



**Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES**

(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)

**A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION**

MHRD Approved & NAAC Accredited

**Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**SCHOOL OF ENGINEERING AND TECHNOLOGY**

**LABORATORY RECORD**

**2022-2023**

**ODD SEMESTER**

**Name: RUBAN GINO SINGH A**

**Reg. No.: URK20CS2001**

**20CS2056 WEB TECHNOLOGY LAB**

**KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES**

(Declared as Deemed-to-be-University under Sec-3 of the UGC Act, 1956)

**Karunya Nagar, Coimbatore - 641 114, India.**

**NOVEMBER 2022**



**Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES**

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

MoE, UGC & AICTE Approved

**NAAC A++ Accredited**

## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### **SCHOOL OF ENGINEERING AND TECHNOLOGY**

### **LABORATORY RECORD**

**Academic Year 2022-2023**

**Course Code**

**20CS2056**

**Course Name**

**Web Technology Lab**

**Register No. URK20CS2001**

It is hereby certified that this is the bonafide record of work done by Mr./Ms. **RUBAN GINO SINGH A** during the odd semester of the academic year 2022-2023 and submitted for the University Practical Examination held on \_\_\_\_\_.

**Faculty-in-charge**

**Program Coordinator**

**Examiner**

**TABLE OF CONTENTS**

#	Date	Name of the Exercise	Page No.	Marks	Signature
01	18.07.22	Simple Web Design using HTML	<b>1</b>		
02	25.07.22	Working with HTML5 Form and Media Elements	<b>16</b>		
03	01.08.22	Responsive webpage using HTML5 and CSS3	<b>37</b>		
04	08.08.22	Responsive web design using Bootstrap UI Framework	<b>55</b>		
05	29.08.22	JavaScript – DOM Elements and events	<b>73</b>		
06	05.09.22	JavaScript – Timer functions and objects	<b>90</b>		
07	12.09.22	Working with jQuery	<b>108</b>		
08	19.09.22	Working with AngularJS directives	<b>138</b>		
09	03.10.22	Working with AngularJS form & routing	<b>158</b>		
10	17.10.22	Web Form scraping using NodeJS	<b>174</b>		

<b>Ex. No. 1</b>	<b>Simple Web Design using HTML</b>
<b>Date of Exercise</b>	16/07/2022
<b>Web Host Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-1/index.html">https://ruban2205.github.io/Web-Technology/Exp-1/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1aWCf79YsWIBOz24-JpmmDkG1tniTXr8S/view?usp=sharing">https://drive.google.com/file/d/1aWCf79YsWIBOz24-JpmmDkG1tniTXr8S/view?usp=sharing</a>
<b>Validator Link</b>	<a href="https://github.com/Ruban2205/Web-Technology/blob/main/Exp-1/Exp-1ValidatorPage.pdf">https://github.com/Ruban2205/Web-Technology/blob/main/Exp-1/Exp-1ValidatorPage.pdf</a>

## Aim

Create a Document that conforms to HTML5 features and has the following elements DOCTYPE, html, meta, title, head, body, div, p, headings, image, anchor, table, list, html, comment.

## Description

<!DOCTYPE html> - Version of the HTML

<head> - Container of metadata

<body> - Defines document body

<p> - Paragraph

<br> - Line break

<img src = "filename"> - Insert an image

<b> - Bold

<u> - Underline

<table> - Create a table

<th> - Table header

<tr> - Table row

<td> - Table data

<rowspan> - Specifies the number of rows to span

<columnspan> - Specifies the number of columns to span

<ol> - Ordered list

<ul> - Unordered list

## Program

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

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

```
  <title>Ruban Gino Singh | Resume Page</title>
```

```
<style>
```

```
  * {
```

```
    margin: 0;
```

```
    padding: 0;
```

```
    box-sizing: border-box;
```

```
  }
```

```
  html{
```

```
    scroll-behavior: smooth;
```

```
  }
```

```
/* Home Section */

.title {
    padding: 2rem;
    text-align: center;
}

#home {
    display: flex;
    justify-content: space-between;
}

.profile-img {
    width: 50%;
    float: right;
    margin: 1rem;
}

.address-info {
    margin: auto 1rem;
}

/* Link Section */
```

```
.social-links {  
    text-decoration: underline;  
}
```

```
.social-images {  
    width: 10%;  
}
```

```
.links {  
    display: flex;  
    margin: 0 1rem 0 1rem;  
    justify-content: start;  
}
```

```
.facebook-img img,  
.instagram-img img,  
.linkedIn-img img {  
    width: 100%;  
}
```

```
.facebook-img,  
.instagram-img,  
.linkedIn-img {
```

```
width: 10%;  
}  
  
.links{  
  padding: 2rem;  
}  
  
.links a,  
.links div {  
  margin: 0 .5rem;  
}  
  
.first-link {  
  margin: 0 .5rem 0 0;  
}  
  
/* Academic profile container */  
.academic-container,  
#technical-skills,  
.advanced-skills,  
#intern-container,  
.career-container, #photo-container {  
  margin: 3rem 1rem;
```



```
}
```

```
.advanced-container,
```

```
.tech-container,
```

```
.intern-head {
```

```
    margin: .8rem 3rem;
```

```
}
```

```
table,
```

```
th,
```

```
tr,
```

```
td {
```

```
    border: 2px solid black;
```

```
    border-collapse: collapse;
```

```
    padding: 1rem;
```

```
}
```

```
/* Photo container */
```

```
.photos{
```

```
    margin: 2rem 1rem;
```

```
}
```

```
.photo1{
```

```
    width: 20%;
```

```
}  
.photo2{  
    width: 29.5%;  
}  
  
/* Bottom Navigation */  
#navigation{  
    margin: 2rem 1rem;  
}  
#navigation a{  
    padding: 1px;  
}  
</style>  
</head>  
  
<body>  
    <header>  
        <h1 class="title">MY RESUME PAGE</h1>  
    </header>  
  
    <!-- Home Section -->  
    <section id="home">  
        <div class="address-info">
```

```
<h3 class="address">
```

```
    Ruban Gino Singh <br>48H2, Jesus House <br>CSI Church Street <br>St. Xavier  
Colony <br>Tirunelveli-05
```

```
    <br>Phone: 9344232829 <br>Email: info@rubangino.in
```

```
</h3>
```

```
</div>
```

```
<div class="profile-container">
```

```
    
```

```
</div>
```

```
</section>
```

```
<hr>
```

```
<!-- About Section -->
```

```
<section id="about">
```

```
    <div class="links">
```

```
        <a class="social-links first-link" href="https://rubangino.in/" target="_blank">Visit My  
Website</a>
```

```
        <a class="social-links" href="https://karunya.edu/" target="_blank">My College</a>
```

```
        <a class="social-links" href="mailto:info@rubangino.in" target="_blank">Email Me</a>
```

```
        <a class="social-links" href="tel:+919344232829" target="_blank">Call Me</a>
```

```
    <div class="facebook-img"><a href="https://www.facebook.com/ruban.gino.22/"  
target="_blank"></a></div>
```

```
<div class="instagram-img"><a href="https://www.linkedin.com/in/ruban-gino-singh/"
target="_blank"></a></div>
```

```
<div class="linkedIn-img"><a href="https://www.instagram.com/ruban_gino_"
target="_blank"></a></div>
```

```
</div>
```

```
</section>
```

```
<hr>
```

```
<!-- Career Objective Section -->
```

```
<section id="career">
```

```
<div class="career-container">
```

```
<h3 class="career-title">Career Objective</h3>
```

```
<p class="career-para">A Career Objective or a Resume Objective is essentially a
heading statement that
```

```
describes your professional goals in two or three sentences. Employers looking to hire
an employee for a
```

```
position tend to seek candiates that are driven enough to understand what they
want</p>
```

```
</div>
```

```
</section>
```

---

```
<hr>
```

```
<!-- Academic Profile Container -->
```

```
<section id="academic-profile">
```

```
  <div class="academic-container">
```

```
    <h3>Academic Profile</h3>
```

```
    <table>
```

```
      <tr>
```

```
        <th></th>
```

```
        <th colspan="2">School/College</th>
```

```
        <th>Percentage of Marks</th>
```

```
        <th>Year of Passing</th>
```

```
      </tr>
```

```
      <tr>
```

```
        <td>B.Tech</td>
```

```
        <td>Karunya university</td>
```

```
        <td>University</td>
```

```
        <td>7.41</td>
```

```
        <td>2024</td>
```

```
      </tr>
```

```
<tr>

  <td>HSC</td>

  <td>Rose Mary School</td>

  <td>Stateboard</td>

  <td>72%</td>

  <td>2020</td>

</tr>

<tr>

  <td>SSLC</td>

  <td>Rose Mary School</td>

  <td>Stateboard</td>

  <td>78%</td>

  <td>2018</td>

</tr>

</table>

</div>

</section>

<hr>

<!-- TEchnical Skills Container -->

<section id="technical-skills">
```

```
<h3>Technical Skills</h3>
<div class="tech-container">
  <ol>
    <li>Data Structures</li>
    <li>Computer Networks</li>
    <li>Web Technology</li>
    <li>Python Programming</li>
    <li>Java Programming</li>
  </ol>
</div>
</section>

<hr>

<!-- Advanced Skills Section -->
<section id="advanced" class="advanced-skills">
  <h3>Advanced Technology Skills</h3>
  <div class="advanced-container">
    <ul>
      <li>Data Science</li>
      <li>Data Analytics</li>
      <li>Machine Learning principles</li>
    </ul>
```

```
</div>

</section>

<hr>

<!-- Internship Completed -->
<section id="intern-container">
  <h3>Intership Completed</h3>
  <div class="intern-head">
    <h4>Google</h4>
    <p>&emsp;I have completed a course in Google</p>
    <br>
    <h4>Intel</h4>
    <p>&emsp;I have completed a training in intel.</p>
    <br>
    <h4>Cisco</h4>
    <p>&emsp;I have completed a course in Cisco</p>
    <br>
    <h4>Meta</h4>
    <p>&emsp;I have completed a certification course in Meta.</p>
  </div>
</section>
```



<hr>

<section id="photo-container">

<h3>Photo Gallery</h3>

<div class="photos">





</div>

</section>

<hr>

<section id="navigation">

<a href="#career">Career Objective | </a>

<a href="#technical-skills">Technical Skills | </a>

<a href="#academic-profile">Education | </a>

<a href="#advanced">Advanced Technology Skills | </a>

<a href="#intern-container">Internships | </a>

</section>

</body>

</html>

## Output



## Result

Thus, The Experiment for creating a Simple Web HTML page is created and validated by obtaining the required results.

<b>Ex. No. 2</b>	<b>Working with HTML5 Forms and Media Elements</b>
<b>Date of Exercise</b>	25/07/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-2/index.html">https://ruban2205.github.io/Web-Technology/Exp-2/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1phuuM2PgLC9CnBsXfEP9IfW02TeMFJFI/view?usp=sharing">https://drive.google.com/file/d/1phuuM2PgLC9CnBsXfEP9IfW02TeMFJFI/view?usp=sharing</a>
<b>Validator Link</b>	<a href="https://github.com/Ruban2205/Web-Technology/tree/main/Exp-2/validator-result">https://github.com/Ruban2205/Web-Technology/tree/main/Exp-2/validator-result</a>

## Aim

Create a Document that conforms to HTML5 Forms and Media Elements.

