03061  
Mail me: [Email](#)*

Personal Information      Interests      Academic proficiency details      Events organized      **Feedback**      My Journey to SSN

## FEEDBACK

*Written by Shreya Sriram.  
 Mobile: +91 73580 03061  
 Mail me: [Email](#)*

Personal Information      Interests      Academic proficiency details      Events organized      **Feedback**      My Journey to SSN

## JOURNEY TO SSN



SSN COLLEGE OF ENGINEERING

**Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus.**

**Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.**

*Written by Shreya Sriram.  
 Mobile: +91 73580 03061  
 Mail me: [Email](#)*

### **BEST PRACTISES:**

Formatting for code readability, commenting code for details and versioning were used.

### **LEARNING OUTCOME:**

1. Learnt to use HTML5 tags in a webpage
2. Developed a basic portfolio page using the above tags
3. Applied styles to the tags using CSS3

## **ASSIGNMENT 3**

### **EVENT REGISTRATION FORM VALIDATION USING JAVASCRIPT**

#### **OBJECTIVE:**

To validate an event registration form using Javascript

#### **METHODS AND TECHNOLOGIES USED:**

HTML5 and CSS3 are used to develop the website and Javascript is used to validate the form fields.

#### **SOURCE CODE:**

##### **registration.html**

```
<DOCTYPE html>
<html>
    <head>
        <meta charset = "utf-8">
        <link rel = "stylesheet" href = "style.css" type = "text/css">
        <script src = "script.js"></script>
        <script src = "display.js"></script>
    </head>
    <body class = "center">
        <!--<div id = "clock">8:00:57</div>-->
        <header class = "reg-heading">REGISTRATION FORM</header>
        <div class = "spacing"></div>
        <div class = "form-register">
            <form id = "frm">
                <br>
                <label for = "name">NAME</label>
                <input id = "name" name = "name" type = "text" onblur =
                "nameBlur(this)" onfocus = "nameFocus(this)" required> <br><br>
                <label for = "college-name">COLLEGE NAME</label>
                <input id = "college-name" name = "college-name" type = "text"
oninvalid = "alert('Invalid input, Enter only alphabetical characters')"
onblur = "blur()" onfocus =
"focus()" pattern = "[a-zA-Z]+"
required> <br><br>
                <label for = "college-address">COLLEGE ADDRESS</label>
                <textarea id = "college-address" name = "college-address"
oninvalid = "alert('Invalid input, Enter only alphabetical characters')"
onselect = "select()"
pattern = "[a-zA-Z]+>"></textarea> <br><br>
```

```

<label for = "college-pin">COLLEGE PINCODE</label>
<input id = "college-pin" name = "college-pin" type = "text"
oninvalid = "alert('Invalid input, Enter only 6 digits')" pattern = "[0-9]{6}" required> <br><br>
<label for = "age">AGE</label>
<input id = "age" name = "age" type = "text" oninvalid =
"alert('Invalid input, You should be under 22 years of age')" pattern = "[0-2][0-2]" required>
<br><br>
<label for = "dob">DATE OF BIRTH</label>
<input id = "dob" name = "dob" type = "date" required> <br><br>
<label for = "gender">GENDER</label>
<input id = "male" name = "gender" type = "radio" required>
<label for = "male">Male</label>
<input id = "female" name = "gender" type = "radio">
<label for = "female">Female</label><br><br>
<label for = "dept">DEPARTMENT</label>
<select class = "select-inp" name = "dep" id="dep" onchange = ""
required>
    <option value = "cse">CSE</option>
    <option value = "ece">ECE</option>
    <option value = "eee">EEE</option>
    <option value = "mech">MECH</option>
    <option value = "it">IT</option>
    <option value = "chem">CHEM</option>
    <option value = "bme">BME</option>
    <option value = "civil">CIVIL</option>
</select><br><br>
<label for = "tel">TELEPHONE</label>
<input type = "text" name = "tel" id = "tel" pattern = "[0-9]{10}">
oninvalid = "alert('Invalid input, Telephone numbers should have 10 digits')" required><br><br>
<label for = "email">EMAIL</label>
<input type = "email" name = "email" id = "email" pattern =
".+@.+\\..+" required><br><br>
<label for = "programming" name = "prog" id =
"prog">PROGRAMMING SKILLS</label>
<textarea id = "prog" name = "prog" placeholder = "Drag and drop
your skills" ondrop = "drop(event)" ondragover = "allowDrop(event)"></textarea><br><br>
<div style = "margin-left: 100px;">
<div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag1">C++</div>

```

```

        <div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag2">C</div>
            <div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag3">JAVA</div>
                <div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag4">PYTHON</div>
                    <div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag5">RUBY</div>
                </div>
                <br><br>
                <label for = "hobby">HOBBIES</label> (Select one or more
which apply)<br>
                <label for = "hobby">Singing</label>
                <input type = "checkbox" name = "hobbies" id = "h1" value =
"Singing">
                <label for = "hobby">Writing</label>
                <input type = "checkbox" name = "hobbies" id = "h1" value =
"Writing">
                <label for = "hobby">Dancing</label>
                <input type = "checkbox" name = "hobbies" id = "h1" value =
"Dancing">
                <label for = "hobby">Reading</label>
                <input type = "checkbox" name = "hobbies" id = "h1" value =
"Reading"><br><br>
                <label for = "letter">UPLOAD YOUR CONSENT LETTER
FROM COLLEGE</label>
                <input type = "file" id = "myFile" name = "filename"><br><br>
                <input type = "submit" value = "SUBMIT" onclick =
"location.href = 'display.html'; load_form(document.form['frm1'])">
                <input type = "reset" value = "RESET" onclick = "alert('Your
values will be reset. Do you want to continue?')">
                <br><br>
            </form>
        </div>
    </body>
</html>

```

## Display.html

```
<DOCTYPE html>
```

```

<html>
<head>
<meta charset = "utf-8">
<link rel = "stylesheet" href = "style.css" type = "text/css">
<script src = "script.js"></script>
</head>
<script>
function load_form(x) {
    for(i=1; i<14; i++) {
        console.log(x[i]);
        document.getElementById(toString(i)).innerHTML = x[i];
    }
}
</script>
<body class = "center" onload = "load_form()">
<header class = "reg-heading">DISPLAYING THE VALUES</header>
    <div class = "spacing"></div>
<table id = "tab">
    <tr>
        <th>FORM ATTRIBUTES</th>
        <th>FORM VALUES</th>
    </tr>
    <tr>
        <td>NAME</td>
        <td><span id = "1"></span></td>
    </tr>
    <tr>
        <td>COLLEGE NAME</td>
        <td><span id = "2"></span></td>
    </tr>
    <tr>
        <td>COLLEGE ADDRESS</td>
        <td><span id = "3"></span></td>
    </tr>
    <tr>
        <td>PINCODE</td>
        <td><span id = "4"></span></td>
    </tr>
    <tr>
        <td>AGE</td>

```

```

<td><span id = "5"></td>
</tr>
<tr>
<td>DOB</td>
<td><span id = "6"></span></td>
</tr>
<tr>
<td>GENDER</td>
<td><span id = "7"></span></td>
</tr>
<tr>
<td>DEPARTMENT</td>
<td><span id = "8"></span></td>
</tr>
<tr>
<td>TELEPHONE</td>
<td><span id = "9"></span></td>
</tr>
<tr>
<td>EMAIL</td>
<td><span id = "10"></span></td>
</tr>
<tr>
<td>PROGRAMMING SKILLS</td>
<td><span id = "11"></span></td>
</tr>
<tr>
<td>HOBBIES</td>
<td><span id = "12"></span></td>
</tr>
<tr>
<td>UPLOAD LETTER</td>
<td><span id = "13"></span></td>
</tr>
</table>
</body>
</html>

```

### style.css

```
body {  
    background: linear-gradient(#5EC2B7, #2CA6A4);  
    background-size: cover;  
    font-family: Verdana;  
    font-size: 20px;  
    overflow-x: hidden;  
    overflow-y: auto;  
}  
  
}
```

```
.reg-heading {  
    padding: 10px;  
    margin-top: 20px;  
    font-weight: bold;  
    font-size: 30px;  
    text-align: center;  
    border: 2px solid black;  
    box-shadow: 2px 1px 2px black;  
}  
  
}
```

```
.spacing {  
    margin: 40px;  
}  
  
}
```

```
.form-register {  
    margin-top: 40px;  
    width: 80%;  
    margin: auto;  
    background-color: grey;  
    text-align: center;  
}  
  
}
```

```
label {  
    padding: 40px;  
}  
  
}
```

```
input[type=text] {  
    height: 40px;  
    width: 60%;  
    font-size: 14px;
```

```
    margin-right: 40px;  
}  
  
input[type=date] {
```

```
    height: 40px;  
    width: 60%;  
    font-size: 14px;  
    margin-right: 40px;
```

```
}
```

```
input[type=email] {
```

```
    height: 40px;  
    width: 60%;  
    font-size: 14px;  
    margin-right: 40px;
```

```
}
```

```
textarea {  
    width: 60%;  
    height: 100px;  
}
```

```
.select-inp {  
    width: 60%;  
}
```

```
.prog-skill {  
    width: 100px;  
    height: 40px;  
    color: white;  
    background-color: black;  
    display: inline;  
}
```

```
#clock {  
    font-size: 40px;  
    width: 100%;  
    margin-left: 900px;  
}
```

## script.js

```
function validate() {
    var name = document.getElementById("name");
    name.pattern = "[a-zA-Z]+"
    name.oninvalid = "alert('Invalid input, Enter only alphabetical characters')";
}

function allowDrop(ev) {
    ev.preventDefault();
}

function drag(ev) {
    ev.dataTransfer.setData("target_id_name", ev.target.id);
}

function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("target_id_name");
    ev.target.innerHTML += document.getElementById(data).innerHTML + " ";
}

function showTime() {
    let time = new Date();
    let hour = time.getHours();
    let min = time.getMinutes();
    let sec = time.getSeconds();
    am_pm = "AM";

    if (hour > 12) {
        hour -= 12;
        am_pm = "PM";
    }
    if (hour == 0) {
        hr = 12;
        am_pm = "AM";
    }

    hour = hour < 10 ? "0" + hour : hour;
```

```

min = min < 10 ? "0" + min : min;
sec = sec < 10 ? "0" + sec : sec;

let currentTime = hour + ":" + min + ":" + sec + am_pm;

document.getElementById("clock").innerHTML = currentTime;
}

showTime();

```

### **OUTPUT SCREENSHOTS:**

The screenshot shows a registration form with a teal header and a grey body. The title 'REGISTRATION FORM' is centered at the top. The form fields include:

- NAME: Shreya Sriram
- COLLEGE NAME: [redacted]
- COLLEGE ADDRESS: [redacted]
- COLLEGE PINCODE: [redacted]
- AGE: [redacted]
- DATE OF BIRTH: [redacted]
- GENDER: Male (radio button selected)
- DEPARTMENT: CSE
- TELEPHONE: [redacted]
- EMAIL: [redacted]
- PROGRAMMING SKILLS: A large text input field with placeholder 'Drag and drop your skills'.
- C++ C JAVA PYTHON RUBY: A row of buttons for programming languages.
- Singing, Writing, Dancing, Reading: Checkboxes for hobbies.
- HOBBIES: (Select one or more which apply)
- UPLOAD YOUR CONSENT LETTER FROM COLLEGE: A file upload field showing 'No file selected.'
- BROWSE: A browse button next to the file upload field.
- SUBMIT: A submit button.
- RESET: A reset button.

UPLOAD YOUR CONSENT LETTER FROM COLLEGE

Browse... No file selected.

SUBMIT RESET

**BEST PRACTISES:**

Formatting for code readability, commenting code for details and versioning were used.

**LEARNING OUTCOME:**

1. Learnt to use HTML5 tags in a webpage
2. Developed a basic portfolio page using the above tags
3. Applied styles to the tags using CSS3
4. Validated the registration form successfully using Javascript

**ASSIGNMENT 3B**  
**MEMORY MATCHING GAME USING JS AND DOM CONCEPTS**

**OBJECTIVE:**

Develop a memory card game using DOM concept

**METHODS, TECHNOLOGIES AND TECHNIQUES USED:**

HTML, CSS were used to develop the webpage, Javascript and DOM concepts were used to build the logic of the page

**SOURCE CODE:**

Index.html

```
<!DOCTYPE html>
<html>
  <head>
    <link rel = "stylesheet" href = "style.css">
  </head>
  <body>
    <script>
      var intervalID;
      var enablejs = false;
      var countDown = 40;
      var cardChosen = null;
      var cardsFound = 0;
      var backsideCard = "backside.jpg";
      var img_width = "150px";

      function selectMode(val) {
        countDown = val;
      }

      function delay(time) {
        return new Promise(resolve => setTimeout(resolve, time))
      }

      function shuffle(array) {
        for (var i = array.length - 1; i > 0; i--) {
          var j = Math.floor(Math.random() * (i + 1));
          var temp = array[i];
          array[i] = array[j];
          array[j] = temp;
        }
      }
    </script>
  </body>
</html>
```

```

        array[i] = array[j];
        array[j] = temp;
    }
}

var flip = async function (e) {
    if (enablejs) {
        let element = e.target;

        if (cardChosen != null) {
            element.getAttribute("name");
            if ((element.getAttribute("name") == cardChosen.getAttribute("name")) &&
(element.getAttribute("id") != cardChosen.getAttribute("id"))) {
                await delay(20);
                element.setAttribute('src', "blank.png");
                cardChosen.setAttribute('src', "blank.png");
                cardsDetected += 1;
                cardChosen = null;
                document.getElementById("score").innerHTML =
parseInt(document.getElementById("score").innerHTML) + 1;
            }
        } else {
            await delay(20);
            cardChosen.src = backsideCard;
            element.src = backsideCard;
            cardChosen = null;
        }
    } else {
        cardChosen = element;
        element.src = element.getAttribute("name");
    }
}
}

var start = function () {
    enablejs = true;
    // Update the count down every 1 second
    document.getElementById("taskbar").disabled = true;
    document.getElementById("timer").innerHTML = countDown;
    document.getElementById("stop").disabled = false;
    document.getElementById("game").disabled = false;
    cardChosen = null;
}

```

```

cardsDetected = 0;
document.getElementById("game").innerHTML = "";
initBoard();
intervalID = setInterval(function () {
    var timer = document.getElementById("timer");
    var seconds = parseInt(timer.innerHTML) - 1;
    timer.innerHTML = seconds;
    if (seconds == 0)
        stop();
}, 1000);

var stop = function () {
    enablejs = false;
    console.log("stop function");
    document.getElementById("taskbar").disabled = false;
    document.getElementById("stop").disabled = true;
    document.getElementById("game").disabled = true;
    clearInterval(intervalID);
    // BLUR GAME DIV
}

function initBoard() {
    document.getElementById("score").innerHTML = cardsDetected;
    let elements = [];
    var cards = new Array('pizza.jpg', 'milkshake.jpg', 'icecream.png', 'fries.png',
    'burger.png');
    var cnt = 0;
    for(var i=0; i<5; i++) {
        var img = document.createElement('img');
        img.setAttribute('src', 'backside.jpg');
        img.setAttribute('width', img_width);
        img.setAttribute('state', 0);
        img.setAttribute('name', cards[i]);
        img.setAttribute('id', cnt);
        cnt += 1;
        img.addEventListener("click", flip);
        elements.push(img);
    }
    for (var i=0; i<5; i++) {
        // Runs for each duplicate.
    }
}