## Description

<!DOCTYPE html> - Version of the HTML

<head> - Container of metadata

<body> - Defines document body

<p> - Paragraph

<br> - Line break

<img src = “filename”> - Insert an image

<b> - Bold

<u> - Underline

<table> - Create a table

<th> - Table header

<tr> - Table row

<td> - Table data

<rowspan> - Specifies the number of rows to span

<columnspan> - Specifies the number of columns to span

<ol> - Ordered list  
<ul> - Unordered list  
<form> - Tag to create a Form  
<fieldset> - To create a Border with text  
<iframe> - To include a video inside a frame  
<label> - To define a text for inputs  
<input> - To define different types of inputs

### Program (Page 1)

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8" />

  <meta http-equiv="X-UA-Compatible" content="IE=edge" />

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

  <title>Company page | Exp-2 | Ruban Gino Singh | URK20CS2001</title>

  <link rel="icon" type="image/png" href="assets/images/head-profile.png">

<style>

  * {

    margin: 0;

    padding: 0;
```

```
    box-sizing: border-box;
}
```

```
body,
header,
section,
footer {
    padding: 1rem;
    margin: 1rem;
    border: 1px solid;
    border-collapse: collapse;
}
```

```
/* Header Section */
```

```
.header-section {
    display: flex;
    justify-content: center;
    align-items: center;
    margin: 2rem 1rem;
}
```

```
img {
    width: 100%;
}
```

```
}
```

```
.profile-img-container {  
  width: 5rem;  
  margin: 0 1rem;  
}
```

```
.head-text {  
  margin: 0 1rem;  
}
```

```
/* Link Section */
```

```
span {  
  margin: 0 5rem;  
}
```

```
.link-container {  
  display: flex;  
  justify-content: space-between;  
  margin: 0 1rem;  
}
```

```
/* About Container */
```

```
.about-container {  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  margin: 2rem 1rem;  
}
```

```
.about-text,  
.about-audio,  
.about-video {  
  margin: 1rem 2rem;  
}
```

```
/* Footer Section */
```

```
fieldset {  
  padding: 2rem;  
  width: fit-content;  
  margin: 2rem;  
}
```

```
footer {  
  display: flex;
```

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

button {
    padding: .2rem 1rem;
}
</style>
</head>

<body>

<!-- Header Section -->
<header class="header-section">
    <div class="profile-img-container">
        
    </div>
    <div class="head-text">
        <h1 class="title">Ruban Gino Singh</h1>
    </div>
</header>

<!-- Link Section -->
<section class="link-container">
```



```
<div class="links">
  <a href="#">Link 1</a>
  <span>|</span>
  <a href="#">Link 2</a>
  <span>|</span>
  <a href="#">Link 3</a>
</div>

<div class="search">
  <input type="text" placeholder="Search" />
</div>
</section>

<!-- About Section -->
<section class="about-container">
  <div class="about-video">
    <iframe width="600" height="355" src="https://www.youtube.com/embed/ktpG9OWzVPA"
    title="YouTube video player"
    frameborder="0" allow="accelerometer; autoplay; clipboard-write; encrypted-media;
    gyroscope; picture-in-picture"
    allowfullscreen></iframe>
  </div>
  <div class="about-and-audio">
    <div class="about-text">
      Lorem Ipsum is simply dummy text of the printing and typesetting
```

industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

</div>

<div class="about-audio">

<audio controls>

<source src="assets/audio/karunya-anthem.mp3" type="audio/mpeg" />

</audio>

</div>

</div>

</section>

<footer class="footer">

<div class="first-row">

<form action="submit\_resume.html" target="\_blank">

<fieldset>

<legend>&nbsp;Sign up&nbsp;</legend>

<label for="username">\*User Name: </label>

```
<input type="text" id="u_name" name="username" placeholder="username"
required><br><br>
```

```
<label for="password">*Password: </label>
```

```
<input type="password" id="pass" name="password" placeholder="password"
required><br><br>
```

```
<button>Submit</button>
```

```
</fieldset>
```

```
</form>
```

```
</div>
```

```
<div class="second-row">
```

```
<h3>Contact us</h3>
```

```
<br>
```

```
<p>
```

```
Address line 1 <br><br> Address line 2 <br><br> Address line 3 <br><br>
```

```
mail id: <a href="mailto:info@rubangino.in">info@rubangino.in</a>
```

```
<br><br>
```

```
Phone no: <a href="tel:+1234567890">+1234567890</a>
```

```
</p>
```

```
</div>
```

```
<div class="third-row">
```

```
<iframe
```

```
src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d3998.9715472007742
!2d76.74187231485904!3d10.936163992213222!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!3
```

m3!1m2!1s0x3ba866bd6aaaaaab%3A0xc650b8a75e7b51f0!2sKarunya%20Institute%20of%20Technology%20and%20Sciences%20(Deemed%20University)!5e1!3m2!1sen!2sin!4v1658938409893!5m2!1sen!2sin"

width="400" height="250" style="border: 0" allowfullscreen="" loading="lazy"

referrerpolicy="no-referrer-when-downgrade"></iframe>

</div>

</footer>

</body>

</html>

## Program (Page 2)

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>Submit Your Resume | Ruban Gino Singh | URK20CS2001</title>

<link rel="icon" type="image/png" href="assets/images/head-profile.png">

<style>

```
* {  
  margin: 0;  
  padding: 0;  
  box-sizing: border-box;  
}
```

```
.title {  
  margin: 1rem 0 2rem 0;  
}
```

```
.container {  
  margin: 1rem;  
  padding: 2rem;  
  border: 1px solid black;  
}
```

```
fieldset {  
  padding: 2rem;  
  width: fit-content;  
}
```

```
label {  
  display: inline-block;
```

```
        min-width: 10rem;
        text-align: left;
    }
    table, td, th, tr{
        border: 2px solid black;
        border-collapse: collapse;
        padding: .8rem;
    }
</style>
</head>

<body>
    <section class="container">
        <h2 class="title">Submit your resume</h2>

        <!-- Personal Details -->
        <div class="personal-details">
            <form action="">
                <fieldset>
                    <legend>&nbsp;Personal Details&nbsp;</legend>
                    <label for="fname">*First Name:</label>
                    <input type="text" id="firstname" name="fname" placeholder="Enter your first
name" required><br><br>
                    <label for="mname">*Middle Name:</label>
```

```

        <input type="text" id="middlename" name="mname" placeholder="Enter your
middle name"

```

```

        required><br><br>

```

```

        <label for="lname">*Last Name:</label>

```

```

        <input type="text" id="lastname" name="lname" placeholder="Enter your last
name"><br><br>

```

```

        <label for="dob">*Date of Birth:</label>

```

```

        <input type="date" id="dob" name="dob"><br><br>

```

```

        <label for="age">*Age:</label>

```

```

        <input type="number" id="age" name="age" placeholder="18"><br><br>

```

```

        <label for="gender">*Gender: </label>

```

```

        <input type="radio" id="gender" name="male" value="Male" checked>

```

```

        <label for="gender">Male</label>

```

```

        <input type="radio" id="gender" name="male" value="Male">

```

```

        <label for="gender">Female</label><br>

```

```

    </fieldset><br>

```

```

        <input type="range" min="1" max="100" value="20"
id="slider">&emsp;&emsp;<label for="slider">20% out of

```

```

        100%</label>

```

```

    </form><br>

```

```

</div>

```

```

<!-- Address Details -->

```

```

<div class="address-details">

```

```

    <form action="">

```

```
<fieldset>

  <legend>&nbsp;Address Details&nbsp;</legend>

  <label for="address">Address:</label>

  <textarea cols="30" rows="2" required></textarea><br><br>

  <label for="city-town">City/Town:</label>

  <input type="text" id="city-town" name="city" required><br><br>

  <label for="state">State:</label>

  <input type="text" id="state" name="state" required><br><br>

  <label for="zip-code">Zip Code:</label>

  <input type="number" placeholder="only 6 numbers" required>

</fieldset><br>

  <input type="range" min="1" max="100" value="40"
id="slider">&nbsp;&nbsp;&nbsp;<label for="slider">40% out of

  100%</label>

</form><br>

</div>

<div class="contact-info">

  <form action="">

    <fieldset>

      <legend>&nbsp;Contact Information&nbsp;</legend>

      <label for="Telephone">Telephone:</label>

      <input type="number" placeholder="(044) 999-9999" required><br><br>

      <label for="mobile">*Mobile:</label>
```





```

</tr>

<tr>

<td><input type="checkbox">10th</td>

<td><input type="text" placeholder="Board/University"></td>

<td>

<select>

<option value="choose">Choose</option>

<option value="ind">India</option>

<option value="us">US</option>

<option value="nz">New Zealand</option>

<option value="sa">South Africa</option>

</select>

</td>

<td><input type="date"></td>

<td><input type="date"></td>

<td><input type="number" placeholder="70" style="width:40px; margin-left:
10px;"></td>

</tr>

<tr>

<td><input type="checkbox">12th</td>

<td><input type="text" placeholder="Board/University"></td>

<td>

<select>

<option value="choose">Choose</option>

```

```

        <option value="ind">India</option>
        <option value="us">US</option>
        <option value="nz">New Zealand</option>
        <option value="sa">South Africa</option>
    </select>
</td>
<td><input type="date"></td>
<td><input type="date"></td>
<td><input type="number" placeholder="70" style="width:40px; margin-left:
10px;"></td>
</tr>
<tr>
<td><input type="checkbox">B.Tech</td>
<td><input type="text" placeholder="Board/University"></td>
<td>
    <select>
        <option value="choose">Choose</option>
        <option value="ind">India</option>
        <option value="us">US</option>
        <option value="nz">New Zealand</option>
        <option value="sa">South Africa</option>
    </select>
</td>
<td><input type="date"></td>

```

```

        <td><input type="date"></td>

        <td><input type="number" placeholder="70" style="width:40px; margin-left:
10px;"></td>

    </tr>

    <tr>

        <td><input type="checkbox">M.Tech</td>

        <td><input type="text" placeholder="Board/University"></td>

        <td>

            <select>

                <option value="choose">Choose</option>

                <option value="ind">India</option>

                <option value="us">US</option>

                <option value="nz">New Zealand</option>

                <option value="sa">South Africa</option>

            </select>

        </td>

        <td><input type="date"></td>

        <td><input type="date"></td>

        <td><input type="number" placeholder="70" style="width:40px; margin-left:
10px;"></td>

    </tr>

</table>

</fieldset><br>

<input type="range" min="1" max="100" value="80">&emsp;&emsp;<label
for="slider">80% out of 100%</label>