```

```

var img = document.createElement('img');
img.setAttribute('src', 'backside.jpg');
img.setAttribute('state', 0);
img.setAttribute('width', img_width);
img.setAttribute('name', cards[i]);
img.setAttribute('id', cnt);
cnt += 1;
img.addEventListener("click", flip);
elements.push(img);
}
shuffle(elements);
var parent = document.getElementById("game");
console.log(parent);
for (var i = 0; i < elements.length; i++) {
    parent.appendChild(elements[i]);
}
}

</script>
<div id= "topside">
    <div id="buttons" style="display:flex;justify-content: space-evenly;">
        <div>
            <button style="background-color: green;color:white" id="start"
onclick="start();">Start</button>
            <button id="stop" style="background-color:
#f44336;color:white" onclick="stop();" disabled>Stop</button>
        </div>
        <div style="font-weight: bold;"><span id="timer"></span>
<h3>seconds</h3></div>
        </div>
    <br>
    <div id="taskbar"><h3>Score:</h3><span id="score" ></span>
        <h3>Mode: </h3>
        <button onclick="selectMode(120);">Mode1(120)</button>
        <button onclick="selectMode(60);">Mode1(60)</button>
        <button onclick="selectMode(40);">Mode1(40)</button>
    </div>
    <br>
    </div>
<div id = "game" disabled> </div>

```

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

Style.css

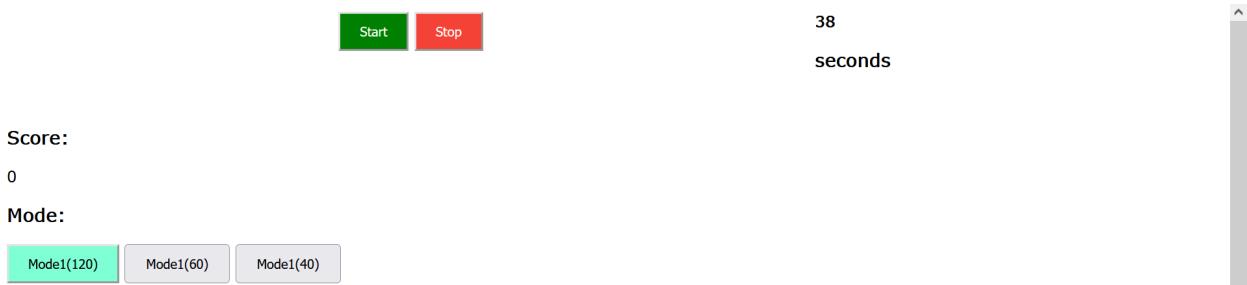
```
#game{
    display: grid;
    grid-template-columns: auto auto auto auto auto;
}
```

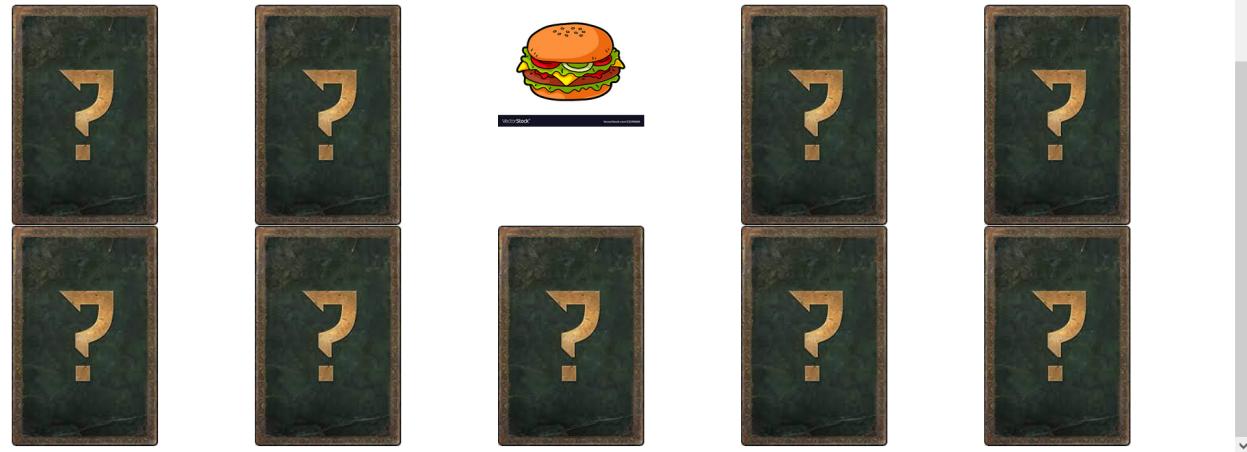
```
img {
    display: block;
    transform: scaleX(1);
    transition: transform 0.5s;
}
```

```
button {
    padding: 10px 20px;
}
```

```
button:focus{
    background-color: aquamarine;
}
```

## OUTPUT SCREENSHOTS:





### **BEST PRACTISES:**

Formatting for code readability, commenting code for details and versioning were used.

### **LEARNING OUTCOME:**

1. Learnt to use HTML5 tags in a webpage
2. Developed a memory matching game using HTML and CSS
3. Applied styles to the tags using CSS3
4. Performed the logic of the memory game using Javascript and DOM.

**ASSIGNMENT 4**  
**ONLINE PROGRAMMING TEST**

**OBJECTIVE:**

To Develop an Online Programming Skill Test application, A Three-tier application  
Built Using Servlets and Database connectivity

**METHODS, TECHNIQUES AND TECHNOLOGIES USED:**

HTML, CSS were used to develop the tags and styles of the page. Apache Tomcat is used to implement servlets written in Java. MYSQL is used as the database.

**SCHEMA:**

**Credentials table**

```
mysql> describe credentials;
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| username | varchar(50) | YES |   | NULL    |       |
| password | varchar(20)  | YES |   | NULL    |       |
+-----+-----+-----+-----+-----+
2 rows in set (0.10 sec)
```

**Quiz table - to store the quiz questions and answers**

```
mysql> describe quiz;
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| question | varchar(100) | YES |   | NULL    |       |
| answer   | varchar(10)  | YES |   | NULL    |       |
| options  | varchar(100) | YES |   | NULL    |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

**Registration table to store registration information**

```

mysql> describe registration;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| name  | varchar(30) | YES  |     | NULL    |       |
| cname | varchar(40)  | YES  |     | NULL    |       |
| caddr | varchar(50)  | YES  |     | NULL    |       |
| pin   | int      | YES  |     | NULL    |       |
| age   | int      | YES  |     | NULL    |       |
| dob   | varchar(20) | YES  |     | NULL    |       |
| gender | varchar(8)  | YES  |     | NULL    |       |
| dept  | varchar(4)   | YES  |     | NULL    |       |
| contact | varchar(11) | YES  |     | NULL    |       |
| email | varchar(50)  | YES  |     | NULL    |       |
| skills | varchar(40) | YES  |     | NULL    |       |
| hobbies | varchar(30) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
12 rows in set (0.03 sec)

```

## SOURCE CODE:

### InsertDetails.java

```

import java.io.*;
import java.util.*;
//import javax.servlet.*;
//import javax.servlet.http.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;

public class InsertDetails extends HttpServlet{
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.jdbc.Driver";
    static final String DB_URL="jdbc:mysql://localhost:3306/test?characterEncoding=utf8";

    // Database credentials

```

```

static final String USER = "root";
static final String PASS = "MySQL@123";
public void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

    // Set response content type
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();

    try {
        // Register JDBC driver
        //Class.forName("com.mysql.cj.jdbc.Driver");
        Class.forName(JDBC_DRIVER);

        // Open a connection
        Connection conn = DriverManager.getConnection(DB_URL, USER, PASS);

        // Execute SQL query
        PreparedStatement st = conn
.prepareStatement("insert into userdet values(?, ?, ?, ?, ?, ?, ?, ?, ?, ?)");
        st.setString(1, request.getParameter("name"));
        st.setString(2, request.getParameter("college"));
        st.setString(3, request.getParameter("address"));
        st.setString(4, request.getParameter("age"));
        st.setString(5, (String)request.getParameter("DOB"));
        st.setString(6, (String)request.getParameter("gender"));
        st.setString(7, (String)request.getParameter("department"));
        st.setString(8, request.getParameter("mobile"));
        st.setString(9, (String)request.getParameter("email"));
        st.setString(10, request.getParameter("prog"));
        st.executeUpdate();

        // Close all the connections
        st.close();
        conn.close();

        // Get a writer pointer
        // to display the successful result

        RequestDispatcher rd = request.getRequestDispatcher("ID2");
    }
}

```

```

        rd.forward(request, response);
        //response.sendRedirect("login.html");
    }
    catch (Exception e) {
        e.printStackTrace();
    }
}
}
}
}
```

### **DatabaseAccessCredentials.java**

```

import java.io.*;
import java.util.*;
//import javax.servlet.*;
//import javax.servlet.http.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;

public class DatabaseAccessCredentials extends HttpServlet{
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.jdbc.Driver";
    static final String DB_URL="jdbc:mysql://localhost:3306/test?characterEncoding=utf8";

    // Database credentials
    static final String USER = "root";
    static final String PASS = "MySQL@123";
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {

    // Set response content type
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    String title = "Database Result";
    String docType =
        "<!doctype html public \"-//w3c//dtd html 4.0 " + "transitional//en\">\n";

    out.println(docType + "<html>\n" + "<head><title>" + title + "</title></head>\n" +
    "<body bgcolor = \"#f0f0f0\">\n" + "<h1 align = \"center\">" + title + "</h1>\n");
    try {
        // Register JDBC driver
```

```

Class.forName(JDBC_DRIVER);
//Class.forName("com.mysql.cj.jdbc.Driver");

// Open a connection
Connection conn = DriverManager.getConnection(DB_URL, USER, PASS);

// Execute SQL query
String uname = request.getParameter("uname");
String pw = request.getParameter("password");
Statement stmt = conn.createStatement();
String sql = "SELECT * FROM test.CRED";
ResultSet rs = stmt.executeQuery(sql);
//out.println("Username : " + request.getParameter("uname") + "<br>");
//out.println("Password : " + request.getParameter("password") + "<br><br>");

int found=0;
int rowCt=0;
while(rs.next()){
    // Extract data from result set
    if(rs.getString("uname").equals(uname) &&
rs.getString("password").equals(pw)){
        out.print("User validated" + "<br>");
        out.println("Username : " + rs.getString("uname") + "<br>");
        out.println("Password : " + rs.getString("password") +
"<br><br>");
        //rowCt+=1;
        found=1;
        response.sendRedirect("register4event.html");
    }
}
if(found==0){
    out.print("Invalid credentials" + "<br>");
    response.sendRedirect("login.html");
}
out.println("</body></html>");
rs.close();
stmt.close();
conn.close();
}
catch(SQLException se) {

```

```

        //Handle errors for JDBC
        se.printStackTrace();
    }
    catch(Exception e) {
        //Handle errors for Class.forName
        e.printStackTrace();
    }
    finally {
        /* //finally block used to close resources
           try {
               if(stmt!=null)
                   stmt.close();
           } catch(SQLException se2) {
               } // nothing we can do
           try {
               if(conn!=null)
                   conn.close();
           } catch(SQLException se) {
               se.printStackTrace();
           } //end finally try */
        } //end try
    }
}

```

### InsertCredentials.java

```

import java.io.*;
import java.util.*;
//import javax.servlet.*;
//import javax.servlet.http.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;

public class InsertCred extends HttpServlet{
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.jdbc.Driver";
    static final String DB_URL="jdbc:mysql://localhost:3306/test?characterEncoding=utf8";

    // Database credentials

```

```

static final String USER = "root";
static final String PASS = "MySQL@123";
public void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

    // Set response content type
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();

    try {
        // Register JDBC driver
        //Class.forName("com.mysql.cj.jdbc.Driver");
        Class.forName(JDBC_DRIVER);

        // Open a connection
        Connection conn = DriverManager.getConnection(DB_URL, USER, PASS);

        // Execute SQL query
        PreparedStatement st = conn
            .prepareStatement("insert into cred values(?, ?)");
        st.setString(1, request.getParameter("uname"));
        st.setString(2, request.getParameter("password"));
        st.executeUpdate();

        // Close all the connections
        st.close();
        conn.close();

        // Get a writer pointer
        // to display the successful result

        out.println("<html><body><b>Successfully Inserted"
            + "</b></body></html>");
        response.sendRedirect("login.html");
    }
    catch (Exception e) {
        e.printStackTrace();
    }
}
}

```

## DisplayScore.java

```
import java.io.*;
import java.util.*;
//import javax.servlet.*;
//import javax.servlet.http.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;

public class DisplayScore extends HttpServlet{
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.jdbc.Driver";
    static final String DB_URL="jdbc:mysql://localhost:3306/test?characterEncoding=utf8";

    // Database credentials
    static final String USER = "root";
    static final String PASS = "MySQL@123";
    public void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        // Set response content type
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        try {
            // Register JDBC driver
            //Class.forName("com.mysql.cj.jdbc.Driver");
            Class.forName(JDBC_DRIVER);

            // Open a connection
            Connection conn = DriverManager.getConnection(DB_URL, USER, PASS);

            out.println("<html>\n<head>\n<title>Quiz</title>\n</head>\n<body>\n<table border=\"1\">\n<tr>\n<th>Question</th>\n<th>Score</th>\n</tr>\n");
            String ans1 = request.getParameter("qn1");
            String ans2 = request.getParameter("qn2");
        }
    }
}
```

```

// Execute SQL query
Statement st = conn.createStatement();
String sql = "SELECT * FROM test.QUIZ";
ResultSet rs = st.executeQuery(sql);
int qn = 1;
int totScore = 0;

while(rs.next()){
    int score=0;
    if(qn==1 && rs.getString("ans").equals(ans1))
        score=1;
    else if(qn==2 && rs.getString("ans").equals(ans2))
        score=1;
    out.println("<tr>\n<td>" + qn + "</td>\n<td>" + score +
"</td>\n</tr>\n");
    totScore+=score;
    qn+=1;
}

out.println("<tr>\n<th>Total Score</th>\n<th>" + totScore +
"</th>\n</tr>\n</table>\n</body>\n</html");

// Close all the connections
st.close();
conn.close();

// Get a writer pointer
// to display the successful result

//response.sendRedirect("login.html");
}
catch (Exception e) {
e.printStackTrace();
}
}

}

```

### **DisplayQuiz.java**

```

//import javax.servlet.*;
//import javax.servlet.http.*;

```

```

import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;

public class DisplayQuiz extends HttpServlet{
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.jdbc.Driver";
    static final String DB_URL="jdbc:mysql://localhost:3306/test?characterEncoding=utf8";

    // Database credentials
    static final String USER = "root";
    static final String PASS = "MySQL@123";
    public void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        // Set response content type
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        try {
            // Register JDBC driver
            //Class.forName("com.mysql.cj.jdbc.Driver");
            Class.forName(JDBC_DRIVER);

            // Open a connection
            Connection conn = DriverManager.getConnection(DB_URL, USER, PASS);

            out.println("<html>\n<head>\n<title>Quiz</title>\n</head>\n<body>\n<form");
            action = \"http://localhost:8080/SQLpgm/ID3\"\\n");

            // Execute SQL query
            Statement st = conn.createStatement();
            String sql = "SELECT * FROM test.QUIZ";
            ResultSet rs = st.executeQuery(sql);
            int qn = 1;

            while(rs.next()){
                out.println("<p>" + rs.getString("qn") + "</p>\\n<ul>\\n");
                String opts = rs.getString("opt");
                String[] optarr = opts.split(",");

```

```

        for(String o: optarr){
            out.println("<li>" + o + "</li><br>");
        }
        out.println("</ul>\nAnswer : <input type=\"text\" name=\"qn\" + qn +
        "\"><\n");
        qn+=1;
    }

    out.println("<br><input style=\"margin-top:25px\" type = \"submit\" value =
    \"Submit\">\n</form>\n</body>\n</html>");

    // Close all the connections
    st.close();
    conn.close();

    // Get a writer pointer
    // to display the successful result

    //response.sendRedirect("login.html");
}
catch (Exception e) {
    e.printStackTrace();
}
}

}

```

### **signup.html**

```

<!DOCTYPE html>
<html>
<head>
<title>Sign Up</title>
</head>
<body>
<form action="http://localhost:8080/SQLpgm/In1" method="get">
    <p>Username </p> <input type="text" name="uname"/>
    <p>Password </p> <input type="text" name="password"/>
    <br/><br/><br/>
    <input type="submit"/>
</form>

```

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

### **login.html**

```
<!DOCTYPE html>
<html>
<head>
<title>Login</title>
</head>
<body>
<form action="http://localhost:8080/SQLpgm/ID1" method="get">
<p>Username </p> <input type="text" name="uname"/>
<p>Password </p> <input type="text" name="password"/>
<br/><br/><br/>
<input type="submit"/>
</form>
</body>
</html>
```

### **Web.xml**

```
<web-app>
<servlet>
<servlet-name>ID1</servlet-name>
<servlet-class>DatabaseAccessCredentials</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>ID1</servlet-name>
<url-pattern>/ID1</url-pattern>
</servlet-mapping>

<servlet>
<servlet-name>In1</servlet-name>
<servlet-class>InsertCredentials</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>In1</servlet-name>
<url-pattern>/In1</url-pattern>
</servlet-mapping>
```

```
<servlet>
<servlet-name>In2</servlet-name>
<servlet-class>InsertDetails</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>In2</servlet-name>
<url-pattern>/In2</url-pattern>
</servlet-mapping>
```

```
<servlet>
<servlet-name>ID2</servlet-name>
<servlet-class>DisplayQuiz</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>ID2</servlet-name>
<url-pattern>/ID2</url-pattern>
</servlet-mapping>
```

```
<servlet>
<servlet-name>ID3</servlet-name>
<servlet-class>DisplayScore</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>ID3</servlet-name>
<url-pattern>/ID3</url-pattern>
</servlet-mapping>
</web-app>
```

### **OUTPUT SCREENSHOTS:**

welcome.html

# Welcome to the Event Registration Page!

For New User:

**Signup**

For Existing User:

**Login**

login.html

## Login

User Name

shreya

Password:

...

**Login**

signup.html

## Sign Up

User Name

shreya

Password:

...

**Sign Up**

Registration.html

06:05:43 PM

## REGISTRATION FORM

Name :	Shreya
College name :	ssn
College Address :	kalavakkam
Pin :	600032
Age :	21
Email :	shreyasriram00@gmail.com
Programming Skills :	JAVA C++ C JAVA PYTHON RUBY
Hobbies :	<input checked="" type="checkbox"/> Drawing <input type="checkbox"/> Badminton <input type="checkbox"/> Reading
Upload Consent :	<input type="button" value="Browse..."/>
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>

**Registered Successfully!**

**Do You Want To Proceed To Quiz?**

# QUIZ

**Name: Shreya**

**Contact: 7358003061**

1) Which is a keyword?

- 1) auto      2) title      3) card      4) record

Enter answer

2) Which is a not keyword?

- 1) auto      2) break      3) while      4) title

Enter answer

Submit

Displaying all scores of a particular user

## QUIZ SCORES

Hello, Shreya

Question 1                                    1

Question 2                                    1

Total Score                                2

**BEST PRACTISES:**

Formatting for code readability, commenting code for details and versioning were used.

**LEARNING OUTCOME**

1. Learnt how to use servlets and integrate them to a database
2. Create a web page with servlets, HTML, CSS with database connectivity
3. Create and access data from tables in a database.

**ASSIGNMENT 5**  
**ONLINE PROGRAMMING SKILL TEST- SESSION HANDLING MECHANISM**

**OBJECTIVE:**

To create an online programming skill test application using Session Handling Mechanism

**METHODS, TECHNIQUES AND TECHNOLOGIES USED:**

HTML, CSS were used to develop the tags and styles of the page. Apache Tomcat is used to implement servlets written in Java. MYSQL is used as the database.

**SCHEMA:**

**Credentials table**

```
mysql> describe credentials;
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| username | varchar(50) | YES |   | NULL    |       |
| password | varchar(20)  | YES |   | NULL    |       |
+-----+-----+-----+-----+-----+
2 rows in set (0.10 sec)
```

**Quiz table - to store the quiz questions and answers**

```
mysql> describe quiz;
+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| question | varchar(100) | YES |   | NULL    |       |
| answer   | varchar(10)  | YES |   | NULL    |       |
| options  | varchar(100) | YES |   | NULL    |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

**Registration table to store registration information**

```
mysql> describe registration;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| name  | varchar(30) | YES  |     | NULL    |       |
| cname | varchar(40)  | YES  |     | NULL    |       |
| caddr | varchar(50)  | YES  |     | NULL    |       |
| pin   | int      | YES  |     | NULL    |       |
| age   | int      | YES  |     | NULL    |       |
| dob   | varchar(20) | YES  |     | NULL    |       |
| gender | varchar(8)  | YES  |     | NULL    |       |
| dept  | varchar(4)  | YES  |     | NULL    |       |
| contact | varchar(11) | YES  |     | NULL    |       |
| email | varchar(50) | YES  |     | NULL    |       |
| skills | varchar(40) | YES  |     | NULL    |       |
| hobbies | varchar(30) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
12 rows in set (0.03 sec)
```

#### Results table:

```
mysql> describe results;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| id    | varchar(40) | YES  |     | NULL    |       |
| score1 | int      | YES  |     | NULL    |       |
| score2 | int      | YES  |     | NULL    |       |
| total | int      | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

#### SOURCE CODE:

##### **Login.html**

```
<!DOCTYPE html>
```

```
<head>
  <meta charset = "utf-8">
    <link rel = "stylesheet" href = "../css/cred.css" type = "text/css">
  <link rel = "stylesheet" href = "../css/index.css" type = "text/css">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login</title>
</head>
<style>
body {
  background: linear-gradient(#5EC2B7, #2CA6A4);
  background-size: cover;
  font-family: Verdana;
  font-size: 20px;
  height: 100vh;
  width: 100vw;
  margin: 0;
  overflow: auto;
  overflow-x: hidden;
  text-align: center;
}
.credentials-container {
  text-align: center;
  width: 60%;
  margin: auto;
  background: black;
  border-radius: 30px;
}
table {
  text-align: center;
}

label {
  color: white;
  font-size: 30px;
}

tr {
  width: 50%;
  text-align: center;
```

```
padding: 20px;
}

td {
    width: 50%;
    text-align: center;
    padding: 20px;
}

input[type="submit"] {
    background: white;
    border-radius: 5px;
    padding: 10px;
    color: black;
    font-size: 20px;
    width: 40%;
}

input[type="text"] {
    background: white;
    border-radius: 5px;
    padding: 10px;
    color: black;
    font-size: 20px;
    width: 80%;
}

input[type="password"] {
    background: white;
    border-radius: 5px;
    padding: 10px;
    color: black;
    font-size: 20px;
    width: 80%;
}

}
</style>
<body>
    <h1>Login</h1>
    <form class="credentials-container" action="http://localhost:8080/quizapp/UserAuth">
        <table width="100%">
```

```

<tr>
    <td><label>User Name</label></td>
    <td><input type="text" name="username" placeholder="Enter User Name"></td>
</tr>
<tr>
    <td><label>Password:</label></td>
    <td><input type="password" name="password" placeholder="Enter
Password"></td><br>
</tr>
<tr>
    <td colspan="2"><input type="submit" value="Login"> </td>
</tr>
</table>
</form>
</body>
</html>

```

## **Signup.html**

```

<!DOCTYPE html>
<head>
    <meta charset = "utf-8">
        <link rel = "stylesheet" href = "../css/cred.css" type = "text/css">
    <link rel = "stylesheet" href = "../css/index.css" type = "text/css">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Sign Up</title>
</head>
<style>
body {
    background: linear-gradient(#5EC2B7, #2CA6A4);
    background-size: cover;
    font-family: Verdana;
    font-size: 20px;
    height: 100vh;
    width:100vw;
    margin: 0;
    overflow: auto;
    overflow-X: hidden;
    text-align: center;
}

```

```
.credentials-container {  
    text-align: center;  
    width: 60%;  
    margin: auto;  
    background: black;  
    border-radius: 30px;  
}
```

```
table {  
    text-align: center;  
}
```

```
label {  
    color: white;  
    font-size: 30px;  
}
```

```
tr {  
    width: 50%;  
    text-align: center;  
    padding: 20px;  
}
```

```
td {  
    width: 50%;  
    text-align: center;  
    padding: 20px;  
}
```

```
input[type="submit"] {  
    background: white;  
    border-radius: 5px;  
    padding: 10px;  
    color: black;  
    font-size: 20px;  
    width: 40%;  
}
```

```
input[type="text"] {  
    background: white;
```

```

border-radius: 5px;
padding: 10px;
color: black;
font-size: 20px;
width: 80%;

}

input[type="password"] {
background: white;
border-radius: 5px;
padding: 10px;
color: black;
font-size: 20px;
width: 80%;

}
</style>
<body>
<h1>Sign Up</h1>
<form class="credentials-container" action="http://localhost:8080/quizapp/InsCred">
<table width="100%">
<tr>
<td><label>User Name</label></td>
<td><input type="text" name = "username" placeholder="Enter User Name"></td>
</tr>
<tr>
<td><label>Password:</label></td>
<td><input type="password" name = "password" placeholder="Enter Password"></td>
<br>
</tr>
<tr>
<td colspan="2"><input type="submit" value="Sign Up"> </td>
</tr>
</table>
</form>
</body>
</html>

```

## **Registration.html**

```
<DOCTYPE html>
```

```
<html>
  <head>
    <meta charset = "utf-8">
    <link rel = "stylesheet" href = "../css/index.css" type = "text/css">
      <link rel = "stylesheet" href = "../css/reg.css" type = "text/css">
    <title>Details</title>
  </head>
  <style>
    body {
      background: linear-gradient(#5EC2B7, #2CA6A4);
      background-size: cover;
      font-family: Verdana;
      font-size: 20px;
      height: 100vh;
      width: 100vw;
      margin: 0;
      overflow: auto;
      overflow-X: hidden;
      text-align: center;
    }

    .reg-heading {
      padding: 10px;
      margin-top: 40px;
      align: center;
      font-weight: bold;
      font-size: 30px;
      text-align: center;
    }

    .form-register {
      margin-top: 40px;
      width: 60%;
      margin: auto;
      background-color: black;
      text-align: center;
    }

    label {
      padding: 40px;
    }
  </style>

```

```
color: white;  
font-size: 20px;  
}
```

```
input[type=text] {  
height: 40px;  
width: 100%;  
font-size: 14px;  
margin-right: 40px;  
}
```

```
input[type=date] {  
height: 40px;  
width: 100%;  
font-size: 14px;  
margin-right: 40px;  
}
```

```
input[type=tel] {  
height: 40px;  
width: 100%;  
font-size: 14px;  
margin-right: 40px;  
}
```

```
input[type=email] {  
height: 40px;  
width: 100%;  
font-size: 14px;  
margin-right: 40px;  
}
```

```
input[type=number] {  
height: 40px;  
width: 100%;  
font-size: 14px;  
margin-right: 40px;  
}
```

```
textarea {
```

```
width: 100%;  
height: 100px;  
}  
  
.select-inp {  
width: 100%;  
}  
  
.prog-skill {  
color: black;  
padding: 5px;  
background-color: white;  
display:inline;  
}  
  
#clock {  
font-size: 40px;  
}  
  
tr {  
width: 50%;  
text-align: right;  
padding: 20px;  
}  
  
td {  
width: 50%;  
text-align: left;  
padding: 20px;  
}  
  
td.submit-col {  
text-align: right;  
padding: 20px;  
}  
  
td.reset-col {  
text-align: left;  
padding: 20px;  
}
```

```

</style>
<body class = "center">
    <div id="clock">8:10:45</div>
    <header class = "reg-heading">REGISTRATION FORM</header>
    <div class = "form-register">
        <form id="here" action="http://localhost:8080/quizapp/InsDet">
            <table>
                <tr>
                    <td>
                        <label for="name">Name :</label>
                    </td>
                    <td>
                        <input type="text" id="name" name="name" onfocus = "focusFunction()" onblur =
                        "blurFunction()" pattern="[A-Za-z]+" oninvalid="nameinv()" required>
                    </td>
                </tr>
                <tr>
                    <td>
                        <label for="cname">College name :</label>
                    </td>
                    <td>
                        <input type="text" id="cname" name="cname"
                        pattern="[A-Za-z]+" oninvalid="nameinv()" onselect="selectFunction()">
                    </td>
                </tr>
                <tr>
                    <td>
                        <label for="cadd">College Address :</label>
                    </td>
                    <td>
                        <input type = "text" id="cadd"
                        onkeypress="keypressFunction()">
                    </td>
                </tr>
                <tr>
                    <td>
                        <label for="pin">Pin :</label>
                    </td>

```

```

<td>
    <input type="number" id="pin" name="pin" maxlength="6"
oninvalid="pininv()" pattern=[0-9]+>
</td>
</tr>
<tr>
    <td>
        <label for="age">Age :</label>
    </td>
    <td>
        <input type="number" id="age" name="age" min="10"
max="22">
    </td>
</tr>
<tr>
    <td>
        <label for="dob">Date of Birth :</label>
    </td>
    <td>
        <input type="date" id="dob" name="dob">
    </td>
</tr>
<tr>
    <td>
        <label for="gender">Gender :</label>
    </td>
    <td>
        <input type="radio" id="male" name="gender" value="male">
        <label for="gender">Male</label>
        <input type="radio" id="female" name="gender" value="female">
        <label for="gender">Female</label>
    </td>
</tr>
<tr>
    <td>
        <label for="dept">Department :</label>
    </td>
    <td>
        <select id="dept" name="dept" onchange = "changeFunction()">
            <option value="choice">Choose an option</option>

```

```

        <option value="CSE">CSE</option>
        <option value="IT">IT</option>
        <option value="ECE">ECE</option>
        <option value="BME">BME</option>
    </select>
</td>
</tr>
<tr>
    <td>
        <label for="contact">Contact Number :</label>
    </td>
    <td>
        <input type="tel" id="contact" name="contact" pattern="[0-9]+" maxlength="10"
oninvalid="contactinv()">
    </td>
</tr>
<tr>
    <td>
        <label for="email">Email :</label>
    </td>
    <td>
        <input type="text" id="emailid" name="emailid" required>
    </td>
</tr>
<tr>
    <td>
        <label for = "programming" name = "progskills">Programming Skills :</label>
    </td>
    <td>
        <textarea id = "progskills" name = "progskills" placeholder = "Drag and drop
your skills" ondrop = "drop(event)" ondragover =
"allowDrop(event)"></textarea><br><br>
        <div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag1">C++</div>
        <div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag2">C</div>
        <div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag3">JAVA</div>
        <div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag4">PYTHON</div>
    
```

```

<div draggable="true" ondragstart="drag(event)" class =
"prog-skill" id = "drag5">RUBY</div>
</td>
</tr>
<tr>
<td>
<label for="hobb">Hobbies : </label><br>
</td>
<td>
<input type="checkbox" id="hobb" name="hobb" value="drawing">
<label for="hobb">Drawing</label><br>
<input type="checkbox" id="hobb" name="hobb" value="badminton">
<label for="hobb">Badminton</label><br>
<input type="checkbox" id="hobb" name="hobb" value="reading">
<label for="hobb">Reading</label>
</td>
</tr>
<tr>
<td>
<label for="filename">Upload Consent : </label>
</td>
<td>
<input type="file" id="myFile" name="filename">
</td>
</tr>
<tr>
<br>
<td class="submit-col">
<input class="submitbuttn" type="submit" value="Submit">
</td>
<td class="reset-col">
<input class="submitbuttn" type="reset" value="Reset">
</td>
</tr>
</table>
<br><br>
</form>
</div>
<script>
setInterval(showTime, 1000);

```