```

```
</form><br>

</div>

<div class="resume-upload">

  <form action="">

    <fieldset>

      <label for="attach-resume">Attach your resume in .doc or .pdf
format&emsp;&emsp;</label>

      <input type="file" id="myresume" name="myresume"><br><br>

      <input type="checkbox">&nbsp;I have filled the details</td>

    </fieldset><br>

    <input type="range" min="1" max="100" value="100">&emsp;&emsp;<label
for="slider">100% out of 100%</label>

  </form><br>

</div>

<div class="button-container" style="width: 50%; text-align: center;">

  <button type="submit" style="padding: .7rem 2rem;">Submit</button>

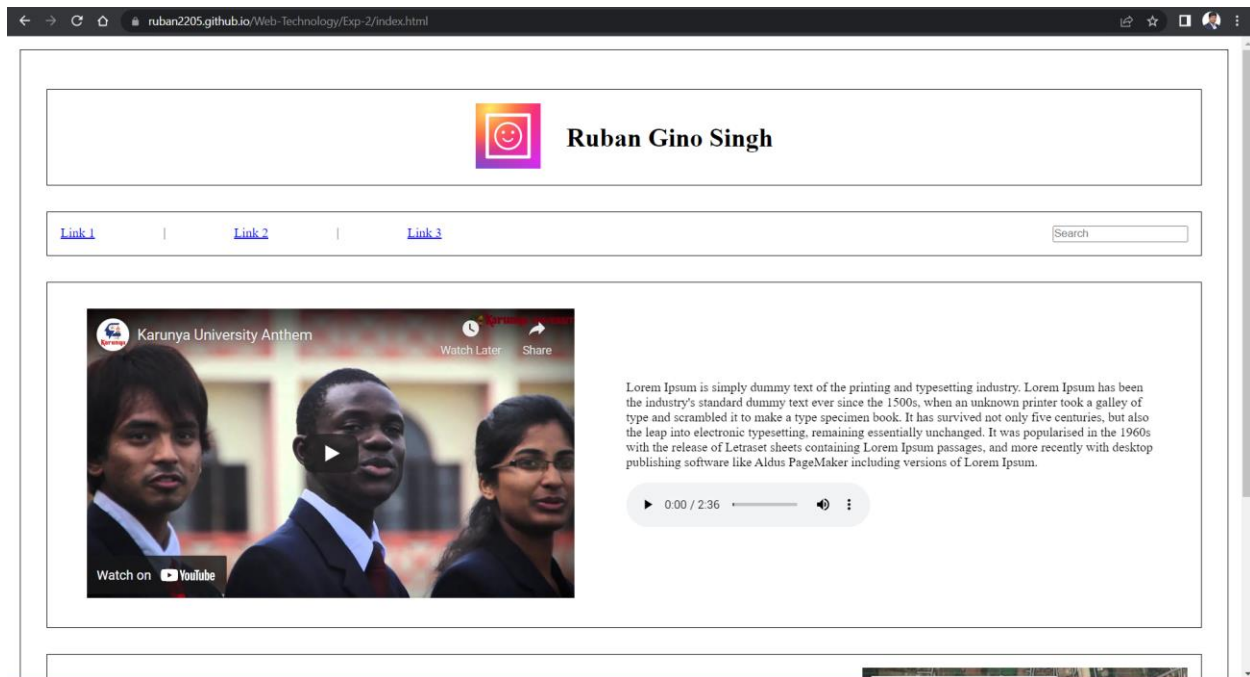
</div>

</section>

</body>

</html>
```

## Output (Page 1)



## Output (Page 2)

**Submit your resume**

**Personal Details**

\*First Name:

\*Middle Name:

\*Last Name:

\*Date of Birth:

\*Age:

\*Gender: ☒ Male ☐ Female

20% out of 100%

**Address Details**

Address:

City/Town:

State:

Zip Code:

40% out of 100%

**Contact Information**

## Result

Thus, The Experiment for a page to work with HTML5 forms and Media Elements is created and validated by obtaining the required results.

<b>Ex. No. 3</b>	<b>Responsive Webpage using HTML5 and CSS3</b>
<b>Date of Exercise</b>	01/08/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-3/index.html">https://ruban2205.github.io/Web-Technology/Exp-3/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1JLZuym2T1g3AXuhpqQKE7tqRLsdDtFTF/view?usp=sharing">https://drive.google.com/file/d/1JLZuym2T1g3AXuhpqQKE7tqRLsdDtFTF/view?usp=sharing</a>
<b>Validator Link</b>	<a href="https://github.com/Ruban2205/Web-Technology/blob/main/Exp-3/validator%20-%20results/Exp-3%20Validator%20Results.pdf">https://github.com/Ruban2205/Web-Technology/blob/main/Exp-3/validator%20-%20results/Exp-3%20Validator%20Results.pdf</a>

## Aim

To develop a webpage using HTML5 tags and apply styles to the webpage using CSS3 properties and layouts like Normal flow and multicolumn layout.

## Description

**Margin** – The margin property defines the space around an HTML element. It is possible to use negative values to overlap content. The values of the margin property are not inherited by the child elements. The following properties are used to set an element margin.

**Formatting Text** – CSS3 has color, letter-spacing, text-align, text-decoration and text-shadow properties to format the texts.

**Font** – The CSS Font property is used to change the face of the fonts.

**Background** – The CSS background properties are used to define the background effects for elements.



**Padding** – The padding property allows you to specify how much space should appear between the content of an element and its border. The value of this attribute should be either a length, a percentage, or the word inherit. If the value is inherited, it will have the same padding as its parent element. If a percentage is used, the percentage is of the containing box.

**Link** – Links can be styled with any CSS property (e.g. color, font-family, background, etc...)

**Display** – Changing an inline element to a block element, or vice versa, can be useful for making the page look a specific way, and still follow the web standards.

**List** – Lists are very helpful in conveying a set of either numbered or bullet points.

**Setting Height and Width** – the height and width properties are used to set the height and width of an element. The height and width can be set to auto or be specified in length values, like px, cm, etc., or in percent (%) of the containing block.

## Program (HTML5)

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<title>URK20CS2001 | Resume page | CSS | Ruban Gino Singh</title>
```

```
<meta charset="UTF-8">
```

```
<meta http-equiv="X-UA-Compatible" content="IE=edge">
```

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

<!-- Link to icon library -->

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.1.2/css/all.min.css"

integrity="sha512-1sCRPdkRXhBV2PBLUdRb4tMg1w2YPf37qatUFeS7zlBy7jJI8Lf4VHwWfZZfpXtYSLy85pk  
m9GaYVYMfw5BC1A=="

crossorigin="anonymous" referrerpolicy="no-referrer" />

<!-- Link to CSS -->

<link rel="stylesheet" href="styles/style.css">

</head>

<body>

<!-- Header Section -->

<header class="head-container">

<div class="head-img">



</div>

<div class="head-title">

<h1>A.Ruban Gino Singh</h1>

</div>

<div class="head-icon">

<a href="https://www.facebook.com/ruban.gino.22/" target="\_blank"><i class="fa-  
brands fa-facebook"></i></a>

```
<a href="https://www.instagram.com/ruban_gino_" target="_blank"><i class="fa-brands fa-twitter"></i></a>
```

```
<a href="https://twitter.com/Rubangino" target="_blank"><i class="fa-brands fa-square-instagram"></i></a>
```

```
</div>
```

```
</header>
```

```
<!-- Link Section -->
```

```
<section class="link-container">
```

```
<a href="#personal" class="links">Personal</a>
```

```
<a href="#personal" class="links">Academic</a>
```

```
<a href="#card-section" class="links">Activity</a>
```

```
<a href="#footer" class="links">Others</a>
```

```
</section>
```

```
<!-- Home section -->
```

```
<section id="home">
```

```
<div class="home-container">
```

```
<div class="left-text">
```

```
<p> Lorem Ipsum is simply dummy text of the printing and typesetting industry.  
Lorem Ipsum has been the
```

```
industry's standard
```

```
dummy text ever since the 1500s, when an unknown printer took a galley of type  
and scrambled it to
```

```
make a type specimen
```

book.

It has survived not only five centuries, but also the leap into electronic typesetting,  
remaining

essentially unchanged.

It was popularised in the 1960s with the release of Letraset sheets containing Lorem  
Ipsum passages,

and more recently

with desktop publishing software like Aldus PageMaker including versions of  
Lorem Ipsum.

It has survived not only five centuries, but also the leap into electronic typesetting,  
remaining

essentially unchanged.

It was popularised in the 1960s with the release of Letraset sheets containing Lorem  
Ipsum passages,

and more recently

with desktop publishing software like Aldus PageMaker including versions of  
Lorem Ipsum.

</p>

</div>

<div class="image-right">



</div>

</div>

</section>

<!-- Image Container -->

```
<section id="personal" class="image-container">

  <div class="image1-container">

    <div class="image1">

      <div class="image-text">

        <p>HTML</p>

      </div>

    </div>

  </div>

  <div class="image2-container">

    <div class="image2">

      <div class="image-text">

        <p>CSS</p>

      </div>

    </div>

  </div>

  <div class="image3-container">

    <div class="image3">

      <div class="image-text">

        <p>Java Script</p>

      </div>

    </div>

  </div>

</section>
```

</div>

</div>

<div class="image4-container">

<div class="image4">



<div class="image-text">PHP</div>

</div>

</div>

<!-- Card Section -->

<section id="card-section" class="card-container">

<div class="cards">

<div class="card-1">

<div class="card-img-1">

<div class="image">



<div class="overlay"></div>

```
<div class="card-body">
```

### Mr. Father's Name

<p>It was my father who taught me to value myself. He told me that I was uncommonly beautiful and that I

```
        was the most precious thing in life</p>
    </div>
</div>
<div class="card-2">
    <div class="card-img-2">
        <div class="image">
            
        </div>
        <div class="overlay"></div>
    </div>
    <div class="card-body"><br>
        <h3 class="card-title">Mrs. Mother's Name</h3><br>
        <p>My mother taught me that we all have the power to achieve our dreams.</p>
    </div>
</div>
<div class="card-3">
    <div class="card-img-3">
        <div class="image">
            
        </div>
        <div class="overlay"></div>
    </div>
    <div class="card-body"><br>
```

```
<h3 class="card-title">Sis / Bro Name</h3><br>
<p>A sister is both your mirror - and your opposite</p>
</div>
</div>
</div>
</section>

<!-- Footer Section -->
<footer id="footer" class="footer-container">
  <h4>Your address</h4>
  <p>&#169; 2020-2021. <strong>URK20CS2001</strong> - Web Technology Lab Batch 1.
  All Rights Reserved.</p>
</footer>
</body>

</html>
```

### Program (CSS3)

```
*{
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}
```



```
html{  
    scroll-behavior: smooth;  
}  
  
/* Header Section */  
  
.head-container{  
    display: flex;  
    justify-content: space-between;  
    background-color: blueviolet;  
}  
  
.head-img{  
    width: 8rem;  
}  
  
.head-img img{  
    width: 100%;  
}  
  
.head-title{  
    color: white;  
    height: 100%;
```

```
    align-self: flex-end;
}

.head-icon{
    background-color: white;
    opacity: .9;
    height: fit-content;
    padding: .8rem;
    margin: .5rem .5rem 0 0;
}

.head-icon i{
    font-size: 1.2rem;
}

/* Link Section */

.link-container{
    display: flex;
    justify-content: space-evenly;
    padding: 1.3rem;
    background-color: rgb(131, 255, 255);
}
```

```
/* home section */

.image-right{
    width: 30rem;
}

.image-right img, .image1 img, .image2 img, .image3 img, .image4 img, .image-bg img{
    width: 100%;
}

.home-container{
    display: flex;
    justify-content: space-between;
    align-items: center;
    background: lightgreen;
    padding: 0 2.5rem;
}

.left-text{
    width: 40%;
    background-color: lightskyblue;
    color: black;
    padding: 3rem;
    border: 3px solid darkblue;
    border-style: dashed;
}
```

```
/* Image Section */
```

```
.image-container{  
    display: flex;  
    justify-content: space-evenly;  
    align-items: center;  
    background-color: rgba(128, 128, 128, 0.452);  
    padding: 2rem 0;  
}
```

```
.image1, .image2, .image3, .image4{  
    width: 16rem;  
}
```

```
.image1-container, .image2-container, .image3-container, .image4-container{  
    position: relative;  
    text-align: center;  
    color: white;  
}
```

```
.image-text{  
    position: absolute;  
    bottom: 0;
```

```
left: 0;

right: 0;

background-color: rgba(0, 0, 0, 0.455);

padding: 1rem;

font-size: 1.5rem;

border: 3px solid rgba(255, 0, 0, 0.493);

}
```

*/\* Card Container \*/*

```
.card-container{

    background-image: url(https://raw.githubusercontent.com/Ruban2205/Web-Technology/main/Exp-3/assets/images/card-section.jpg);

    width: 100%;

    height: 100%;

    background-size: cover;

    background-repeat: no-repeat;

}

.cards{

    display: flex;

    justify-content: space-evenly;

    padding: 6rem 0;

}
```

```
.card-title{
    color: rgb(0, 255, 0);
    font-weight: 700;
    font-size: 1.5rem;
}

.card-body p{
    color: white;
}

.card-1, .card-2, .card-3{
    width: 20rem;
    text-align: center;
    padding: 1.5rem;
    background: transparent;
}

.card-img-1 img, .card-img-2 img, .card-img-3 img{
    width: 100%;
    border-radius: 100%;
    border: 5px solid black;
    box-shadow: 5px 10px 8px rgba(0, 0, 0, 0.427);
}

.card-img-1, .card-img-2, .card-img-3{
```

```
position: relative;
text-align: center;

}

.overlay{
    position: absolute;
    top: 0;
    right: 0;
    left: 0;
    bottom: 0;
    border-radius: 100%;
    border: 5px solid black;
    background-color: green;
    opacity: .6;
    transition: 250ms ease-in-out;
}

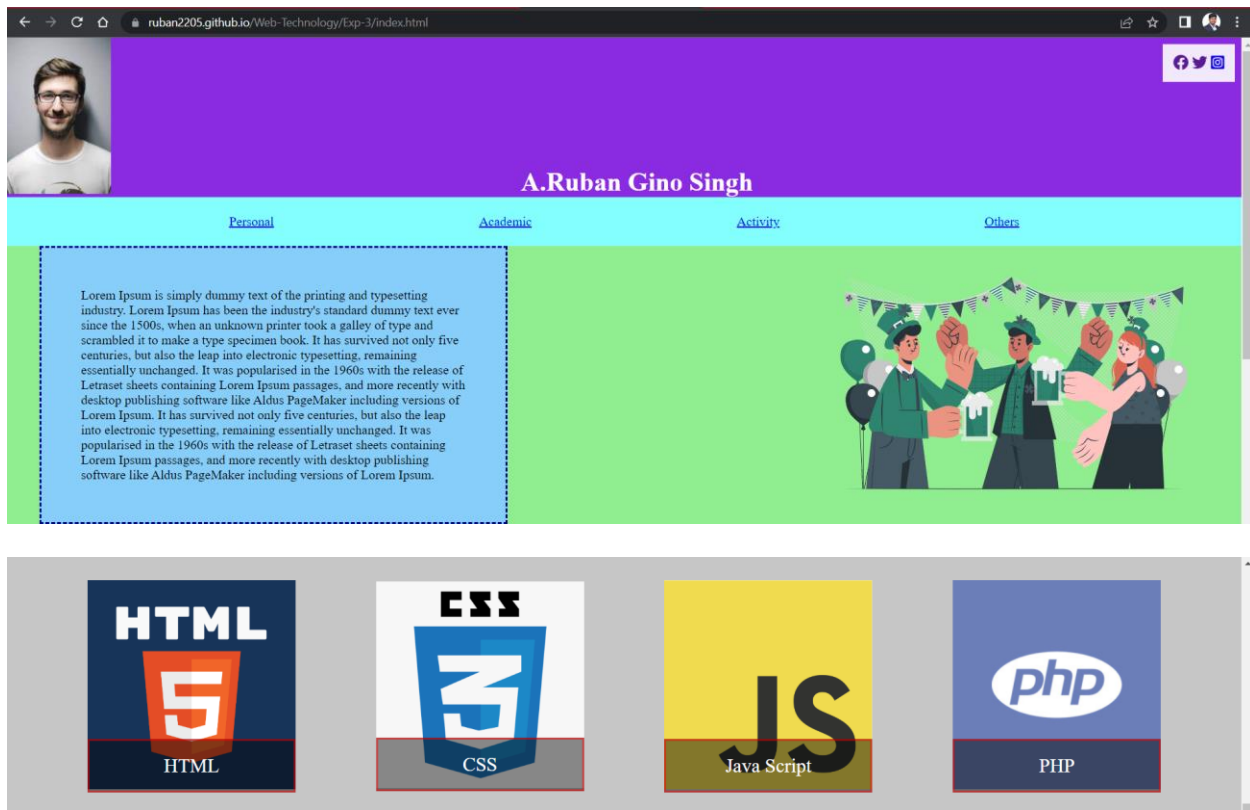
.overlay:hover{
    opacity: 0;
}

/* Footer Section */

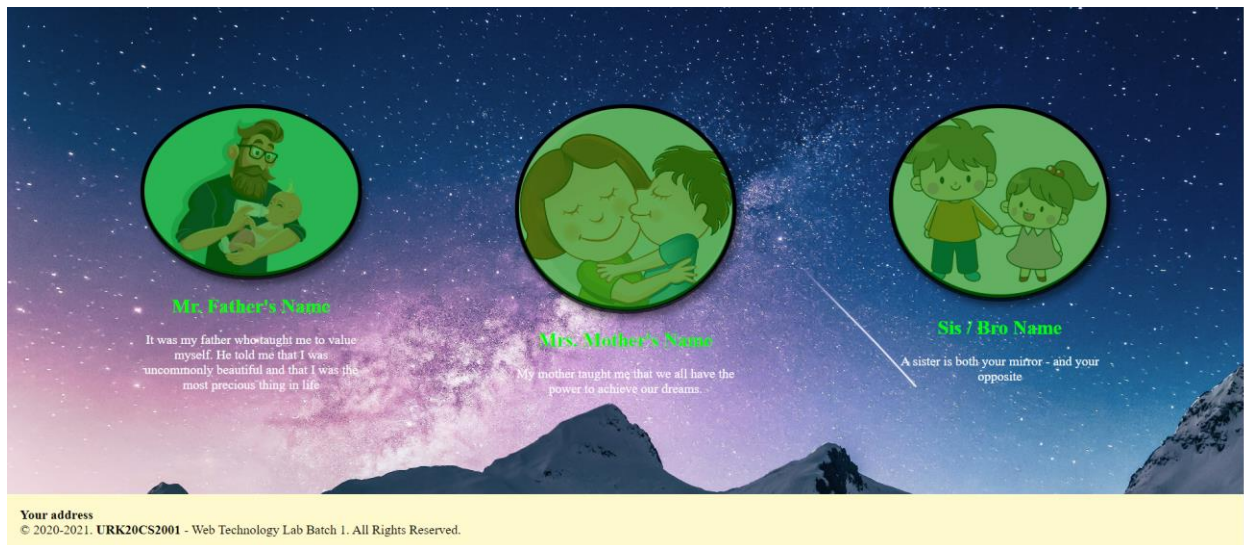
.footer-container{
```

```
padding: 1rem;  
background-color: lemonchiffon;  
}
```

### Output (Screenshot):







## Result

Thus, The Experiment for creating a Responsive web page using HTML5 and CSS3 is created by obtaining the required results.

<b>Ex. No. 4</b>	<b>Responsive Webpage using Bootstrap a UI Framework</b>
<b>Date of Exercise</b>	08/08/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-4/index.html">https://ruban2205.github.io/Web-Technology/Exp-4/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1ZGScaM3OcfCBLxEu-rrNvAVxkv4YkSVO/view?usp=sharing">https://drive.google.com/file/d/1ZGScaM3OcfCBLxEu-rrNvAVxkv4YkSVO/view?usp=sharing</a>
<b>Validator Link</b>	<a href="https://github.com/Ruban2205/Web-Technology/blob/main/Exp-4/Validator_page/Exp-4_validator.pdf">https://github.com/Ruban2205/Web-Technology/blob/main/Exp-4/Validator_page/Exp-4_validator.pdf</a>

## Aim

To develop a webpage using HTML5 tags and apply styles to the webpage using Bootstrap UI Framework.

## Description

### Overview

- Bootstrap is a free front-end framework for faster and easier web development.
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image, carousels and many other, as well as optional JavaScript plugins.
- Bootstrap also gives you the ability to easily create responsive designs.

## What is Responsive Web Design?

Responsive web design is about creating web sites which automatically adjust themselves to look good on all devices, from small phones to large desktops.

**Setting the View port:**

To create a responsive website, add the following <meta> tag to all your web pages:

**Bootstrap 5 Containers:**

Containers are used to pad the content inside of them, and there are two container classes available

The container class provides a responsive fixed width container.

**Bootstrap Spacing – Padding and Margin:**

The classes are name using the format

{property}{sides}-{size}

Where property is one of:

m – for classes that set margin

p – for classes that set padding

Where the sides is one of:

t – for classes that set margin-top or padding-top

b – for classes that set margin-bottom or padding-bottom

s - for classes that set margin-left or padding

x – for classes that set both \*-left and \*-right

y – for classes that set both \*-top and \*-bottom

blank – for classes that set a margin or padding on all 4 sides of the element.

**Bootstrap Grid System:**

Bootstrap's grid system is build with flexbox and allows upto 12 coloumns.

**Responsive Images:**

- The .rounded class adds rounded corners to an image
- The .rounded-circle class shapes the image to a circle
- The .img-thumbnail class shapes the image to a thumbnail

**Bootstrap Forms:**

- Bootstrap provides three types of form layouts:
- Stacked (full-width) form: (form-group)
- Inline form: (form-inline)

**Bootstrap Tables:**

- A basic Bootstrap table has a light padding and only horizontal dividers.
- The .table class adds basic styling to a table
- The .table-striped class adds zebra-stripes to a table
- The .table-bordered class adds borders on all sides of the table and cells
- The .table-hover class adds a hover effect on the table rows.
- The .table-dark class adds a black background to the table.
- The .table-borderless class removes borders from the table.

**Program (Bootstrap HTML):**

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>URK20CS2001 Exp-4 | Responsive web design using Bootstrap UI Framework</title>


<!-- Bootstrap CDN -->

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
rel="stylesheet"

    integrity="sha384-
gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNl/vI1Bx"
crossorigin="anonymous">


<!-- External CSS -->

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


<!-- Favicon -->

<link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">

</head>

<body>

<header>

    <nav class="navbar navbar-expand-lg bg-light fixed-top">

        <div class="container-fluid">
```

```
<a class="navbar-brand" href="#">

   URK20CS2001</a>

<button class="navbar-toggler" type="button" data-bs-toggle="collapse"

  data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"

  aria-expanded="false" aria-label="Toggle navigation">

  <span class="navbar-toggler-icon"></span>

</button>

<div class="collapse navbar-collapse" id="navbarSupportedContent">

  <ul class="navbar-nav mb-2 mb-lg-0">

    <li class="nav-item">

      <a class="nav-link" aria-current="page" href="#">Home</a>

    </li>

    <li class="nav-item">

      <a class="nav-link" href="#">Services</a>

    </li>

    <li class="nav-item">

      <a class="nav-link">Clients</a>

    </li>

    <li class="nav-item">

      <a href="" class="nav-link">Contact Us</a>

    </li>
```

```
</ul>

<form class="d-flex search" role="search">

  <input class="form-control me-2" type="search" placeholder="Search" aria-
label="Search">

  <button class="btn btn-primary" type="submit">Submit</button>

</form>

</div>

</div>

</nav>

</header>

<!-- Carousel Section -->

<section class="carousel-section">

  <div id="carouselExampleIndicators" class="carousel slide" data-bs-ride="true">

    <div class="carousel-indicators">

      <button type="button" data-bs-target="#carouselExampleIndicators" data-bs-slide-
to="0" class="active"

        aria-current="true" aria-label="Slide 1"></button>

      <button type="button" data-bs-target="#carouselExampleIndicators" data-bs-slide-
to="1"

        aria-label="Slide 2"></button>

      <button type="button" data-bs-target="#carouselExampleIndicators" data-bs-slide-
to="2"

        aria-label="Slide 3"></button>
```

```
<button type="button" data-bs-target="#carouselExampleIndicators" data-bs-slide-  
to="3"  
  
    aria-label="Slide 4"></button>  
  
<button type="button" data-bs-target="#carouselExampleIndicators" data-bs-slide-  
to="4"  
  
    aria-label="Slide 5"></button>  
  
</div>  
  
<div class="carousel-inner">  
  
    <div class="carousel-item active">  
  
          
  
    </div>  
  
    <div class="carousel-item">  
  
          
  
    </div>  
  
    <div class="carousel-item">  
  
          
  
    </div>  
  
    <div class="carousel-item">  
  
          
  
    </div>  
  
    <div class="carousel-item">
```



```