```

function showTime() {
    let time = new Date();
    let hour = time.getHours();
    let min = time.getMinutes();
    let sec = time.getSeconds();
    am_pm = "AM";

    if (hour > 12) {
        hour -= 12;
        am_pm = " PM";
    }
    if (hour == 0) {
        hr = 12;
        am_pm = " AM";
    }

    hour = hour < 10 ? "0" + hour : hour;
    min = min < 10 ? "0" + min : min;
    sec = sec < 10 ? "0" + sec : sec;

    let currentTime = hour + ":" +
        + min + ":" + sec + am_pm;

    document.getElementById("clock")
        .innerHTML = currentTime;
}

showTime();

function submitForm()
{
    window.location.href="submit.html";
    submitFormDetails();
    validateForm();
    tabulate();
}

function focusFunction() {
    document.getElementById("name").style.background = "#5EC2B7";
}

```

```

function blurFunction() {
    document.getElementById("name").style.background = "#5EC2B7";
}

function selectFunction() {
    document.getElementById("cname").style.background = "#5EC2B7";
}

function keypressFunction() {
    document.getElementById("cadd").style.background = "#5EC2B7";
}

function changeFunction() {
    document.getElementById("dept").style.background = "#5EC2B7";
}

function allowDrop(ev) {
    ev.preventDefault();
}
function drag(ev) {
    ev.dataTransfer.setData("target_id_name", ev.target.id);
}
function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("target_id_name");
    ev.target.innerHTML += document.getElementById(data).innerHTML + " ";
}

function tabulate() {
    var myForm = document.getElementById('here') ;
    let formData = new FormData(myForm);
    document.write('<link rel="stylesheet" href="styles.css"><style>table, th, td{ border: 1px solid gray ; }</style>');
    document.writeln("<h1>FORM RESPONSE RECEIVED</h1>");
    document.writeln("<div class='box' style='width: fit-content;'><table style='width: 400px; margin: 10px; font-size: 25px;'>");
}

document.writeln("<tr><th>Name</th><td>" + formData.get('name') + "</td></tr><tr><th>College Name</th><td>" + formData.get('cname') + "</td></tr><tr><th>College"

```

```

Address</th><td>"+formData.get('cadd')+"</td></tr><tr><th>Pincode</th><td>"+formData.get('pin')+"</td></tr><tr><th>Age</th><td>"+formData.get('age')+"</td></tr><tr><th>DOB</th><td>"+formData.get('dob')+"</td></tr><tr><th>Gender</th><td>"+formData.get('gender')+"</td></tr><tr><th>Department</th><td>"+formData.get('dept')+"</td></tr><tr><th>Contact Number</th><td>"+formData.get('contact')+"</td></tr><tr><th>Email</th><td>"+formData.get('emailid')+"</td></tr><tr><th>Programming skills</th><td>"+formData.get('progskills')+"</td></tr><tr><th>Hobbies</th><td>"+formData.getAll('hobb')+"</td></tr></table></div>" ;
}

```

```

function validateForm()
{
    var n=document.getElementById("name").value;
    var n1=document.getElementById("cname").value;
    var n2=document.getElementById("cadd").value;
    var n3=document.getElementById("pin").value;
    var n4=document.getElementById("age").value;
    var n8=document.getElementById("contact").value;
    var n9=document.getElementById("email").value;

    demo.innerHTML="";

    if(n.value.length > 15 || n.value.match(/[A-Z a-z]+/g)==null || n.value.match(/[A-Z a-z]+/g)[0]
!= n.value)
    {
        demo.innerHTML = "Name should be alphabets/spaces and < 15 length.<br>"
    }

    if(n3.value.length > 6)
    {
        demo.innerHTML = demo+innerHTML + "Pin Number should be <= 6 length.<br>"
    }

    if(n4.value.length > 22)
    {
        demo.innerHTML = demo+innerHTML + "Pin Number should be <= 6 length.<br>"
    }

    if(n8.value.match(/[(]+\d[)]{0-9}{10}/g) == null || n8.value.match(/[(]+\d[)]{0-9}{10}/g)[0]
!= n8.value)

```

```

{
    demo.innerHTML = demo.innerHTML + "Follow mobile format (+91)xxxxxxxxxx<br>";
}

if(n9.value.match(/([a-zA-Z\-\_0-9]+@[a-zA-Z\-\_0-9]+\.[\.][a-zA-Z\-\_0-9\.]+)/g) == null ||
n9.value.match(/([a-zA-Z\-\_0-9]+@[a-zA-Z\-\_0-9]+\.[\.][a-zA-Z\-\_0-9\.]+)/g)[0] != n9.value)
{
    demo.innerHTML = demo.innerHTML + "Enter Valid email!<br>";
}
}

function nameinv()
{
document.getElementById("namep").innerHTML="Name is not valid should be an
alphanumeric";
document.getElementById("namep").style.color="red";
}

function contactinv()
{
document.getElementById("contactp").innerHTML="Contact Number has to contain only
digits.";
document.getElementById("contactp").style.color="red";
}

</script>
</body>
</html>

```

### **AdminDisplay.java**

```

import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;
public class AdminDisplay extends HttpServlet{

```

```

        // JDBC driver name and database URL
static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
static final String DB_URL="jdbc:mysql://localhost:3306/quizapp";

        // Database credentials
static final String USER = "root";
static final String PASS = "Shreya@123";
    public void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

        // Set response content type
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
String title="Admin Page";
String docType =
"<!doctype html public "-//w3c//dtd html 4.0 " + "transitional//en\">\n";

        out.println(docType +
"<html>\n" +
"<head><title>" + title + "</title>\n" +
"<link rel = \"stylesheet\" href = \"..//css/cred.css\" type = \"text/css\">\n" +
"<link rel = \"stylesheet\" href = \"..//css/index.css\" type = \"text/css\">\n" +
"<script>document.getElementById('hidden-form').submit()</script>" +
"</head>\n" +
"<body>\n");

        out.println(docType +
"<html>\n" +
"<head><title>" + title + "</title>\n"+ "<style>\n" +
"body {\n" +
"background: linear-gradient(#5EC2B7, #2CA6A4);\n" +
"background-size: cover;\n" +
"font-family: Verdana;\n" +
"font-size: 20px;\n" +
"height: 100vh;\n" +
"width:100vw;\n" +
"margin: 0;\n" +
"overflow: auto;\n" +
"overflow-X: hidden;\n" +
"
```

```
"text-align: center;\n"+\n"}\n+\n".credentials-container {\n"+\n    "text-align: center;\n"+\n    "width: 60%;\n"+\n    "margin: auto;\n"+\n    "background: black;\n"+\n    "border-radius: 30px;\n"+\n}\n+\n\n"table {\n"+\n    "text-align: center;\n"+\n}\n+\n\n"label {\n"+\n    "color: white;\n"+\n    "font-size: 30px;\n"+\n}\n+\n\n"tr {\n"+\n    "width: 100%;\n"+\n    "text-align: center;\n"+\n    "padding: 20px;\n"+\n}\n+\n\n"td {\n"+\n    "width: 25%;\n"+\n    "text-align: center;\n"+\n    "padding: 20px;\n"+\n}\n+\n\n"input[type=\"submit\"] {\n"+\n    "background: white;\n"+\n    "border-radius: 5px;\n"+\n    "padding: 10px;\n"+\n    "color: black;\n"+\n    "font-size: 20px;\n"+\n    "width: 40%;\n"+\n}\n+\n\n"
```

```

"input[type=\"text\"] {\n"+
    "background: white;\n"+
    "border-radius: 5px;\n"+
    "padding: 10px;\n"+
    "color: black;\n"+
    "font-size: 20px;\n"+
    "width: 80%;\n"+
"}\n"+
"\n");
HttpSession session = request.getSession();
Integer count = (Integer)session.getAttribute("usercount");
out.println("<h1>Welcome Admin!<h1>");
out.println("<br><br><div class='credentials-container'><br><br><label>No of Users
Taking the Test: "+count+"</label></div></body></html>");

}
}

```

### **DisplayScore.java**

```

import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class DisplayScore extends HttpServlet{
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
    static final String DB_URL="jdbc:mysql://localhost:3306/quizapp";

    // Database credentials
    static final String USER = "root";
    static final String PASS = "Shreya@123";
    public void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

    // Set response content type

```

```
response.setContentType("text/html");
PrintWriter out = response.getWriter();
String title = "Quiz Score";
String docType =
"<!doctype html public "-//w3c//dtd html 4.0 " + "transitional//en\">\n";

out.println(docType +
"<html>\n" +
"<head><title>" + title + "</title>\n"+"<style>\n" +
"body {\n"+
"background: linear-gradient(#5EC2B7, #2CA6A4);\n"+
"background-size: cover;\n"+
"font-family: Verdana;\n"+
"font-size: 20px;\n"+
"height: 100vh;\n"+
"width:100vw;\n"+
"margin: 0;\n"+
"overflow: auto;\n"+
"overflow-X: hidden;\n"+
"text-align: center;\n"+
"}\n"+
".credentials-container {\n"+
"text-align: center;\n"+
"width: 60%;\n"+
"margin: auto;\n"+
"background: black;\n"+
"border-radius: 30px;\n"+
"}\n"+
"table {\n"+
"text-align: center;\n"+
"}\n"+
"label {\n"+
"color: white;\n"+
"font-size: 30px;\n"+
"}\n"+
"tr {\n"+
"width: 100%;\n"+
```

```
"text-align: center;\n"+\n    "padding: 20px;\n"+\n"}\n"+\n\n"td {\n"+\n    "width: 25%;\n"+\n    "text-align: center;\n"+\n    "padding: 20px;\n"+\n}\n"+\n\n"input[type=\"submit\"] {\n"+\n    "background: white;\n"+\n    "border-radius: 5px;\n"+\n    "padding: 10px;\n"+\n    "color: black;\n"+\n    "font-size: 20px;\n"+\n    "width: 40%;\n"+\n}\n"+\n\n"input[type=\"text\"] {\n"+\n    "background: white;\n"+\n    "border-radius: 5px;\n"+\n    "padding: 10px;\n"+\n    "color: black;\n"+\n    "font-size: 20px;\n"+\n    "width: 80%;\n"+\n}\n"+\n\n"</style>\n");\n\nString ans1 = request.getParameter("answer1");\nString ans2 = request.getParameter("answer2");\nString name = request.getParameter("name");\ntry {\n    // Register JDBC driver\n    Class.forName(JDBC_DRIVER);\n    //Class.forName("com.mysql.cj.jdbc.Driver");\n\n    // Open a connection\n
```

```

Connection conn = DriverManager.getConnection(DB_URL, USER,
PASS);

        // Execute SQL query
        Statement stmt = conn.createStatement();
        String sql;
        sql = "SELECT * FROM quiz";
        ResultSet rs = stmt.executeQuery(sql);

        // Extract data from result set
        int qn=1;
        int score1=0;
        int score2=0;
        int totalscore=0;
        while(rs.next()){
            //Retrieve by column name
            if(qn==1) {
                String answer1 = rs.getString("answer");
                if(ans1.equals(answer1)) {
                    score1 = 1;
                    totalscore++;
                }
            }
            if(qn==2){
                String answer2 = rs.getString("answer");
                if(ans2.equals(answer2)) {
                    score2 = 1;
                    totalscore++;
                }
            }
            qn++;
        }

        PreparedStatement st = conn
        .prepareStatement("insert into results values(?, ?, ?, ?)");
        st.setString(1, request.getParameter("id"));
        st.setInt(2, score1);
        st.setInt(3, score2);
        st.setInt(4, totalscore);
        st.executeUpdate();
    }
}

```

```

stmt = conn.createStatement();
sql = "SELECT * FROM results where id='"+request.getParameter("id")+"'";
rs = stmt.executeQuery(sql);

out.println("<h1>QUIZ SCORES</h1><br><br>");
out.println("<h3>Hello, "+name+"</h3>");
// Extract data from result set
while(rs.next()){
    //Retrieve by column name
    int s1 = rs.getInt("score1");
    int s2 = rs.getInt("score2");
    int total = rs.getInt("total");
    out.println("<div class='credentials-container'>\n"+
    "<table>\n"+
    "<tr>\n"+
    "<td><label>Question 1</label>/td>\n"+
    "<td>" + <label>" + s1 + </label></td>\n"+
    "</tr>" +
    "<tr>\n"+
    "<td><label>Question 2</label></td>\n"+
    "<td><label>" + s2 + "</label></td>\n"+
    "</tr>" +
    "<tr>\n"+
    "<td><label>Total Score</label></td>\n"+
    "<td><label>" + total + "</label></td>\n"+
    "</tr>" +
    "</table>\n"+
    "</div><br><br>");

}

out.println("</body></html>");

// Clean-up environment
rs.close();
stmt.close();
conn.close();
}

catch(SQLException se) {
//Handle errors for JDBC
}

```

```
    se.printStackTrace();
}
catch(Exception e) {
//Handle errors for Class.forName
e.printStackTrace();
}
}
```

## InsertCredentials.java

```
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class InsertCredentials extends HttpServlet{
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
    static final String DB_URL="jdbc:mysql://localhost:3306/quizapp";

    // Database credentials
    static final String USER = "root";
    static final String PASS = "Shreya@123";

    public void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
        // Set response content type
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        String title="Insert Credentials";
        String docType =
"<!doctype html public "-//w3c//dtd html 4.0 " + "transitional//en\">\n";
        out.println(docType +
"<html>\n" +
"<head><title>" + title + "</title>\n" +
"<link rel = \"stylesheet\" href = \"..../css/cred.css\" type = \"text/css\">\n" +
"<link rel = \"stylesheet\" href = \"..../css/index.css\" type = \"text/css\">\n" +
"</head>\n");
    }
}
```

```

try {
    // Register JDBC driver
    //Class.forName("com.mysql.cj.jdbc.Driver");
    Class.forName(JDBC_DRIVER);

    // Open a connection
    Connection conn = DriverManager.getConnection(DB_URL, USER,
PASS);

    // Execute SQL query
    PreparedStatement st = conn
.prepareStatement("insert into credentials values(?,?)");
    st.setString(1, request.getParameter("username"));
    st.setString(2, request.getParameter("password"));
    st.executeUpdate();

    // Close all the connections
    st.close();
    conn.close();

    // Get a writer pointer
    // to display the successful result
    response.sendRedirect("html/login.html");
    // forwarding the request to Welcome.java
}

catch (Exception e) {
    e.printStackTrace();
}
}
}

```

### **InsertDetails.java**

```

import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

```

```

public class InsertDetails extends HttpServlet{

```

```

        // JDBC driver name and database URL
static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
static final String DB_URL="jdbc:mysql://localhost:3306/quizapp";

        // Database credentials
static final String USER = "root";
static final String PASS = "Shreya@123";

    public void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

        // Set response content type
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
String title="Insert Details";
String docType =
"<!doctype html public "-//w3c//dtd html 4.0 " + "transitional//en">\n";

        out.println(docType +
"<html>\n" +
"<head><title>" + title + "</title>\n" +
"<link rel = \"stylesheet\" href = \"..//css/cred.css\" type = \"text/css\">\n" +
"<link rel = \"stylesheet\" href = \"..//css/index.css\" type = \"text/css\">\n" +
"<script>document.getElementById('hidden-form').submit()</script>" +
"</head>\n" +
"<body>\n");

        out.println(docType +
"<html>\n" +
"<head><title>" + title + "</title>\n" + "<style>\n" +
"body {\n" +
"background: linear-gradient(#5EC2B7, #2CA6A4);\n" +
"background-size: cover;\n" +
"font-family: Verdana;\n" +
"font-size: 20px;\n" +
"height: 100vh;\n" +
"width:100vw;\n" +
"margin: 0;\n" +
"overflow: auto;\n" +
"overflow-X: hidden;\n" +
"
```

```
"text-align: center;\n"+\n"}\n+\n".credentials-container {\n"+\n    "text-align: center;\n"+\n    "width: 60%;\n"+\n    "margin: auto;\n"+\n    "background: black;\n"+\n    "border-radius: 30px;\n"+\n}\n+\n\n"table {\n"+\n    "text-align: center;\n"+\n}\n+\n\n"label {\n"+\n    "color: white;\n"+\n    "font-size: 30px;\n"+\n}\n+\n\n"tr {\n"+\n    "width: 100%;\n"+\n    "text-align: center;\n"+\n    "padding: 20px;\n"+\n}\n+\n\n"td {\n"+\n    "width: 25%;\n"+\n    "text-align: center;\n"+\n    "padding: 20px;\n"+\n}\n+\n\n"input[type=\"submit\"] {\n"+\n    "background: white;\n"+\n    "border-radius: 5px;\n"+\n    "padding: 10px;\n"+\n    "color: black;\n"+\n    "font-size: 20px;\n"+\n    "width: 40%;\n"+\n}\n+\n\n"
```

```

"input[type=\"text\"] {\n"+
    "background: white;\n"+
    "border-radius: 5px;\n"+
    "padding: 10px;\n"+
    "color: black;\n"+
    "font-size: 20px;\n"+
    "width: 80%;\n"+
"}\n"+
"\n");

String name = request.getParameter("name");
String contact = request.getParameter("contact");
try {
    // Register JDBC driver
    //Class.forName("com.mysql.cj.jdbc.Driver");
    Class.forName(JDBC_DRIVER);

    // Open a connection
    Connection conn = DriverManager.getConnection(DB_URL, USER,
PASS);

    // Execute SQL query
    PreparedStatement st = conn
.prepareStatement("insert into registration values(?,?,?,?,?,?,?,?,?,?)");
    st.setString(1, request.getParameter("name"));
    st.setString(2, request.getParameter("cname"));
    st.setString(3, request.getParameter("cadd"));
    st.setInt(4, Integer.valueOf(request.getParameter("pin")));
    st.setInt(5, Integer.valueOf(request.getParameter("age")));
    st.setString(6, request.getParameter("dob"));
    st.setString(7, request.getParameter("gender"));
    st.setString(8, request.getParameter("dept"));
    st.setString(9, request.getParameter("contact"));
    st.setString(10, request.getParameter("email"));
    st.setString(11, request.getParameter("progskills"));
    st.setString(12, request.getParameter("hobb"));
    st.executeUpdate();

    Cookie cookie1 = new Cookie("Name", name);
    // Add cookie to HTTP response.
}

```

```

response.addCookie(cookie1);
Cookie cookie2 = new Cookie("Contact", contact);
// Add cookie to HTTP response.
response.addCookie(cookie2);
out.println("<br><br><h1>Registered Successfully!<h1><br><br>");
out.println("<form id='hidden-form' class='credentials-container'"+action="http://localhost:8080/quizapp/RenQuiz'>\n"+"<input type='hidden' name='name' value='"+request.getParameter("name")+"'>\n"+"<label>Do You Want To Proceed To Quiz?</label>\n<br><br><input type='submit' value='Yes, Proceed'><br><br>\n"+"</form></body></html>");

// Close all the connections
st.close();
conn.close();

// Get a writer pointer
// to display the successful result
// forwarding the request to Welcome.java
//out.println("Successfully updated!");

}

catch (Exception e) {
    e.printStackTrace();
}

}

}
}

```

## **RenderQuiz.java**

```

import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class RenderQuiz extends HttpServlet{
    // JDBC driver name and database URL
    static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";
    static final String DB_URL="jdbc:mysql://localhost:3306/quizapp";

```

```
// Database credentials
static final String USER = "root";
static final String PASS = "Shreya@123";

int count = 1;

public void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

// creating HTTP Session
    // Set response content type
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    String title = "Quiz";
    String docType =
"<!doctype html public "-//w3c//dtd html 4.0 " + "transitional//en\">\n";

    out.println(docType +
"<html>\n" +
"<head><title>" + title + "</title>\n" + "<style>\n" +
"body {\n" +
"background: linear-gradient(#5EC2B7, #2CA6A4);\n" +
"background-size: cover;\n" +
"font-family: Verdana;\n" +
"font-size: 20px;\n" +
"height: 100vh;\n" +
"width:100vw;\n" +
"margin: 0;\n" +
"overflow: auto;\n" +
"overflow-X: hidden;\n" +
"text-align: center;\n" +
"}\n" +
".credentials-container {\n" +
"text-align: center;\n" +
"width: 60%;\n" +
"margin: auto;\n" +
"background: black;\n" +
```

```
"border-radius: 30px;\n" +\n"}\n" +\n\n"table {\n" +\n    "text-align: center;\n" +\n"}\n" +\n\n"label {\n" +\n    "color: white;\n" +\n    "font-size: 30px;\n" +\n"}\n" +\n\n"tr {\n" +\n    "width: 100%;\n" +\n    "text-align: center;\n" +\n    "padding: 20px;\n" +\n"}\n" +\n\n"td {\n" +\n    "width: 25%;\n" +\n    "text-align: center;\n" +\n    "padding: 20px;\n" +\n"}\n" +\n\n"input[type=\"submit\"] {\n" +\n    "background: white;\n" +\n    "border-radius: 5px;\n" +\n    "padding: 10px;\n" +\n    "color: black;\n" +\n    "font-size: 20px;\n" +\n    "width: 40%;\n" +\n"}\n" +\n\n"input[type=\"text\"] {\n" +\n    "background: white;\n" +\n    "border-radius: 5px;\n" +\n    "padding: 10px;\n" +\n    "color: black;\n" +\n    "font-size: 20px;\n" +\n    "width: 80%;\n" +\n}
```

```

"}\n"+
"</style>\n");

String username = request.getParameter("username");
String password = request.getParameter("password");
String name = request.getParameter("name");

try {
    HttpSession session = request.getSession();
    String id = session.getId();

    session.setAttribute("usercount", Integer.valueOf(count));
    count++;

    // Register JDBC driver
    Class.forName(JDBC_DRIVER);
    //Class.forName("com.mysql.cj.jdbc.Driver");

    // Open a connection
    Connection conn = DriverManager.getConnection(DB_URL, USER,
PASS);

    // Execute SQL query
    Statement stmt = conn.createStatement();
    String sql,n="", contact="";

Cookie[] cookie = request.getCookies();
for(int i=0; i<cookie.length; i++) {
    if(cookie[i].getName().equals("Name")) {
        n = cookie[i].getValue();
    }
    if(cookie[i].getName().equals("Contact")) {
        contact = cookie[i].getValue();
    }
}

sql = "SELECT * FROM quiz";
ResultSet rs = stmt.executeQuery(sql);

```

```

        // Extract data from result set
        out.println("<h1>QUIZ</h1><br>");
        out.println("<h3>Name: "+n+"</h3>");
        out.println("<h3>Contact: "+contact+"</h3><br><br>");
        out.println("<form class='credentials-container' action='http://localhost:8080/quizapp/DispScore'>\n<table width='100%'>\n");
        int qn = 1;
        while(rs.next()){
            //Retrieve by column name
            String question = rs.getString("question");
            String answer = rs.getString("answer");
            String options = rs.getString("options");
            String[] option = options.split(",");
            out.println("<tr>\n<td colspan='4'><label>"+qn+" "+question+"</label></td>\n</tr>");
            for(int i=0; i<option.length; i++) {
                out.println("<td><label>"+(i+1)+" "+option[i]+"</label></td>\n");
            }
            out.println("</tr>\n<td colspan='4'><input type='text' name='answer"+qn+"' placeholder='Enter answer'></td></tr>");
            qn++;
        }
        out.println("<input type='hidden' name='id' value='"+id+"'");
        out.println("<input type='hidden' name='name' value='"+name+"><tr><td colspan='4'><input type='submit' value='Submit'></td></tr>");
        out.println("</body></html>");

        // Clean-up environment
        rs.close();
        stmt.close();
        conn.close();
    }
    catch(SQLException se) {
        //Handle errors for JDBC
        se.printStackTrace();
    }
    catch(Exception e) {
        //Handle errors for Class.forName
        e.printStackTrace();
    }
}

```

```
    }  
}
```

### UserAuthenticate.java

```
import java.io.*;  
import java.util.*;  
import javax.servlet.*;  
import javax.servlet.http.*;  
import java.sql.*;  
  
public class UserAuthenticate extends HttpServlet{  
    // JDBC driver name and database URL  
    static final String JDBC_DRIVER = "com.mysql.cj.jdbc.Driver";  
    static final String DB_URL="jdbc:mysql://localhost:3306/quizapp";  
  
    // Database credentials  
    static final String USER = "root";  
    static final String PASS = "Shreya@123";  
    public void doGet(HttpServletRequest request, HttpServletResponse response)  
throws ServletException, IOException {  
  
    // Set response content type  
    response.setContentType("text/html");  
    PrintWriter out = response.getWriter();  
    String title = "Validating";  
    String docType =  
    "<!doctype html public "-//w3c//dtd html 4.0 " + \"transitional//en\">\n";  
  
    out.println(docType +  
    "<html>\n" +  
    "<head><title>" + title + "</title>\n" +  
    "<link rel = \"stylesheet\" href = \"..//css/cred.css\" type = \"text/css\">\n" +  
    "<link rel = \"stylesheet\" href = \"..//css/index.css\" type = \"text/css\">\n" + "</head>\n");  
  
    String username = request.getParameter("username");  
    String password = request.getParameter("password");  
  
    try {  
        if(username.equals("admin") && password.equals("admin")) {
```

```

        RequestDispatcher rd =
request.getRequestDispatcher("/AdminDisp");
        rd.forward(request, response);
    }
else {
    // Register JDBC driver
    Class.forName(JDBC_DRIVER);
//Class.forName("com.mysql.cj.jdbc.Driver");

    // Open a connection
    Connection conn = DriverManager.getConnection(DB_URL,
USER, PASS);

    // Execute SQL query
    Statement stmt = conn.createStatement();
    String sql;
    sql = "SELECT * FROM credentials";
    ResultSet rs = stmt.executeQuery(sql);

    // Extract data from result set
    int flag=0;
    while(rs.next()){
        //Retrieve by column name
        String uname = rs.getString("username");
        String pass = rs.getString("password");
        if(uname.equals(username) && pass.equals(password)) {
            RequestDispatcher rd =
request.getRequestDispatcher("html/registration.html");
                // forwarding the request to Welcome.java
                rd.forward(request, response);
                flag=1;
            }
        }
    if(flag == 0) {
        out.println("Invalid Credentials!");
        RequestDispatcher rd =
request.getRequestDispatcher("html/login.html");
                // forwarding the request to Welcome.java
                rd.include(request, response);
    }
}

```

```
        out.println("</body></html>");

    // Clean-up environment
    rs.close();
    stmt.close();
    conn.close();
}

}

catch(SQLException se) {
//Handle errors for JDBC
se.printStackTrace();
}

catch(Exception e) {
//Handle errors for Class.forName
e.printStackTrace();
}

}

}
```

## Web.xml

```
<web-app>
  <servlet>
    <servlet-class>UserAuthenticate</servlet-class>
    <servlet-name>UserAuth</servlet-name>
  </servlet>
  <servlet-mapping>
    <servlet-name>UserAuth</servlet-name>
    <url-pattern>/UserAuth</url-pattern>
  </servlet-mapping>

  <servlet>
    <servlet-class>InsertCredentials</servlet-class>
    <servlet-name>InsCred</servlet-name>
  </servlet>
  <servlet-mapping>
    <servlet-name>InsCred</servlet-name>
    <url-pattern>/InsCred</url-pattern>
  </servlet-mapping>
```

```
<servlet>
  < servlet-class>InsertDetails</servlet-class>
  < servlet-name>InsDet</servlet-name>
</servlet>
<servlet-mapping>
  < servlet-name>InsDet</servlet-name>
  <url-pattern>/InsDet</url-pattern>
</servlet-mapping>

<servlet>
  < servlet-class>RenderQuiz</servlet-class>
  < servlet-name>RenQuiz</servlet-name>
</servlet>
<servlet-mapping>
  < servlet-name>RenQuiz</servlet-name>
  <url-pattern>/RenQuiz</url-pattern>
</servlet-mapping>

<servlet>
  < servlet-class>DisplayScore</servlet-class>
  < servlet-name>DispScore</servlet-name>
</servlet>
<servlet-mapping>
  < servlet-name>DispScore</servlet-name>
  <url-pattern>/DispScore</url-pattern>
</servlet-mapping>

<servlet>
  < servlet-class>ProceedToQuiz</servlet-class>
  < servlet-name>ProcQuiz</servlet-name>
</servlet>
<servlet-mapping>
  < servlet-name>ProcQuiz</servlet-name>
  <url-pattern>/ProcQuiz</url-pattern>
</servlet-mapping>

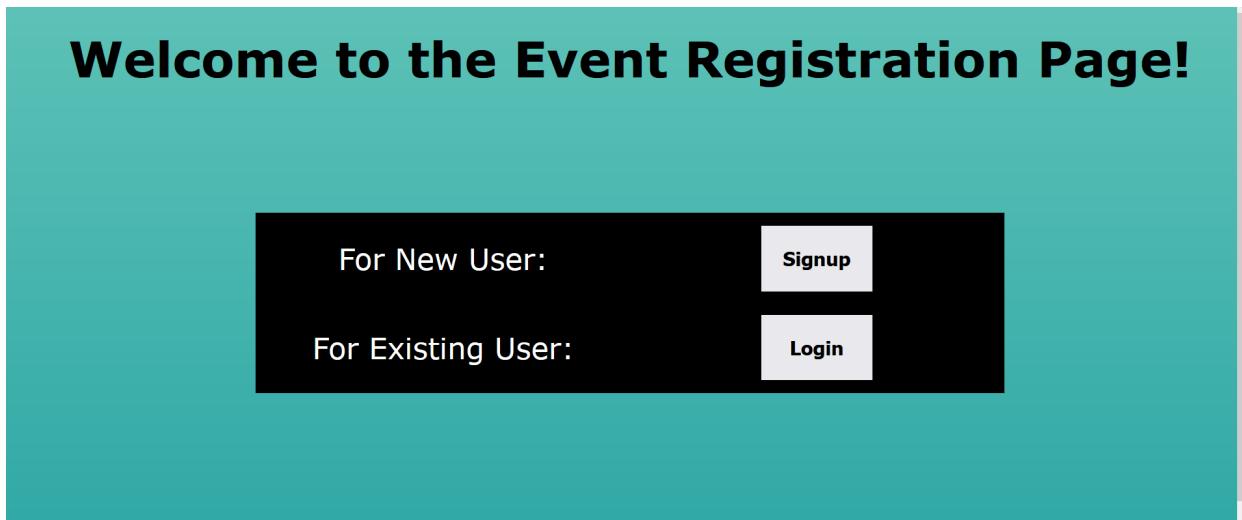
<servlet>
  < servlet-class>AdminDisplay</servlet-class>
  < servlet-name>AdminDisp</servlet-name>
</servlet>
```

```
<servlet-mapping>
  <servlet-name>AdminDisp</servlet-name>
  <url-pattern>/AdminDisp</url-pattern>
</servlet-mapping>