```

```
</div>
```

```
</div>
```

```
<button class="carousel-control-prev" type="button" data-bs-target="#carouselExampleIndicators"
```

```
data-bs-slide="prev">
```

```
<span class="carousel-control-prev-icon" aria-hidden="true"></span>
```

```
<span class="visually-hidden">Previous</span>
```

```
</button>
```

```
<button class="carousel-control-next" type="button" data-bs-target="#carouselExampleIndicators"
```

```
data-bs-slide="next">
```

```
<span class="carousel-control-next-icon" aria-hidden="true"></span>
```

```
<span class="visually-hidden">Next</span>
```

```
</button>
```

```
</div>
```

```
</section>
```

```
<section class="form-table">
```

```
<div class="container-fluid">
```

```
<div class="row">
```

```
<div class="col-md-6">
```

```
<form class="row g-3 form">
```

```
<div class="col-md-6">
```

```
<label for="inputEmail4" class="form-label">Email</label>
<input type="email" class="form-control" id="inputEmail4">
</div>
<div class="col-md-6">
  <label for="inputPassword4" class="form-label">Password</label>
  <input type="password" class="form-control" id="inputPassword4">
</div>
<div class="col-12">
  <label for="inputAddress" class="form-label">Address</label>
  <input type="text" class="form-control" id="inputAddress" placeholder="1234
Main St">
</div>
<div class="col-12">
  <label for="inputAddress2" class="form-label">Address 2</label>
  <input type="text" class="form-control" id="inputAddress2"
    placeholder="Apartment, studio, or floor">
</div>
<div class="col-md-6">
  <label for="inputCity" class="form-label">City</label>
  <input type="text" class="form-control" id="inputCity">
</div>
<div class="col-md-4">
  <label for="inputState" class="form-label">State</label>
  <select id="inputState" class="form-select">
```

```
<option selected>Choose...</option>
<option>...</option>
</select>
</div>
<div class="col-md-2">
  <label for="inputZip" class="form-label">Zip</label>
  <input type="text" class="form-control" id="inputZip">
</div>
<div class="col-12">
  <div class="form-check">
    <input class="form-check-input" type="checkbox" id="gridCheck">
    <label class="form-check-label" for="gridCheck">
      Check me out
    </label>
  </div>
</div>
<div class="col-12">
  <button type="submit" class="btn btn-primary">Sign in</button>
</div>
</form>
</div>
<div class="col-md-6">
  <table class="table table-bordered">
```

```
<thead class="bg-primary" style="color: white;">
  <tr>
    <th scope="col">S.No</th>
    <th scope="col">Reg.No</th>
    <th scope="col">Name of the Participant</th>
    <th scope="col">Collaborative activity</th>
    <th scope="col">Collaborating Agency</th>
  </tr>
</thead>
<tbody>
  <tr>
    <th scope="row">1</th>
    <td>URK16AE001</td>
    <td>ANIT ANU JOHN</td>
    <td>Product Design and Analysis</td>
    <td>CADD Centre</td>
  </tr>
  <tr>
    <th scope="row">2</th>
    <td>URK16AE011</td>
    <td>VASANTHA KANESH M</td>
    <td>Product Design and Analysis</td>
    <td>CADD Centre</td>
```

```
</tr>

<tr>

  <th scope="row">3</th>

  <td>URK16AE013</td>

  <td>ABIJITH J</td>

  <td>Product Design and Analysis</td>

  <td>CADD Centre</td>

</tr>

<tr>

  <th scope="row">4</th>

  <td>URK16AE015</td>

  <td>JEBIN JOHN J</td>

  <td>Product Design and Analysis</td>

  <td>CADD Centre</td>

</tr>

<tr>

  <th scope="row">5</th>

  <td>URK16AE018</td>

  <td>JOSHI K J</td>

  <td>Product Design and Analysis</td>

  <td>CADD Centre</td>

</tr>

<tr>
```

```
<th scope="row">6</th>
<td>URK16AE020</td>
<td>J P GOKUL</td>
<td>Product Design and Analysis</td>
<td>CADD Centre</td>
</tr>
<tr>
<th scope="row">7</th>
<td>URK16AE021</td>
<td>JEROME</td>
<td>Product Design and Analysis</td>
<td>CADD Centre</td>
</tr>
<tr>
<th scope="row">8</th>
<td>URK16AE022</td>
<td>AFNAN M. ARIEF</td>
<td>Product Design and Analysis</td>
<td>CADD Centre</td>
</tr>
</tbody>
</table>
</div>
```

```
</div>

</div>

</section>

<!-- Popper JS -->

<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"
    integrity="sha384-
Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"
    crossorigin="anonymous"></script>

<!-- Bootstrap JS -->

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
    integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JnFsRydbmQbmL5t1tQ0culUzyK"
    crossorigin="anonymous"></script>

</body>

</html>
```

**Program (External CSS):**

```
* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
```

```
}
```

```
html{
```

```
    scroll-behavior: smooth;
```

```
}
```

```
/* Navigation Section */
```

```
.navbar-collapse {
```

```
    justify-content: end;
```

```
}
```

```
.nav-item,
```

```
.search,
```

```
.navbar-brand {
```

```
    margin: 1rem;
```

```
}
```

```
.navbar {
```

```
    font-weight: 600;
```

```
}
```

```
.navbar-nav li a {
```

```
    color: blue;
```



```
}
```

```
.navbar-brand {  
    font-weight: 700;  
}
```

```
/* Carousel-Section */
```

```
.carousel-inner {  
    height: 100vh;  
}
```

```
.form {  
    border: 2px solid blue;  
    border-radius: 10px;  
    padding: 1rem;  
    margin-top: 1rem;  
}
```

```
.form-table {  
    margin-top: 2rem;  
    justify-content: center;  
    align-items: center;  
    align-self: center;
```

}

## Output (Screenshot):

ruban2205.github.io/Web-Technology/Exp-4/index.html

**URK20CS2001** Home Services Clients Contact Us Search Submit

Email Password

Address  
1234 Main St

Address 2  
Apartment, studio, or floor

City State Zip

☐ Check me out

Sign in

S.No	Reg.No	Name of the Participant	Collaborative activity	Collaborating Agency
1	URK16AE001	ANIT ANU JOHN	Product Design and Analysis	CADD Centre
2	URK16AE011	VASANTHA KANESH M	Product Design and Analysis	CADD Centre
3	URK16AE013	ABUJITH J	Product Design and Analysis	CADD Centre
4	URK16AE015	JEBIN JOHN J	Product Design and Analysis	CADD Centre
5	URK16AE018	JOSHI K J	Product Design and Analysis	CADD Centre
6	URK16AE020	J P GOKUL	Product Design and Analysis	CADD Centre
7	URK16AE021	JEROME	Product Design and Analysis	CADD Centre
8	URK16AE022	AFNAN M. ARIEF	Product Design and Analysis	CADD Centre

## Result

Thus, The Experiment for creating a Responsive web page using Bootstrap Framework has created and hosted successfully.

<b>Ex. No. 5</b>	<b>JavaScript – DOM Elements and Events</b>
<b>Date of Exercise</b>	28/08/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-5/index.html">https://ruban2205.github.io/Web-Technology/Exp-5/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1MBus2dwvdfyflOz-y3AkPSnqM5HXTCiU/view?usp=sharing">https://drive.google.com/file/d/1MBus2dwvdfyflOz-y3AkPSnqM5HXTCiU/view?usp=sharing</a>

## Aim

To create web pages which demonstrate the applications of document object model and events in JavaScript

## Description

### Document Object Model:

A Document Object represents the HTML document that is displayed in that window. The Document object has various properties that refer to other objects which allow access to and modification of document content. The way a document content is accessed and modified is called the Document Object Model, or DOM.

## Program:

### 1) HTML

```
<!-- Question-1 Section-->
```

```
<section id="qn1">
```

```
<div class="container">
```

```
<h3 class="qn-title">Question-1 | Find short and long string</h3>
```

<p class="question">Write a function that accepts a string as a parameter and find the  
<b>shortest and

longest word</b>

within the String. <br> Example String: 'Web Development Tutorial' <br> Expected  
Output: <br>

Shortest: Web <br> Longest: Development</p>

<form>

<div class="mb-3">

<label for="string" class="form-label"><b>Enter a String</b></label>

<input type="text" class="form-control" id="string"

placeholder="Example string: 'Web Development Tutorial'" required>

</div>

<p>Shortest string: <span id="short-string"></span></p>

<p>Longest string: <span id="long-string"></span></p>

<button type="button" class="btn btn-primary px-5" onclick="checkString()">Check  
Results</button>

</form>

</div>

</section>

**JS:**

```
function checkString() {
```

```
    var stringInput = document.getElementById("string").value;
```

```
    // alert(stringInput);
```

```
var strSplit = stringInput.split(' ');

var longest = 0;
var longword = null;
for (var i = 0; i <= strSplit.length - 1; i++){
    if (longest < strSplit[i].length) {
        longest = strSplit[i].length;
        longword = strSplit[i];
    }
}

document.getElementById("long-string").innerHTML = longword;

let shortestWord = strSplit[0];

for (let word of shortestWord) {
    if (word.length < shortestWord.length) {
        word = shortestWord;
    }
}

document.getElementById("short-string").innerHTML = shortestWord;
}
```

## 2) HTML:

<!-- Question-2 Section -->

<section id="qn2">

<div class="container">

<h3 class="qn-title">Question-2 | BMI Calculator</h3>

<p class="question"><b>BMI Calculator:</b> The following HTML snippet shows the skeleton of a BMI

Calculator. Write the calculate() function that takes the weight and height in the text boxes and

displays the BMI in the span with the id of "score." BMI is calculated from the equation: weight/(height

\* height). You should also describe the person's body type based on their BMI Score using the following

criteria:

<ol>

<li>Underweight: < 18</li>

<li>Normal: 18 - 25</li>

<li>Overweight: 25 - 30</li>

<li>Obese: > 30</li>

</ol>

</p>

<form>

<div class="mb-3">

<label for="height" class="form-label"><b>Height:</b> </label>

```
<input type="text" class="form-control" id="height" placeholder="Enter your height" required>
```

```
<label for="weight" class="form-label"><b>Weight:</b> </label>
```

```
<input type="text" class="form-control" id="weight" placeholder="Enter your weight" required>
```

```
</div>
```

```
<p><b>BMI Result: </b><span id="bmi-result"></span></p>
```

```
<p><b>BMI Value: </b><span id="bmi-value"></span></p>
```

```
<button type="button" onclick="calculateBMI()" class="btn btn-primary px-5">Calculate your BMI</button>
```

```
</form>
```

```
</div>
```

```
</section>
```

## JS:

*// Question-2 | BMI Calculator*

```
function calculateBMI() {
```

```
    var height = document.getElementById("height").value;
```

```
    var weight = document.getElementById("weight").value;
```

```
    var result = (weight / ((height * height) / 10000)).toFixed(2);
```

```
    document.getElementById("bmi-result").innerHTML = result;
```



```
if (result < 18) {  
    document.getElementById("bmi-value").innerHTML = "You are in Underweight";  
}  
else if (result >= 18 && result <= 25) {  
    document.getElementById("bmi-value").innerHTML = "You are in normal weight";  
}  
else if (result > 25 && result <= 30) {  
    document.getElementById("bmi-value").innerHTML = "You are in Overweight";  
}  
else {  
    document.getElementById("bmi-value").innerHTML = "Your weight is too high!!!  
OBESE";  
}  
}
```

### 3) HTML:

*<!-- Question-3 / Fruit Farm-->*

```
<section id="qn3">
```

```
<div class="container">
```

```
<h3 class="qn-title">Question-3 | Fruit Farm</h3>
```

<p class="question"><b>Fruit Farm: </b>The following HTML snippet is from a webpage that allows users to

design rectangular fruit farm beds. When you click the "Plant Garden" Button, the page should generate a

rectangular grid of fruit images in the div with the id of the "garden". The dimensions of grid are

given by the values entered in the text boxes. Write the `grow()` JavaScript function to complete the

functionality for the webpage. You should randomly display either "apple.jpg" or "orange.jpg"

for each fruit image, and either fruit should show up with equal probability.

```
<form>

<div class="mb-3">

  <label for="string" class="form-label"><b>Rows: </b></label>

  <input type="text" class="form-control" id="row" placeholder="Enter the rows"
required>

  <label for="string" class="form-label"><b>Columns: </b></label>

  <input type="text" class="form-control" id="column" placeholder="Enter the
columns" required>

</div>

<p><b>Result:</b></p>

<div id="garden" class="mb-3"></div>

<button type="button" onclick="grow()" class="btn btn-primary px-5">Grow
Fruits</button>

<button type="button" onclick="refreshPage()" class="btn btn-dark px-
5">Refresh</button>

</form>

</div>

</section>
```

**JS:***// Question-3 | Fruit Farm*

```
function grow(){
    var row = document.getElementById('row').value;
    var column = document.getElementById('column').value;
    var imgArray = ["assets/images/apple.jpg", "assets/images/orange.jpg"];
    var garden = document.getElementById('garden');

    for(let i=0; i<row; i++){
        for (let j=0; j<column; j++){
            var fruits = Math.floor(Math.random() * 2);
            var img = '<img src=' + imgArray[fruits] + ' width="150px" height="150px"></img>';
            garden.innerHTML += img;
        }
        garden.innerHTML+="<br>";
    }
}

function refreshPage(){
    window.location.reload();
}
```

**4) HTML:**

```
<!-- Question - 4 | Currency Converter -->
```

```
<section id="qn4">
```

```
<div class="container">
```

```
<h3 class="qn-title">Question-4 | Currency converter</h3>
```

<p class="question"><b>The Currency converter: </b>The following HTML snippet shows the skeleton of a

rupees-to-dollars, dollars-to-rupees conversion tool. Write the convert() function that takes the value

in the text input and converts it from the unit selected in the left dropdown box o the unit selected on

the right. The unit should be displayed in the empty span with the id of "answer." The conversion factor

from rupees to dollars is 0.015, and the conversion factor from dollars to rupees is 67.12. You should

edit the HTML to add id's to the elements as necessary and you may assume valid input.</p>

```
<form>
```

```
<div class="mb-3">
```

```
<label for="string" class="form-label"><b>Enter amount: </b></label>
```

<input id="amount" type="text" class="form-control mb-3" placeholder="Enter the amount to convert"

```
required>
```

```
<p><b>From: </b></p>
```

<select id="from" class="form-select form-select-sm mb-3" aria-label=".form-select-sm example">

```

        <option selected>Choose Currency type...</option>
        <option>Indian Rupee</option>
        <option>US Dollar</option>
    </select>

    <p><b>To: </b></p>

    <select id="to" class="form-select form-select-sm mb-3" aria-label=".form-select-sm example">
        <option selected>Choose Currency type...</option>
        <option>Indian Rupee</option>
        <option>US Dollar</option>
    </select>

</div>

<p><b>Result:</b>&nbsp;<span id="currency_result"></span></p>

<button type="button" onclick="convertCurrecny()" class="btn btn-primary px-5">Convert</button>

</form>

</div>

</section>

```

**JS:**

*// Question-4 | Currency Converter*

```

function convertCurrecny() {
    var userInput = parseFloat(document.getElementById('amount').value);
    var from = document.getElementById('from').value;

```

```
var to = document.getElementById('to').value;

if (from == "US Dollar" && to == "Indian Rupee") {
    document.getElementById('currency_result').innerHTML = (userInput * 79.71);
} else if (from == "Indian Rupee" && to == "US Dollar") {
    document.getElementById('currency_result').innerHTML = (userInput * 0.013);
} else if ((from == "US Dollar" && to == "US Dollar") || (from == "Indian Rupee" && to == "Indian Rupee")) {
    document.getElementById('currency_result').innerHTML = "Same currencies can't be converted!!!";
}

}
```

## 5) HTML:

*<!-- Question - 5 / Coin flip -->*

```
<section id="qn5">
```

```
<div class="container">
```

```
<h3 class="qn-title">Question-5 | Coin Flip</h3>
```

```
<p class="question"><b>Coin Flip: </b> Write JavaScript code to randomly change the  
src of the img in the
```

HTML snippet to "heads.jpg" or "tails.jpg" when the "Flip!" button is pressed. The image should change

to the heads or tails picture with equal probability. Keep track of how many flips have resulted in

heads and tails and report the results beneath the button in two spans with ids "num\_heads" and

"num\_tails" respectively. You should write JavaScript code to attach the event handler to the button and

you may assume the user enters valid input.</p>

<form>

<div class="mb-3">

<h3>Heads or Tails?</h3>

<br>

</div>

<p><b>No of Heads: </b><span id="nos-head">0</span></p>

<p><b>No of Tails: </b><span id="nos-tail">0</span></p>

<button type="button" onclick="coinFlip()" class="btn btn-primary px-5">Flip Coin!!!</button>

</form>

</div>

</section>

### JS:

// Question - 5 | Coin Flip

```
function coinFlip(){
```

```
    var image = document.getElementById('coin-img');
```

```
    var head = document.getElementById('nos-head');
```

```
var tail = document.getElementById('nos-tail');

var parseHead = parseInt(head.innerHTML);
var parseTail = parseInt(tail.innerHTML);

var imageArr = ['coin-head.jpg', 'coin-tail.jpg'];

var rand = Math.floor(Math.random() * 2);

if(imageArr[rand] == imageArr[0]){
    head.innerHTML = parseHead + 1;
}
else{
    tail.innerHTML = parseTail + 1;
}
image.src = "assets/images/"+imageArr[rand];
}
```

## 6) HTML:

```
<!-- Question - 6 / Birthday Cake Order form -->

<section id="qn6" class="mb-5">

    <div class="container">
```



<h3 class="qn-title">Question-6 | Birthday cake order form</h3>

<p class="question"><b>Birthday cake order form: </b> The following HTML snippet represents a skeleton of a

price calculator for a cake order form. A 1/2Kg cake is Rs.100, a 1Kg cake is Rs.200 and a 2Kg cake is

Rs.400. Tax is an additional 9% to the order. The user must also pay a tip from 10-20% of the total cost

of the order after tax. Write the Java Script code necessary to calculate and display the total cost of

the order in the span with the id of "price" when the user clicks the "Calculate Order" button. You

should write unobtrusive JavaScript code to attach the event handler to the button and you may assume

the user enters valid input.</p>

<form>

<div class="mb-3">

<h3>Birthday cake order Form</h3>

<label for="string" class="form-label"><b>Number of 1/2Kg Cakes? </b></label>

<input type="text" class="form-control" id="small" placeholder="Enter in nos:">

<label for="string" class="form-label"><b>Number of 1Kg Cakes? </b></label>

<input type="text" class="form-control" id="medium" placeholder="Enter in nos:

">

<label for="string" class="form-label"><b>Number of 2Kg Cakes? </b></label>

<input type="text" class="form-control" id="large" placeholder="Enter in nos: ">

</div>

<div class="form-check">

```
<input class="form-check-input" type="radio" value="10" name="tip"
id="flexRadioDefault1">

<label class="form-check-label" for="flexRadioDefault1">

    10%

</label>

</div>

<div class="form-check">

    <input class="form-check-input" type="radio" value="15" name="tip"
checked="checked"

        id="flexRadioDefault2">

        <label class="form-check-label" for="flexRadioDefault2">

            15%

        </label>

    </div>

    <div class="form-check">

        <input class="form-check-input" type="radio" value="20" name="tip"
id="flexRadioDefault3">

        <label class="form-check-label" for="flexRadioDefault3">

            20%

        </label>

    </div>

    <p class="mt-4"><b>Total Cost of Order: </b> <span id="total-price"></span></p>

    <button type="button" onclick="cakeOrder()" class="btn btn-primary px-6">Caculate
Total Cost</button><br><br>

</form>
```

```
</div>
```

```
</section>
```

**JS:**


*// Question - 6 | Birthday Cake order Form*

```
function cakeOrder() {  
    var small = document.getElementById('small').value;  
    var medium = document.getElementById('medium').value;  
    var large = document.getElementById('large').value;  
  
    var total = (small * 100) + (medium * 200) + (large * 400);  
    var taxAmount = ((9 / 100) * total) + total;  
  
    var radioBtn = document.querySelector('input[name="tip"]:checked').value;  
    var tip = ((radioBtn / 100) * taxAmount);  
    var totalCost = taxAmount + tip;  
  
    document.getElementById('total-price').innerHTML = totalCost;  
}
```

## Output (Screenshot):

← → ↻ 🏠 📄 ⚙️ 👤 ⋮

ruban2205.github.io/Web-Technology/Exp-5/index.html

 **URK20CS2001 | Exp-5** Questions ▾ Home

### Question-1 | Find short and long string

Write a function that accepts a string as a parameter and find the **shortest and longest word** within the String.