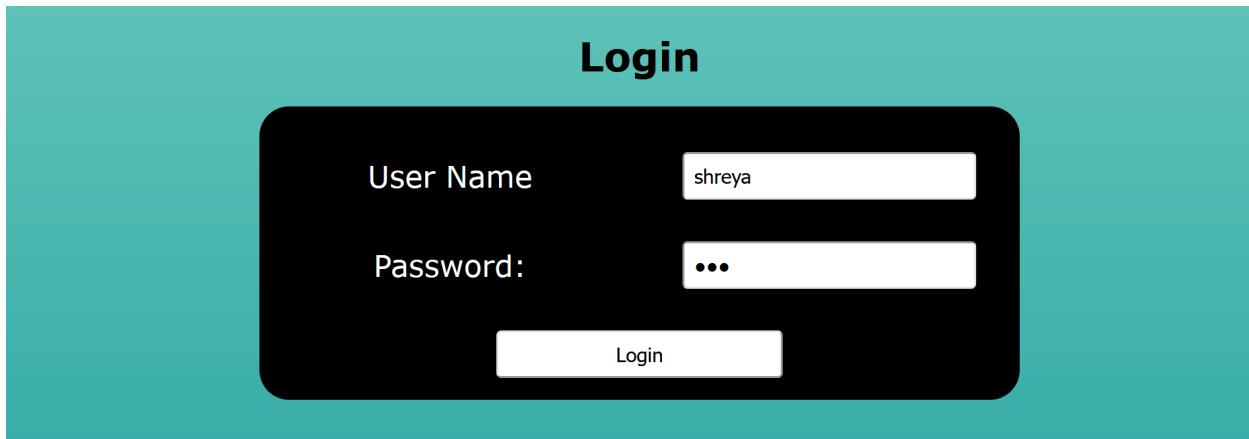
</web-app>
```

### **OUTPUT SCREENSHOTS:**

welcome.html



login.html



signup.html

## Sign Up

User Name shreya

Password: \*\*\*

Sign Up

Registration.html

06:05:43 PM

### REGISTRATION FORM

Name : Shreya

College name : ssn

College Address : kalavakkam

Pin : 600032

Age : 21

Email : shreyasriram00@gmail.com

JAVA

Programming Skills :

C++ C JAVA PYTHON RUBY

Hobbies :  Drawing  
 Badminton  
 Reading

Upload Consent : Browse...

Submit

Reset

**Registered Successfully!**

**Do You Want To Proceed To Quiz?**

Yes, Proceed

Cookies stored and displayed

## QUIZ

**Name: Shreya**

**Contact: 7358003061**

1) Which is a keyword?

- 1) auto      2) title      3) card      4) record

Enter answer

2) Which is a not keyword?

- 1) auto      2) break      3) while      4) title

Enter answer

Submit

Displaying all scores of a particular user

## QUIZ SCORES

**Hello, Shreya**

Question 1	1
Question 2	1
Total Score	2

Question 1	1
Question 2	0
Total Score	1

Admin login page

## Welcome Admin!

**No of Users Taking the Test: 2**

### **BEST PRACTISES:**

Formatting for code readability, commenting code for details and versioning were used.

### **LEARNING OUTCOME**

1. Learnt how to use servlets and integrate them to a database
2. Create a web page with servlets, HTML, CSS with database connectivity
3. Create and access data from tables in a database.

4. Learnt how to use cookies, hidden form fields, and other session handling techniques

**ASSIGNMENT 6**  
**ONLINE PROGRAMMING SKILL TEST - AJAX**

**OBJECTIVE:**

To validate the Name field in the event registration form

**METHODS, TECHNOLOGIES AND TECHNIQUES USED:**

HTML and CSS were used to develop the form, Javascript was used to validate the form. Ajax was used to validate the name field.

**SOURCE CODE:**

```
<DOCTYPE html>
<html>
    <head>
        <meta charset = "utf-8">
        <link rel = "stylesheet" href = "../css/index.css" type = "text/css">
            <link rel = "stylesheet" href = "../css/reg.css" type = "text/css">
        <title>Details</title>
    </head>
    <style>
body {
    background: linear-gradient(#5EC2B7, #2CA6A4);
    background-size: cover;
    font-family: Verdana;
    font-size: 20px;
    height: 100vh;
    width:100vw;
    margin: 0;
    overflow: auto;
    overflow-X: hidden;
    text-align: center;
}
.reg-heading {
    padding: 10px;
    margin-top: 40px;
    align: center;
    font-weight: bold;
    font-size: 30px;
    text-align: center;
```

}

```
.form-register {  
margin-top: 40px;  
width: 60%;  
margin: auto;  
background-color:black;  
text-align: center;  
}
```

```
label {  
padding: 40px;  
color: white;  
font-size: 20px;  
}
```

```
input[type=text] {  
height: 40px;  
width: 100%;  
font-size: 14px;  
margin-right: 40px;  
}
```

```
input[type=date] {  
height: 40px;  
width: 100%;  
font-size: 14px;  
margin-right: 40px;  
}
```

```
input[type=tel] {  
height: 40px;  
width: 100%;  
font-size: 14px;  
margin-right: 40px;  
}
```

```
input[type=email] {  
height: 40px;  
width: 100%;
```

```
    font-size: 14px;  
    margin-right: 40px;  
}
```

```
input[type=number] {  
    height: 40px;  
    width: 100%;  
    font-size: 14px;  
    margin-right: 40px;  
}
```

```
textarea {  
    width: 100%;  
    height: 100px;  
}
```

```
.select-inp {  
    width: 100%;  
}
```

```
.prog-skill {  
    color: black;  
    padding: 5px;  
    background-color: white;  
    display:inline;  
}
```

```
#clock {  
    font-size: 40px;  
}
```

```
tr {  
    width: 50%;  
    text-align: right;  
    padding: 20px;  
}
```

```
td {  
    width: 50%;  
    text-align: left;
```

```

        padding: 20px;
    }

td.submit-col {
    text-align: right;
    padding: 20px;
}

td.reset-col {
    text-align: left;
    padding: 20px;
}

</style>
<body class = "center">
    <div id="clock">8:10:45</div>
    <header class = "reg-heading">REGISTRATION FORM</header>
    <div class = "form-register">
        <form id="here" action="http://localhost:8080/quizapp/InsDet">
            <table>
                <tr>
                    <td>
                        <label for="name">Name :</label>
                    </td>
                    <td>
                        <input type="text" id="name" name="name" onfocus = "focusFunction()" onblur =
                        "blurFunction()" pattern="[A-Za-z]+" oninvalid="nameinv()" onchange="validate()" required>
                    </td>
                </tr>
                <tr>
                    <td>
                        <label for="cname">College name :</label>
                    </td>
                    <td>
                        <input type="text" id="cname" name="cname"
                        pattern="[A-Za-z]+" oninvalid="nameinv()" onselect="selectFunction()">
                    </td>
                </tr>

```

```

<tr>
  <td>
    <label for="cadd">College Address :</label>
  </td>
  <td>
    <input type = "text" id="cadd"
onkeypress="keypressFunction()">
  </td>
</tr>
<tr>
  <td>
    <label for="pin">Pin :</label>
  </td>
  <td>
    <input type="number" id="pin" name="pin" maxlength="6"
oninvalid="pininv()" pattern=[0-9]+>
  </td>
</tr>
<tr>
  <td>
    <label for="age">Age :</label>
  </td>
  <td>
    <input type="number" id="age" name="age" min="10"
max="22">
  </td>
</tr>
<tr>
  <td>
    <label for="dob">Date of Birth :</label>
  </td>
  <td>
    <input type="date" id="dob" name="dob">
  </td>
</tr>
<tr>
  <td>
    <label for="gender">Gender :</label>
  </td>
  <td>

```

```

<input type="radio" id="male" name="gender" value="male">
<label for="gender">Male</label>
<input type="radio" id="female" name="gender" value="female">
<label for="gender">Female</label>
</td>
</tr>
<tr>
<td>
<label for="dept">Department :</label>
</td>
<td>
<select id="dept" name="dept" onchange = "changeFunction()">
<option value="choice">Choose an option</option>
<option value="CSE">CSE</option>
<option value="IT">IT</option>
<option value="ECE">ECE</option>
<option value="BME">BME</option>
</select>
</td>
</tr>
<tr>
<td>
<label for="contact">Contact Number :</label>
</td>
<td>
<input type="tel" id="contact" name="contact" pattern="[0-9]+" maxlength="10"
oninvalid="contactinv()">
</td>
</tr>
<tr>
<td>
<label for="email">Email :</label>
</td>
<td>
<input type="text" id="emailid" name="emailid" required>
</td>
</tr>
<tr>
<td>
<label for = "programming" name = "progskills">Programming Skills :</label>

```

```

</td>
<td>
    <textarea id = "progskills" name = "progskills" placeholder = "Drag and drop
    your skills" ondrop = "drop(event)" ondragover =
    "allowDrop(event)"></textarea><br><br>
        <div draggable="true" ondragstart="drag(event)" class =
        "prog-skill" id = "drag1">C++</div>
        <div draggable="true" ondragstart="drag(event)" class =
        "prog-skill" id = "drag2">C</div>
        <div draggable="true" ondragstart="drag(event)" class =
        "prog-skill" id = "drag3">JAVA</div>
        <div draggable="true" ondragstart="drag(event)" class =
        "prog-skill" id = "drag4">PYTHON</div>
        <div draggable="true" ondragstart="drag(event)" class =
        "prog-skill" id = "drag5">RUBY</div>
    </td>
</tr>
<tr>
    <td>
        <label for="hobb">Hobbies : </label><br>
    </td>
    <td>
        <input type="checkbox" id="hobb" name="hobb" value="drawing">
        <label for="hobb">Drawing</label><br>
        <input type="checkbox" id="hobb" name="hobb" value="badminton">
        <label for="hobb">Badminton</label><br>
        <input type="checkbox" id="hobb" name="hobb" value="reading">
        <label for="hobb">Reading</label>
    </td>
</tr>
<tr>
    <td>
        <label for="filename">Upload Consent : </label>
    </td>
    <td>
        <input type="file" id="myFile" name="filename">
    </td>
</tr>
<tr>
    <br>

```

```

<td class="submit-col">
    <input class="submitbuttn" type="submit" value="Submit">
</td>
<td class="reset-col">
    <input class="submitbuttn" type="reset" value="Reset">
</td>
</tr>
</table>
<br><br>
</form>
</div>
<script>
var xhttp, xmlDoc, txt, x, i;
xhttp = new XMLHttpRequest();
xhttp.onreadystatechange = function() {
if (this.readyState == 4 && this.status == 200) {
xmlDoc = this.responseXML;
txt = "";
var flag = 0;
x = xmlDoc.getElementsByTagName("Name");
for (i = 0; i < x.length; i++) {
if(x[i].childNodes[0].nodeValue==document.getElementById("name")) {
flag = 1;
break;
}
}
if(flag==1) {
}
document.getElementById("demo").innerHTML = txt;
}
};
xhttp.open("GET", "cd_catalog.xml", true);
xhttp.send();
setInterval(showTime, 1000);
function showTime() {
let time = new Date();
let hour = time.getHours();
let min = time.getMinutes();
let sec = time.getSeconds();

```

```

am_pm = "AM";

if (hour > 12) {
    hour -= 12;
    am_pm = " PM";
}
if (hour == 0) {
    hr = 12;
    am_pm = " AM";
}

hour = hour < 10 ? "0" + hour : hour;
min = min < 10 ? "0" + min : min;
sec = sec < 10 ? "0" + sec : sec;

let currentTime = hour + ":" +
    min + ":" + sec + am_pm;

document.getElementById("clock")
    .innerHTML = currentTime;
}

showTime();

function submitForm()
{
    window.location.href="submit.html";
    submitFormDetails();
    validateForm();
    tabulate();
}

function focusFunction() {
    document.getElementById("name").style.background = "#5EC2B7";
}

function blurFunction() {
    document.getElementById("name").style.background = "#5EC2B7";
}

```

```

function selectFunction() {
    document.getElementById("cname").style.background = "#5EC2B7";
}

function keypressFunction() {
    document.getElementById("cadd").style.background = "#5EC2B7";
}

function changeFunction() {
    document.getElementById("dept").style.background = "#5EC2B7";
}

function allowDrop(ev) {
    ev.preventDefault();
}
function drag(ev) {
    ev.dataTransfer.setData("target_id_name", ev.target.id);
}
function drop(ev) {
    ev.preventDefault();
    var data = ev.dataTransfer.getData("target_id_name");
    ev.target.innerHTML += document.getElementById(data).innerHTML + " ";
}

function tabulate() {
    var myForm = document.getElementById('here') ;
    let formData = new FormData(myForm);
    document.write('<link rel="stylesheet" href="styles.css"><style>table, th, td{ border: 1px solid gray ; }</style>');
    document.writeln("<h1>FORM RESPONSE RECEIVED</h1>");
    document.writeln("<div class='box' style='width: fit-content;'><table style='width: 400px; margin: 10px; font-size: 25px;'>");

    document.writeln("<tr><th>Name</th><td>" + formData.get('name') + "</td></tr><tr><th>College Name</th><td>" + formData.get('cname') + "</td></tr><tr><th>College Address</th><td>" + formData.get('cadd') + "</td></tr><tr><th>Pincode</th><td>" + formData.get('pin') + "</td></tr><tr><th>Age</th><td>" + formData.get('age') + "</td></tr><tr><th>DOB</th><td>" + formData.get('dob') + "</td></tr><tr><th>Gender</th><td>" + formData.get('gender') + "</td></tr><tr><th>Department</th><td>" + formData.get('dept') + "</td></tr><tr><th>Contact Number</th><td>" + formData.get('contact') + "</td></tr><tr><th>Email</th><td>" + formData.get('email') + "</td></tr>");

}

```

```

t('emailid')+"</td></tr><tr><th>Programming
skills</th><td>"+formData.get('progskills')+"</td></tr><tr><th>Hobbies</th><td>"+formData.
getAll('hobb')+"</td></tr></table></div>") ;
}

function validateForm()
{
    var n=document.getElementById("name").value;
    var n1=document.getElementById("cname").value;
    var n2=document.getElementById("cadd").value;
    var n3=document.getElementById("pin").value;
    var n4=document.getElementById("age").value;
    var n8=document.getElementById("contact").value;
    var n9=document.getElementById("email").value;

    demo.innerHTML="";

    if(n.value.length > 15 || n.value.match(/[A-Z a-z]+/g)==null || n.value.match(/[A-Z a-z]+/g)[0]
!= n.value)
    {
        demo.innerHTML = "Name should be alphabets/spaces and < 15 length.<br>"
    }

    if(n3.value.length > 6)
    {
        demo.innerHTML = demo+innerHTML + "Pin Number should be <= 6 length.<br>"
    }

    if(n4.value.length > 22)
    {
        demo.innerHTML = demo+innerHTML + "Pin Number should be <= 6 length.<br>"
    }

    if(n8.value.match(/[(]+91[)][0-9]{10}/g) == null || n8.value.match(/[(]+91[)][0-9]{10}/g)[0]
!= n8.value)
    {
        demo.innerHTML = demo.innerHTML + "Follow mobile format (+91)xxxxxxxxxx<br>";
    }
}

```

```

if(n9.value.match(/[a-zA-Z\-.0-9]+@[a-zA-Z\-.0-9]+\.[a-zA-Z\-.0-9.]+/g) == null ||
n9.value.match(/[a-zA-Z\-.0-9]+@[a-zA-Z\-.0-9]+\.[a-zA-Z\-.0-9.]+/g)[0] != n9.value)
{
    demo.innerHTML = demo.innerHTML + "Enter Valid email!<br>";
}
}

function nameinv()
{
document.getElementById("namep").innerHTML="Name is not valid should be an
alphanumeric";
document.getElementById("namep").style.color="red";
}

function contactinv()
{
document.getElementById("contactp").innerHTML="Contact Number has to contain only
digits.";
document.getElementById("contactp").style.color="red";
}