Example String: 'Web Development Tutorial'

Expected Output:  
Shortest: Web  
Longest: Development

**Enter a String**

Example string: 'Web Development Tutorial'

Shortest string:

Longest string:

[Check Results](#)

## Result

Thus, The Experiment for creating a web page with dynamic function of Java Script DOM Elements has created and hosted successfully.

<b>Ex. No. 6</b>	<b>JavaScript – Timer Functions and Objects</b>
<b>Date of Exercise</b>	28/08/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-6/index.html">https://ruban2205.github.io/Web-Technology/Exp-6/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1aAgSf1_CuZJ6H7k19y2-Pwm5W3aK8OVr/view?usp=share_link">https://drive.google.com/file/d/1aAgSf1_CuZJ6H7k19y2-Pwm5W3aK8OVr/view?usp=share_link</a>

## Aim

To create web pages using various timer functions, events and objects in Java Script.

## Description

### Timing Events

The window object allows execution of code at specified time intervals. These time intervals are called timing events. The three key methods to use with Java Script are:

setTimeout() – Executes a function, after waiting a specified number of milliseconds.

setInterval() – Same as setTimeout(), but repeats the execution of the function continuously.

clearInterval() – Method stops the executions of the function specified in the setInterval() method.

### HTML:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

<title>URK20CS2001 | Exp-6</title>

<!-- Bootstrap Cdn -->

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"  
rel="stylesheet"

integrity="sha384-  
gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNl/vI1Bx"  
crossorigin="anonymous">

<!-- External CSS -->

<link rel="stylesheet" href="CSS/style.css">

<!-- Favicon -->

<link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">

</head>

<body>

<header id="navigation">

<nav class="navbar navbar-expand-lg bg-light fixed-top">

```

<div class="container-fluid">

  <a class="navbar-brand" href="#">

    &nbsp;URK20CS2001 | Exp-6</a>

  <button class="navbar-toggler" type="button" data-bs-toggle="collapse"

    data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"

    aria-expanded="false" aria-label="Toggle navigation">

    <span class="navbar-toggler-icon"></span>

  </button>

  <div class="collapse navbar-collapse" id="navbarSupportedContent">

    <ul class="navbar-nav mb-2 mb-lg-0">

      <li class="nav-item dropdown">

        <a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"

        aria-expanded="false">Questions</a>

        <ul class="dropdown-menu">

          <li><a href="#qn1" class="dropdown-item">Question-1</a></li>

          <li><a href="#qn2" class="dropdown-item">Question-2</a></li>

          <li><a href="#qn3" class="dropdown-item">Question-3</a></li>

          <li><a href="#qn4" class="dropdown-item">Question-4</a></li>

          <li><a href="#qn5" class="dropdown-item">Question-5</a></li>

        </ul>

      </li>

```

```
<li class="nav-item">
  <a class="nav-link active" aria-current="page" href="#">Home</a>
</li>
</ul>
</div>
</div>
</nav>
</header>

<!-- Question - 1 / Digital Clock -->
<section id="qn1">
  <div class="container-fluid clock-container">
    <div id="clock-display" class="clock text-center" onload="showTime()"></div>
  </div>
</section>

<!-- Question-2 -->
<section id="qn2">
  <div class="dynamic-bg container-fluid" onload="changeBg()">
    <h1 class="text-center">Dynamic Background</h1>
  </div>
</section>
```



<!-- Question-3 -->

<section id="qn3">

<div class="font-container container-fluid">

<h3>On mouse over to change font-size</h3>

<p id="para-to-change" onmouseover="incSize()" onmouseout="decSize()" class="paragraph text-center">

JavaScript is a text-based programming language used both on the client-side and server-side that allows

you to make web

pages interactive. Where HTML and CSS are languages that give structure and style to web pages,

JavaScript gives web

pages interactive elements that engage a user.</p>

</div>

</section>

<!-- Question-4 -->

<section id="qn4">

<div class="container-fluid road-container box">





</div>

</section><br><br><br>

```
<!-- Question-5 -->

<section id="qn5">

    <div class="container text-center justify-content-center">

        <span id="student1"></span><br><br>

        <span id="student2"></span><br><br>

        <button onclick="studentDetails();" class="btn btn-dark">Show Student
Details</button>

    </div>

</section>


<!-- External JavaScript -->

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


<!-- Bootstrap Popper JS -->

<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"
integrity="sha384-
Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"
crossorigin="anonymous"></script>


<!-- Bootstrap JS -->

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JjnFsRydbmQbmL5t1tQ0culUzyK"
crossorigin="anonymous"></script>

</body>
```

```
</html>
```

**CSS:**

```
* {  
    margin: 0;  
    padding: 0;  
    box-sizing: border-box;  
}
```

```
/* Navigation Section */
```

```
.navbar-collapse {  
    justify-content: end;  
}
```

```
.nav-item,  
.search,  
.navbar-brand {  
    margin: 1rem;  
}
```

```
.navbar {  
    font-weight: 600;
```

```
}
```

```
.navbar-brand {  
    font-weight: 700;  
}
```

```
.navbar-toggler:focus,  
.navbar-toggler:active,  
.navbar-toggler-icon:focus {  
    outline: none;  
    box-shadow: none;  
    border: 0;  
}
```

```
/* Question - 1 */
```

```
.clock-container {  
    background-color: #222222;  
    color: white;  
    width: 100%;  
    display: flex;  
    justify-content: center;  
    align-items: center;  
    height: 100vh;
```

```
}
```

```
.clock {  
    color: white;  
    position: absolute;  
    top: 50%;  
    left: 50%;  
    font-size: 5rem;  
    font-weight: 500;  
    transform: translateX(-50%) translateY(-50%);  
}
```

```
/* Question-2 */
```

```
.dynamic-bg {  
    width: 100%;  
    height: 100vh;  
    display: flex;  
    align-items: center;  
    color: white;  
    justify-content: center;  
}
```

```
/* Question-3 */
```

```
.font-container,  
.road-container {  
    width: 100%;  
    height: 100vh;  
    display: flex;  
    flex-direction: column;  
    justify-content: center;  
    align-items: center;  
}
```

```
.paragraph {  
    width: 50rem;  
    padding: 2rem;  
    font-size: 0.8rem;  
}
```

*/\* Question-4 \*/*

```
.road-img {  
    width: 100%;  
}
```

```
.box {  
    position: relative;
```

```
}
```

```
.car-img {  
    position: absolute;  
    bottom: -1rem;  
    left: 0;  
}
```

```
/* Question-5 */
```

```
#qn5 {  
    position: relative;  
    margin: 5rem;  
}
```

### JS:

```
// Quesiton - 1 | Digital Clock
```

```
function showTime() {  
    var date = new Date();  
    var hour = date.getHours(); //0 - 23  
    var min = date.getMinutes(); //0 - 59  
    var sec = date.getSeconds(); //0 - 59  
    var session = "AM";
```

```
if (hour == 0) {  
    hour = 12;  
}  
  
if (hour > 12) {  
    hour = hour - 12;  
    session = "PM";  
}  
  
hour = (hour < 10) ? "0" + hour : hour;  
min = (min < 10) ? "0" + min : min;  
sec = (sec < 10) ? "0" + sec : sec;  
  
var time = hour + ":" + min + ":" + sec + " " + session;  
document.getElementById("clock-display").innerText = time;  
document.getElementById("clock-display").textContent = time;  
  
setTimeout(showTime, 1000);  
  
}  
showTime();  
  
// Question-2
```



```
function changeBg() {  
    var red = Math.floor(Math.random() * 255);  
    var green = Math.floor(Math.random() * 255);  
    var blue = Math.floor(Math.random() * 255);  
  
    var color = "rgb(" + red + ", " + green + ", " + blue + ")";  
  
    document.getElementsByClassName("dynamic-bg")[0].style = "background-color:" + color;  
  
    setTimeout(changeBg, 2000);  
}  
changeBg();
```

*// Question-3*

```
function incSize() {  
    document.getElementById("para-to-change").style = "font-size: 2rem";  
}  
  
function decSize() {  
    document.getElementById("para-to-change").style = "font-size: 0.8rem";  
}
```

*// Question-4*

```
function init(){
    imgObj = document.getElementById('car');
    imgObj.style.left = '0px';
}

function moveRight(){
    imgObj.style.left = parseInt(imgObj.style.left) + 1 + 'px';
    animate = setTimeout('moveRight()', 10);

    if (parseInt(imgObj.style.left) >= 1300){
        stop();
    }
}

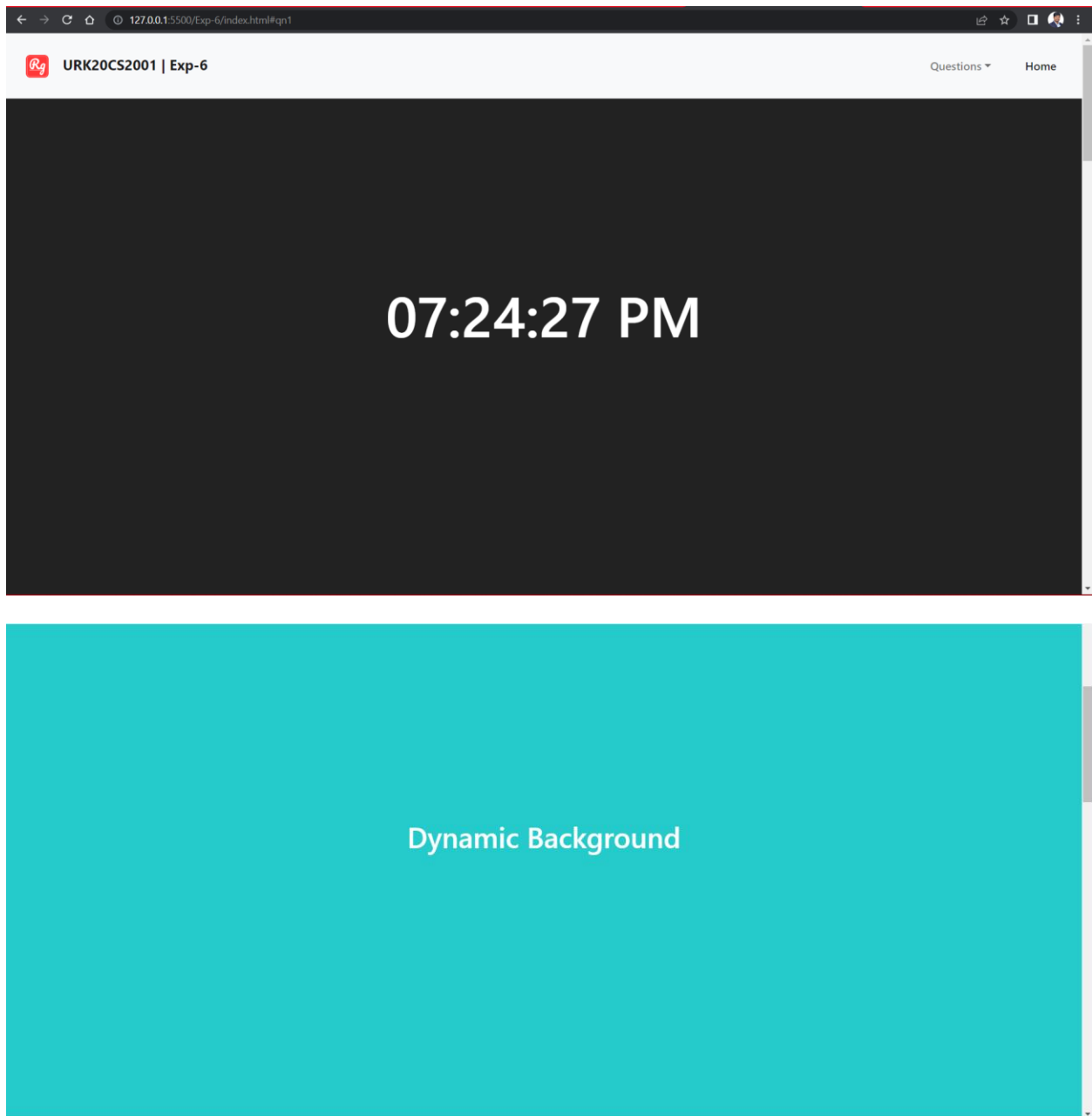
function stop(){
    clearTimeout(animate);
    imgObj.style.left = '0px';
}
```