</script>
</body>
</html>

```

### **OUTPUT SCREENSHOTS:**

Registration.html

06:05:43 PM

## REGISTRATION FORM

Name :	Shreya
College name :	ssn
College Address :	kalavakkam
Pin :	600032
Age :	21
Email :	shreyasriram00@gmail.com
Programming Skills :	JAVA C++ C JAVA PYTHON RUBY
Hobbies :	<input checked="" type="checkbox"/> Drawing <input type="checkbox"/> Badminton <input type="checkbox"/> Reading
Upload Consent :	<input type="button" value="Browse..."/>
	<input type="button" value="Submit"/> <input type="button" value="Reset"/>

### **BEST PRACTISES:**

Formatting for code readability, commenting code for details and versioning were used.

### **LEARNING OUTCOME**

1. Create a web page with servlets, HTML, CSS with database connectivity
2. Learnt how to use AJAX to validate the name field

**ASSIGNMENT 7**  
**PERSONAL WEBSITE USING REACTJS, NODEJS AND MONGODB**

**OBJECTIVE:**

To design a personal blog using the React framework

**METHODS, TECHNIQUES AND TECHNOLOGIES USED:**

ReactJS was used to refactor the code from the second assignment

**SOURCE CODE**

**a) index.js**

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import './index.css';
import App from './App';
import reportWebVitals from './reportWebVitals';
// ReactDOM.render(<TTContainer />, document.getElementById("root"))

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <React.StrictMode>
    <App />
    {/* <TTCContainer /> */}
  </React.StrictMode>
);

// If you want to start measuring performance in your app, pass a function
// to log results (for example: reportWebVitals(console.log))
// or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
reportWebVitals();
```

**b) App.js**

```
import React from "react";
import "./App.css";
// importing components from react-router-dom package
import {
  BrowserRouter as Router,
```

```

Routes,
Route,
} from "react-router-dom";

// import Home component
import HomePage from "./Home";
// import Journey component
import Journey from "./Journey";
// import Blog component
import Blog from "./Blog";
//import Acad Qual component
import AcadQual from "./AcadQual";
//import Events component
import Events from "./Events";
//import Feedback components
import Feedback from "./Feedback";
// import { render } from "@testing-library/react";

class App extends React.Component{
render() {
  return (
    <Router>
      <Routes>
        <Route exact path="/home" element={<Home/>} />
        <Route path="/myjourney" element={<Journey/>} />
        <Route path="/blog" element={<Blog/>} />
        <Route path="/acad" element={<AcadQual/>} />
        <Route path="/events" element={<Events/>} />
        <Route path="/feedback" element={<Feedback/>} />
      </Routes>
      {/* </div> */}
    </Router>
  );
}
}

export default App;

```

### c) Home.js

```
import React from 'react';
import './style.css';
import { Link } from 'react-router-dom';

class HomePage extends React.Component {
  render() {
    return (
      <>
      <div className="App">
        <ul className="App-header">
          <li>
            <Link to="/home">Home</Link>
          </li>
          <li>
            <Link to="/myjourney">My Journey to SSN</Link>
          </li>
          <li>
            <Link to="/blog">Areas of Interest</Link>
          </li>
          <li>
            <Link to="/acad">Academic Qualifications</Link>
          </li>
          <li>
            <Link to="/events">Events Organized</Link>
          </li>
          <li>
            <Link to="/feedback">Feedback Form</Link>
          </li>
        </ul>
      </div>

      <div className="div1-1">
        <div className="div1-2"></div>
        <br>
        <div className="div1-3">
          <ul>
            <li><strong>Name : </strong>Shreya Sriram</li>
            <p></p>
            <li><strong>Age : </strong>20</li>
            <p></p>
          </ul>
        </div>
      </div>
    );
  }
}
```

```

<li><strong>Gender : </strong>Female</li>
<p></p>
<li><strong>Date of Birth : </strong>11-10-2001</li>
<p></p>
<li><a href="mailto:shreya19106@cse.ssn.edu.in" className="a-email"><strong>Email
: </strong>shreya19106@cse.ssn.edu.in</a></li>
<p></p>
</ul>
</div>
</div>

<ul className="App-header">
<li>
<p className="p-footer">Phone No. :7358003061</p>
<Link to="/home">Back to Homepage</Link>
<p className="p-footer"> Location : Kalavakkam, Chennai</p>
</li>
</ul>
</>
);
}
}
}

export default HomePage;

```

#### d) Journey.js

```

import React from 'react';
import './style.css';
import { Link } from 'react-router-dom';

Class Journey extends React.Component {
  render() {
    return (
      <>
        <div className="App">
          <ul className="App-header">
            <li>
              <Link to="/home">Home</Link>
            </li>
          </ul>
        </div>
      </>
    );
  }
}

export default Journey;

```

```

<li>
  <Link to="/myjourney">My Journey to SSN</Link>
</li>
<li>
  <Link to="/blog">Areas of Interest</Link>
</li>
<li>
  <Link to="/acad">Academic Qualifications</Link>
</li>
<li>
  <Link to="/events">Events Organized</Link>
</li>
<li>
  <Link to="/feedback">Feedback Form</Link>
</li>
</ul>
</div>

<div className="div2-1">
<br>
<map name="workmap">
  <area shape="rect" coords="34,44,270,350" alt="Computer" title="SSN College of
Engineering">
</map>
<figcaption>SSN College of Engineering</figcaption>
<section>
  <p className="p2-1">Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem
  ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur
  adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit
  amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing
  elit. <br> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet,
  consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum
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  elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p><br>
</section>
</div>

<ul className="App-header">
<li>
  <p className="p-footer">Phone No. :7358003061</p>

```

```

        <Link to="/home">Back to Homepage</Link>
        <p className="p-footer"> Location : Kalavakkam, Chennai</p>
        </li>
        </ul>
    </>
);
}
}
}

export default Journey;

```

### e) Blog.js

```

import React from 'react';
import './style.css';
import { Link } from 'react-router-dom';

Class Blog extends React.Component {
render() {
return (
<>
<div className="App">
<ul className="App-header">
<li>
<Link to="/home">Home</Link>
</li>
<li>
<Link to="/myjourney">My Journey to SSN</Link>
</li>
<li>
<Link to="/blog">Areas of Interest</Link>
</li>
<li>
<Link to="/acad">Academic Qualifications</Link>
</li>
<li>
<Link to="/events">Events Organized</Link>
</li>
<li>
<Link to="/feedback">Feedback Form</Link>

```

```
</li>
</ul>
</div>

<ol>
<li>
  <h3>Singing</h3>>
  <br>
  <p><q>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit
t, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem
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t, consectetur adipiscing elit.</p><br>
</li>
<li>
  <h3>Reading</h3>>
  <br>
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet,
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</li>
<li>
  <h3>Coding</h3>>
  <br>
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```

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amet, consectetur adipiscing elit.</p><br>
</li>
<li>
    </li>
</ol>

<ul className="App-header">
    <li>
        <p className="p-footer">Phone No. : 7358003061</p>
        <Link to="/home">Back to Homepage</Link>
        <p className="p-footer"> Location : Kalavakkam, Chennai</p>
    </li>
</ul>
</>
);
}
}

```

export default Blog;

#### f) AcadQual.js

```

import React from 'react';
import './style.css';
import { Link } from 'react-router-dom';

Class AcadQual extends React.Component {
    render() {
        return (
            <>
            <div className="App">
                <ul className="App-header">
                    <li>
                        <Link to="/home">Home</Link>
                    </li>
                    <li>
                        <Link to="/myjourney">My Journey to SSN</Link>
                    </li>
                    <li>
                        <Link to="/blog">Areas of Interest</Link>
                    </li>
                </ul>
            </div>
        );
    }
}

```

```

</li>
<li>
    <Link to="/acad">Academic Qualifications</Link>
</li>
<li>
    <Link to="/events">Events Organized</Link>
</li>
<li>
    <Link to="/feedback">Feedback Form</Link>
</li>
</ul>
</div>

```

```

<br>
<p></p>
<caption><strong>Academic Proficiency Details</strong></caption>
<table border="1" align="center">
    <thead>
        <tr>
            <th>Level</th>
            <th>Institution</th>
            <th colspan="2">CGPA/Percentage</th>
            <th>Year of Graduation</th>
        </tr>
    </thead>
    <tbody>
        <tr>
            <td>CBSE Class 10</td>
            <td rowspan="2">Abudhabi Indian School</td>
            <td>10</td>
            <td>100%</td>
            <td>2017</td>
        </tr>
        <tr>
            <td>CBSE Class 12</td>
            <td>9.66</td>
            <td>96.6%</td>
            <td>2019</td>
        </tr>
        <tr>

```

```

<td>B.E CSE</td>
<td>SSN College of Engineering</td>
<td>9.156</td>
<td>91.56%</td>
<td>2023</td>
</tr>
</tbody>
</table>
<p></p>
<h1 style="margin-left: 35px;">Coding Knowledge</h1>
<ol>
  <h4>1. Programming Languages</h4>
  <ol>
    a. C/C++<br>
    b. Java<br>
    c. Python<br>
    d. MATLAB<br>
  </ol>
  <h4>2. Web Development</h4>
  <ol>
    a. HTML5<br>
    b. CSS3<br>
    c. JavaScript<br>
  </ol>
<br>

<ul className="App-header">
  <li>
    <p className="p-footer">Phone No. : 7358003061</p>
    <Link to="/home">Back to Homepage</Link>
    <p className="p-footer"> Location : Kalavakkam, Chennai</p>
  </li>
</ul>
</>
);
}
}
}

export default AcadQual;

```

## g) Events.js

```
import React from 'react';
import './style.css';
import { Link } from 'react-router-dom';

Class Events extends React.Component {
  render() {
    return (
      <>
      <div className="App">
        <ul className="App-header">
          <li>
            <Link to="/home">Home</Link>
          </li>
          <li>
            <Link to="/myjourney">My Journey to SSN</Link>
          </li>
          <li>
            <Link to="/blog">Areas of Interest</Link>
          </li>
          <li>
            <Link to="/acad">Academic Qualifications</Link>
          </li>
          <li>
            <Link to="/events">Events Organized</Link>
          </li>
          <li>
            <Link to="/feedback">Feedback Form</Link>
          </li>
        </ul>
      </div>

      <div className="div5-1">
        <div className="div5-2">
          <h2 className="head6" ><span>Event</span> 1</h2>>
          <br>
          <article>
            <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing</p>
          </article>
        </div>
      </div>
    );
  }
}
```

elit.<br>Lorem ipsum dolor sit amet, consectetur adipiscing elit.Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p><br>

</article>

</div>

<div className="div5-2">

<h2 className="head6"><span>Event</span> 2</h2>

<br>

<details>

<summary>Graduation Ceremony</summary>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p><br>

</details>

</div>

<div className="div5-2">

<h2 className="head6"><span>Event</span> 3</h2>>

<br>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p><br>

</div>

<div className="div5-2">

<h2 className="head6"><span>Event</span> 4</h2>

<br>

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit.Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p><br>

</div>

</div>

<ul className="App-header">

<li>

<p className="p-footer">Phone No. : 7358003061</p>

<Link to="/home">Back to Homepage</Link>

<p className="p-footer"> Location : Kalavakkam, Chennai</p>

</li>

</ul>

```

        </>
    );
}
}

export default Events;

```

### **h) Feedback.js**

```

import React from 'react';
import './style.css';
import { Link } from 'react-router-dom';

Class Feedback extends React.Component {
render() {
return (
<>
<div className="App">
<ul className="App-header">
<li>
<Link to="/home">Home</Link>
</li>
<li>
<Link to="/myjourney">My Journey to SSN</Link>
</li>
<li>
<Link to="/blog">Areas of Interest</Link>
</li>
<li>
<Link to="/acad">Academic Qualifications</Link>
</li>
<li>
<Link to="/events">Events Organized</Link>
</li>
<li>
<Link to="/feedback">Feedback Form</Link>
</li>
</ul>
</div>

```

```
<div class="div6-1">
  <div class="div6-2">
    </div>
    <div class="div6-3">
      <form>
        <label for="name">Name</label><br>
        <input type="text" id="name" name="name"><br>
        <p></p>
        <label for="email">Email</label><br>
        <input type="text" id="email" name="email"><br>
        <p></p>
        <label for="message">Message</label><br>
        <textarea id="text" name="message"></textarea><br>
        <button type="submit"> Submit </button>
      </form>
    </div>
  </div>

<ul className="App-header">
  <li>
    <p className="p-footer">Phone No. : 7358003061</p>
    <Link to="/home">Back to Homepage</Link>
    <p className="p-footer"> Location : Kalavakkam, Chennai</p>
  </li>
</ul>
</>
);
}
}
```

export default Feedback;

**g) CSS file for styling (style.css)**

```
nav {  
    background-color: #FFF0E0;  
    padding-top: 20px;  
    padding-bottom: 20px;  
}
```

```
.ul-header{  
    display: flex;  
    flex-direction: row;  
}
```

```
.a-header{  
    display: block;  
    text-align: center;  
    width: 16.67%;  
}
```

```
.a-header:visited{  
    color: blue;  
}
```

```
.body-1{  
    height: 100%;  
    margin: 0;  
    padding: 0;  
}
```

```
.div1-1{  
    width: 100%;  
    height: 100%;  
    display: flex;  
    flex-direction: row;  
    padding: 0px;
```

```
background-color: #000000;
}

.div1-2{
    width: 30%;
    min-height: 100%;
    /*background-color: #000000;*/
    background-image: linear-gradient(to bottom right, #000000, #333333, #666666,
#999999);
}

.img1-1{
    width: 200px;
    height: 200px;
    border-radius: 50%;
    position: absolute;
    top: 45%;
    left: 23.5%;
    object-fit: cover;
    margin-left: 20px;
    z-index: 2;
    transition: transform 4s;
    transition-timing-function: ease-in;
}

.img1-1:hover{
    transform: scale(1.25);
}

.div1-3{
    width: 70%;
    min-height: 100%;
    background-color: #E8E8E8;
    display: flex;
    flex-direction: column;
    align-items: center;
    justify-content: center;
    font-size: 20px;
}
```

```
.a-email{  
    color: black;  
    text-decoration: none;  
}  
  
.div2-1{  
    height: 100%  
}  
  
.img2-1{  
    transition: transform 2s;  
    transition-timing-function: ease-out;  
}  
  
.img2-1:hover{  
    transform: rotate(360deg);  
}  
  
section>p{  
    margin-left: 8%;  
    margin-right: 8%;  
}  
  
.img3{  
    width: 800px;  
    height: 500px;  
}  
  
.img4{  
    width: 1000px;  
    height: 500px;  
    object-fit: cover;  
}  
  
.div5-1{  
    display: flex;  
    flex-direction: row;  
    flex-wrap: wrap;  
}
```

```
.div5-2{
    width: 50%;
}

article img, .img5{
    width: 80%;
    height: 400px;
}

table:hover{
    border: 1px solid red;
    box-shadow: 5px 5px #999999;
}

tr:nth-child(odd){
    background-color: #DDDDDD;
}

h2>span{
    color: #D90166;
}

.div6-1{
    display: flex;
    flex-direction: row;
    height: 100%;
}

.div6-2{
    width: 40%;
    background: url(feedback.jpg);
    background-size: cover;
    background-position: center center;
}

.div6-3{
    width: 60%;
    background-color: #FFF0E0;
    display: flex;
    flex-direction: column;
```

```
    align-items: center;
    justify-content: center;
}

.head6{
    text-shadow: 1px 1px #ff0000;
}

form{
    min-width: 75%;
    animation: skew 3s linear;
}

@keyframes skew
{
    from { transform: skewX(0deg); }
    25% { transform: skewX(10deg); }
    50% { transform: skewX(0deg); }
    75% { transform: skewX(-10deg); }
    to { transform: skewX(0deg); }
}

form>label{
    font-size: 17px;
    font-weight: bold;
}

input{
    width: 100%;
    height: 20px;
    margin-top: 10px;
    transition: transform 1s;
    transition-timing-function: linear;
}

input:focus{
    transform: translate(10px, 0px);
}

#text{
```

```
        width: 100%;  
        height: 140px;  
        margin-top: 10px;  
    }  
  
form button{  
    width: 160px;  
    height: auto;  
    margin-top: 28px;  
    background-color: black;  
    color: white;  
    font-size: 14px;  
    padding-top: 10px;  
    padding-bottom: 10px;  
    cursor: pointer;  
}  
  
form button:hover{  
    background-color: #333333;  
}  
  
.ul-footer{  
    display: flex;  
    flex-direction: row;  
}  
  
.p-footer{  
    display: block;  
    text-align: center;  
    width: 33.33%;  
}  
  
.a-footer{  
    display: block;  
    width: 33.33%;  
    color: black;  
}  
  
.a-header:visited, .a-footer:visited{
```

```
        color: blue;  
    }  
  
.a-footer:hover{  
    color: green;  
}  
  
.a-footer:active{  
    color: red;  
}  
  
.addr-footer{  
    display: block;  
    text-align: center;  
    margin-top: 13px;  
}  
  
@media screen and (max-width: 1024px) {  
    .div5-1{  
        flex-direction: column;  
    }  
  
.div5-2{  
    width: 100%;  
}  
}
```

#### **OUTPUT SCREENSHOTS:**

## PERSONAL INFORMATION



**Name:** Shreya Sriram  
**DOB:** 11/10/2001  
**Gender:** Female  
**Age:** 20  
**Email:** shrey19106@cse.ssn.edu.in

*Written by Shreya Sriram.  
 Mobile: +91 73580 03061  
 Mail me: [Email](#)*

## MY INTERESTS

### Singing

► Singing

### Crochet

*Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus.*

### Coding

*Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.*

*Written by Shreya Sriram.  
 Mobile: +91 73580 03061  
 Mail me: [Email](#)*

Personal Information      Interests      Academic proficiency details      Events organized      Feedback      My Journey to SSN

## ACADEMIC PROFICIENCY

ACADEMIC QUALIFICATIONS						
Class	CGPA/ Percentage	Institution	Year of Passing			
School (5-8)	-	95%	ADIS	2015		
10th Board	10 CGPA	100%		2017		
12th Board	-	96.8%		IHS	2019	
College	9.339	-		SSN	2023	

**Technical Skills**

1.

- o C/C++
- o Java
- o Python
- o HTML,CSS,JS
- o Flask
- o C++

2.

**Languages**

- C/C++
- Java
- Python
- HTML,CSS,JS
- Flask
- C++

**Frameworks**

- Flask

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Personal Information      Interests      Academic proficiency details      Events organized      **Feedback**      My Journey to SSN

## FEEDBACK

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Personal Information

Interests

Academic proficiency details

Events organized

Feedback

**My Journey to SSN**

## JOURNEY TO SSN



Proin erat nulla, rhoncus vehicula nisl sed, congue placerat nibh. Vivamus non purus placerat, viverra nulla id, commodo lectus. Integer vulputate nibh quis est porttitor, tincidunt suscipit urna euismod. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. In laoreet molestie ipsum, sed consectetur enim iaculis at. Mauris tristique nisl eros, non auctor enim elementum vitae. Sed aliquet, lectus vitae hendrerit porta, dui lacus auctor velit, sit amet porttitor leo tellus sagittis ex. Nunc efficitur efficitur aliquam. Maecenas a euismod neque. Aliquam erat volutpat. Etiam porta consectetur purus, in porttitor eros iaculis et. Duis cursus cursus semper. Nulla vulputate hendrerit est id sollicitudin. Morbi finibus vitae quam ac lacinia. Vestibulum eleifend id dui vitae ornare. Mauris commodo vel nibh vitae cursus.

Fusce vitae tortor quam. Integer non massa ante. Donec et faucibus arcu, in maximus ante. Nunc aliquet porta sapien non accumsan. Vivamus ut massa vehicula, venenatis felis et, aliquet nisi. Vestibulum blandit molestie metus, nec scelerisque purus molestie non. Duis nec libero et justo vestibulum sollicitudin sed vitae mauris. Donec a tellus eu dui semper placerat at nec tellus.

Written by Shreya Sriram.  
Mobile: +91 73580 03061  
Mail me: [Email](#)

### **BEST PRACTISES:**

Formatting for code readability, commenting code for details and versioning were used.

### **LEARNING OUTCOME**

1. Learnt how to create components in ReactJS
2. Learnt to reuse components and develop a page in ReactJS

## **MINI PROJECT REPORT**

## **RESOURCE RESERVATION SYSTEM**

### **TEAM MEMBERS:**

Shreya Sriram  
Srivarsha Elangovan  
Swetha R  
Tushar Nair

## **DETAILED PROBLEM STATEMENT**

### **INTRODUCTION:**

The classrooms in our department, in addition to being a venue for conducting regular classes, can also serve as examination halls and spaces for club meetings.

Inorder to facilitate the hassle-free allotment of classrooms, seminar halls, labs, we need to build a user-friendly classroom resources reservation system.

This system can be extended to all departments, schools and workspaces with necessary modifications.

### **FEATURES:**

1. Priority based allotment of classrooms and labs through dynamic allocation.
2. Allotment of classes for examinations.
3. Allotment of seminar halls for events/guest lectures/club meetings, etc.
4. Accommodate changes to the allotment based on class strength.
5. Intimation of changes in the reservation to the concerned faculty and class representative via mail.
6. Reporting issues pertaining to the classroom.
7. Allotment of labs for special purposes, eg: placement tests, student project requirements depending on software requirements.

### **END USERS:**

#### **1) ADMIN:**

1. At the beginning of the semester, create initial allotment and time tables for all labs and classrooms.
2. Approve or deny all requests on the basis of priority (priority is determined by purpose of reservation)
3. Only user who is allowed access before the start of the semester.
4. Incorporates permanent changes to the timetables and allotments. Eg: accomodate a new batch of students to the existing system.
5. View an activity log.

#### **2) PROFESSORS:**

1. View their timetables and the ones of the classes handled by them.
2. Reserve classrooms for extra classes by stating the purpose and class strength.
3. Cancellation/extension of class hours.
4. Exchange of classes with another professor.
5. Request to hand over responsibilities to another faculty permanently, subject to admin approval.

### **3) STUDENTS (GENERAL FUNCTIONS)**

1. View timetable for the day and their respective classroom allotment.

### **4) STUDENTS (REPRESENTATIVES)**

1. Report issues pertaining to the classroom.
2. View status of the professors handling their classes.
3. Request professors free during the hour to handle a canceled class.

### **5) STUDENTS (CLUB HEADS)**

1. Reserve free classes for club meetings stating the reason, to be approved by admin.

## **SOFTWARE REQUIREMENTS (FUNCTIONAL AND NON FUNCTIONAL)**

### **1. FUNCTIONAL REQUIREMENTS**

#### **a. INTEGRATION**

NodeJS was used to integrate the frontend and backend of the application. React was used to build the frontend and the components created in React are rendered in the browser. MongoDB is used as a NoSQL database.

#### **b. LIBRARIES USED**

EJS (embedded JS) - templating tool to generate HTML using Javascript  
Convert-excel-to-json - npm package to convert an excel file to JSON  
Mongoose - javascript library to enable a connection between express and mongoDB  
React - framework to render components to the browser.

### **2. NON FUNCTIONAL REQUIREMENTS**

#### **a. USABILITY**

- The system shall allow the users to access it from the Internet using HTML or its derivative technologies. The system uses a web browser as an interface.
- Since all users are familiar with the general usage of browsers, no specific training is required.
- The system is user friendly and self-explanatory.

#### **b. SCALABILITY**

The system can be used currently for the CSE department of SSN College. It can be extended to other departments in the colleges with multiple administrators and maintainers. Further, the project can be used by other colleges/schools to handle their resource reservations.

#### **c. RELIABILITY**

The system has to be very reliable due to the importance of data and the damages incorrect or incomplete data can do.

#### ***Availability***

The system is available 100% for the user and is used 9 hrs a day and 365 days a year. The system shall be operational 24 hours a day and 7 days a week.

#### ***Mean Time Between Failures (MTBF)***

The system will be developed in such a way that it may fail once in a year

***Mean Time to Repair (MTTR)***

Even if the system fails, the system will be recovered back up within an hour or less.

***Accuracy***

The accuracy of the system is limited by the accuracy of the speed at which the admin responds to the requests posted by any user.

***Maximum Bugs or Defect Rate***

Not specified.

***Access Reliability***

The system shall provide 100% access reliability.

**d. PERFORMANCE**

***Response Time***

The user's home page should be rendered within seconds upon entering the correct login credentials. The information is refreshed every two minutes. The system shall respond to the member when the admin has processed and accepted/denied the submitted request. The system shall be allowed to take more time when there is a clash in reservations by any two or more parties and the resources need to be allocated accordingly and dynamically.

***Administrator***

The system shall take as less time as possible to provide the resource request details to the administrator.

***Throughput***

The number of reservation requests is directly dependent on the number of users, the users may be the Admin, Professors and also the students of the departments that may want to view the timetable for the day or request for faculty, report issues as in the case of a class representative.

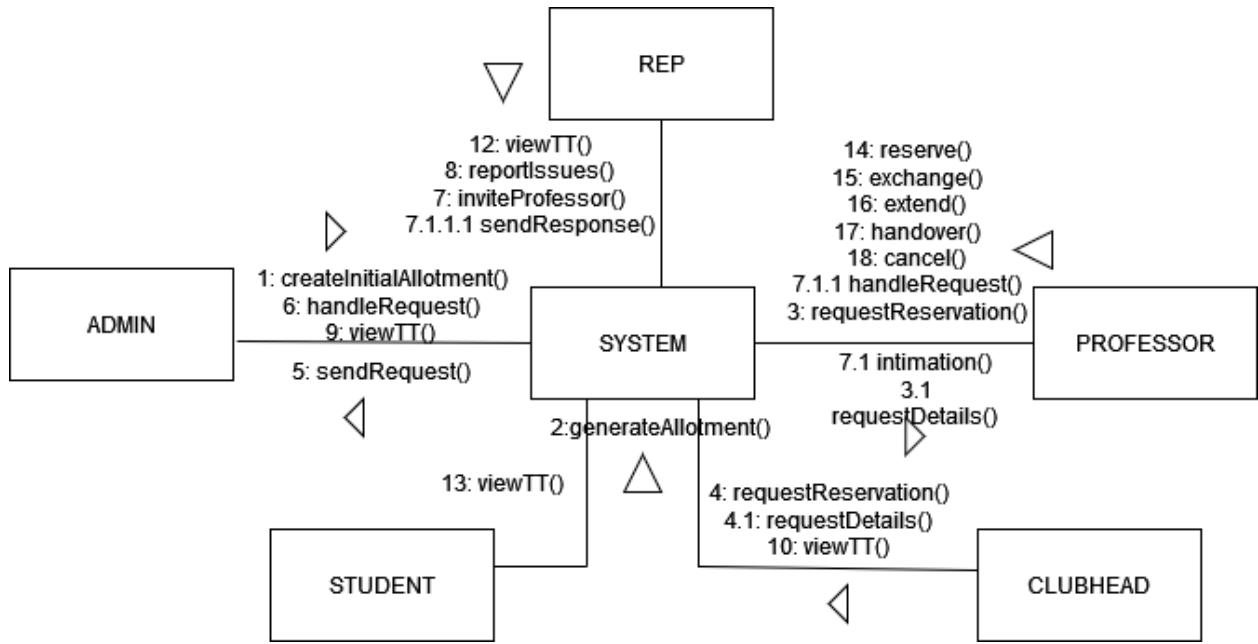
***Capacity***

The system is capable of handling 25 users at a time.

***Resource Utilization***

The resources are modified according to the user requirements and also according to the classrooms, seminar halls or laboratories requested by the users.

## SYSTEM DESIGN



## FUNCTIONALITY OF EACH MODULE

**Login** - This module allows a user to enter the credentials and use the system based on the user.

**View timetables** - This module allows the user to view the respective timetable(s)

**Check availability** - This module allows the user to check the availability of a resource (classroom, lab, seminar hall)

**Report issues** - This module allows the class representatives to report the issues in a class/lab/seminar hall.

**View overall allotment** - This module allows the user to view the overall allotment of the resources for a particular day and time

**Activity log** - This module displays an activity log containing every activity in the system to the administrator.

## **LOGIC USED FOR EACH MODULE**

### **Login**

The user enters the credentials in the login form, the credentials stored in the database are retrieved and the details are authenticated. If the credentials are valid, then the user can use the system, else it is redirected to the login page. The login username is prefixed with ST,P,CH,A etc to display the appropriate components based on the role of the user.

### **View timetables**

The timetables are fed as an excel file into the database by the administrator. On requesting for the timetables, the timetables from the database are retrieved based on the user (ie, the professor can view the timetables of all classes handled, students can view their class timetable alone, admin can view the timetables of all the classes in the department) and converted into JSON. The JSON file is parsed and the appropriate entries in the timetable are rendered in React.

### **Check availability**

The user (ie, professor, club head) fills a form stating the type of resource and time. On submitting the form, the Resources table in the database is accessed and the availability field of the resource is accessed. If available, free is printed, else busy is printed.

### **Reserve resource**

The user (professor or club head) fills a form stating the type of resource, time, class strength, number of hours and additional requirement details. The Resources table of the database is accessed and an appropriate free resource is found using check availability. If the requested resource cannot be found, then an intimation is sent to the user, else the request for resource is logged into the activity log for admin approval. If the admin approves the request, the booking is successful and the availability entry in the resources table corresponding to the resource for the specified date and time is set to busy, the current allotment table in the database for the specified date and time is updated.

### **Report issues**

The class representative fills a form containing the resource name (classroom/lab/seminar hall ID), issue to be reported and the severity of the issue. This is stored into the Issues table in the database. On the admin side, a log of the standing issues can be viewed, with formatting to signify the critical score/severity of the issue.

### **View overall allotment**

Any user, on submitting the date and time, can access the current allotment table in the database. The current allotment table is accessed and displayed.

### **Activity log**

Activity table, merged with the Issues table is retrieved from the database and the result is displayed on the admin side with formatting for issues and activity based on the order of priority.

### **USAGE OF NEW TOOLS FOR BETTER FUNCTIONALITY**

#### **Mongoexport**

mongoexport command is used to export MongoDB Collection data to a CSV or JSON file. In doing this, we have reduced the

#### **convert-excel-to-json**

convert-excel-to-json is an npm package that - given an Excel file - gets all the rows, for each sheet, where each row will be represented by an object with a structure like { COLUMN: 'CELLVALUE' }. This allows us to access the allotment as specified by the Admin in a JSON format and further implement the same in our system as intended.

### **FEATURES OR TECHNIQUES NOT USED**

#### **Reporting issues and third party stakeholder**

When issues pertaining to a classroom are reported, there are some cases where we require the intervention of some third party to handle the same. For example, when a report for a fan not working in a particular classroom is logged, the Admin is notified with the classroom details and has to take some particular action. They would have to contact a third party (maintenance team) that would handle the issue. Since this introduces some new stakeholder(s) that could potentially be external to the department or even the college, it was not explicitly defined as a stakeholder in the Use-Case Diagram. Owing to which, it has not been implemented in this version of the software system.

But in the future, if we are able to identify some permanent set of professionals that usually tackle these technical problems a classroom could pose, then the system could be extended to accommodate these services through the Admin as an added functionality. Thereby, making the viewing and handling of issues a seamless process on the same platform.

### **BEST PRACTICES**

Formatters like Prettier were used for better code readability, appropriate naming conventions for all components and files, versioning of code for each module, commenting to provide details, closing files and database after each access, exception handling for files, database access were implemented