*// Question-5*

```
function studentDetails(){
    var studentObj = [
        { name: 'John', regNum: '1234', dob: '10-APR-1995'},
```

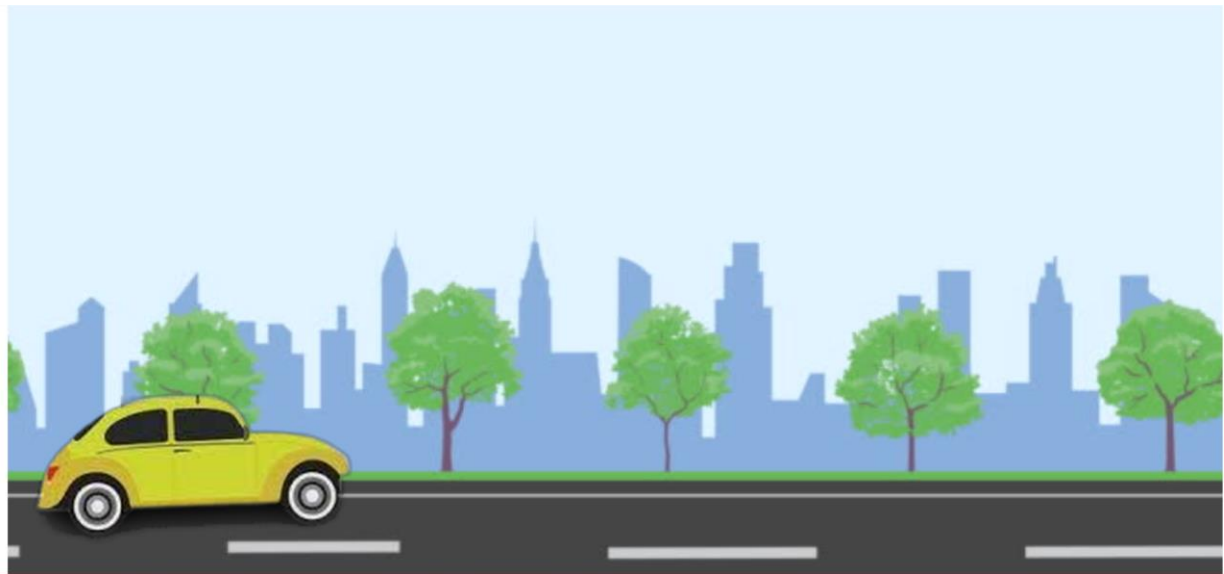
```
{ name: 'Joseph', regNum: '12345', dob: '05-JAN-1998'}  
];  
  
for (var i=0; i<studentObj.length; i++){  
    var name = studentObj[i].name;  
    var regNo = studentObj[i].regNum;  
    var DOB = studentObj[i].dob;  
  
    var outputString = "<br>" + "Name: " + name + "<br>" + "Register Number: " + regNo +  
    "<br>" + "Date Of Birth: " + DOB;  
    document.getElementById('student' + (i+1)).innerHTML = outputString;  
}  
}
```

**Output (Screenshot):**



On mouse over to change font-size

JavaScript is a text-based programming language used both on the client-side and server-side that allows you to make web pages interactive. Where HTML and CSS are languages that give structure and style to web pages, JavaScript gives web pages interactive elements that engage a user.



Name: John  
Register Number: 1234  
Date Of Birth: 10-APR-1995

Name: Joseph  
Register Number: 12345  
Date Of Birth: 05-JAN-1998

Show Student Details

## **Result**

Thus, The Experiment for creating a web page with dynamic function of Java Script objects has created and hosted successfully.

<b>Ex. No. 7</b>	<b>JQuery Game Animations and Dynamic Form</b>
<b>Date of Exercise</b>	5/08/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-7/index.html">https://ruban2205.github.io/Web-Technology/Exp-7/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1LuWLZ4zYQthyTuFmBz8ix2vkHA42FbdN/view?usp=share_link">https://drive.google.com/file/d/1LuWLZ4zYQthyTuFmBz8ix2vkHA42FbdN/view?usp=share_link</a>

## Aim

To create web pages to play games using various JQuery functions, events and objects to perform gaming.

## Description

jQuery includes methods which give special effects to the elements on hiding, showing, changing style properties, and fade-in or fade-out operation. These special effect methods can be useful in building an interactive user interface.

Animate() – Perform custom animation using element's style properties.

Queue() – Show or manipulate the queue of functions to be executed on the specified element.

Stop() – Stop currently running animations on the specified element.

fadeIn() – Display specified elements by fading them to opaque.

fadeOut() – Hides specified element by fading them to transparent.

Toggle() – Display hidden elements or hide visible elements.

**QUESTION – 1**

Create a game using JQuery with the following constraint

1. Create a four-lane race track, where in you be able to insert cars in the race track at the beginning based on user selection.
2. Start the race and every time randomly assign speed to the car by modifying slide properties.
3. Use fade properties if it hit a car or hits the corners of the wall

**HTML:**

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta http-equiv="X-UA-Compatible" content="IE=edge">
```

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

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

```
<title>URK20CS2001 Exp-7 | JQuery Car Game</title>
```



```
<!-- Bootstrap Cdn -->
```

```
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
rel="stylesheet"
```

```
    integrity="sha384-
gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNI/vI1Bx"
crossorigin="anonymous">
```

```
<!-- External CSS -->
```

```
<link rel="stylesheet" href="css/style.css">
```

```
<!-- JQuery cdn -->
```

```
<script src="https://code.jquery.com/jquery-3.6.1.min.js"
```

```
    integrity="sha256-o88AwQnZB+VDvE9tvIXrMQaPlFFSUTR+nldQm1LuPXQ="
crossorigin="anonymous"></script>
```

```
<!-- Favicon -->
```

```
<!-- <link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">
-->
```

```
</head>
```

```
<body>
```

```
<header id="navigation">
```

```
<nav class="navbar navbar-expand-lg bg-light fixed-top">
```

```
<div class="container-fluid">
```

```
<a class="navbar-brand" href="#">
```

```
&emsp;URK20CS2001 | Exp-7 | Car
Game</a>
```

```
<button class="navbar-toggler" type="button" data-bs-toggle="collapse"
```

```
data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"
```

```
aria-expanded="false" aria-label="Toggle navigation">
```

```
<span class="navbar-toggler-icon"></span>
```

```
</button>
```

```
<div class="collapse navbar-collapse" id="navbarSupportedContent">
```

```
<ul class="navbar-nav mb-2 mb-lg-0">
```

```
<li class="nav-item dropdown">
```

```
<a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"
```

```
aria-expanded="false">Questions</a>
```

```
<ul class="dropdown-menu">
```

```
<li><a href="index.html" class="dropdown-item">Question-1</a></li>
```

```
<li><a href="jquery-form.html" class="dropdown-item">Question-
2</a></li>
```

```
<li><a href="#" class="dropdown-item">Question-3</a></li>
```

```
</ul>
```

```
</li>
```

```
<li class="nav-item">
```

```
<a class="nav-link active" aria-current="page" href="#">Home</a>
```

```
</li>

</ul>

</div>

</div>

</nav>

</header>

<section id="qn1">

  <div class="container-fluid road-container">

  </div>

  <div class="car1-container car1">

  </div>

  <div class="car2-container car2" id="car2">

  </div>

  <div class="car3-container car3" id="car3">

  </div>

  <div class="car4-container car4" id="car4">

  </div>
```

</section>

<section class="container buttons justify-content-center text-center">

<button class="btn btn-dark car1-btn">Car1</button>

<button class="btn btn-dark car2-btn">Car2</button>

<button class="btn btn-dark car3-btn">Car3</button>

<button class="btn btn-dark car4-btn">car4</button>

<button id="start-btn" class="btn btn-success">Start</button>

<button id="stop-btn" class="btn btn-danger">Stop</button>

</section>

<!-- Bootstrap Popper JS -->

<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"

integrity="sha384-Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"

crossorigin="anonymous"></script>

<!-- Bootstrap JS -->

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"

integrity="sha384-ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JjnFsRydbmQbmL5t1tQ0culUzyK"

crossorigin="anonymous"></script>

</body>

</html>

**CSS:**

```
*{  
    margin: 0;  
    padding: 0;  
    box-sizing: border-box;  
}
```

```
body{  
    overflow-x: hidden;  
}
```

```
main{  
    padding: 10rem 0 0 0 ;  
}
```

```
/* Navigation Section */  
.navbar-collapse {  
    justify-content: end;  
}
```

```
.nav-item,  
.search,  
.navbar-brand {  
    margin: 1rem;  
}  
  
.navbar {  
    font-weight: 600;  
}  
  
.navbar-brand {  
    font-weight: 700;  
}  
  
.navbar-toggler:focus,  
.navbar-toggler:active,  
.navbar-toggler-icon:focus {  
    outline: none;  
    box-shadow: none;  
    border: 0;  
}  
  
#qn1{
```

```
height: 93vh;  
}
```

```
/* Question-1 */
```

```
.road-container{  
    width: 100%;  
    height: fit-content;  
    padding: 6.5rem 0 0 0;  
    position: relative;  
}
```

```
.road-img{  
    width: 100%;  
    height: 80vh;  
}
```

```
.car1-container{  
    width: 15%;  
    position: absolute;  
    top: 20%;  
    /* display: none; */  
}
```

```
.car2-container{  
    width: 15%;  
    position: absolute;  
    top: 38%;  
    /* display: none; */  
}
```

```
.car3-container{  
    width: 15%;  
    position: absolute;  
    top: 60%;  
    /* display: none; */  
}
```

```
.car4-container{  
    width: 15%;  
    position: absolute;  
    top: 78%;  
    /* display: none; */  
}
```

```
.car1, .car2, .car3, .car4{  
    width: 35%;
```



```
}
```

```
.btn{
```

```
padding: 0.8rem 5rem;
```

```
}
```

**JS:**

```
$(document).ready(function () {
```

```
    $(".car1-btn").click(function () {
```

```
        $(".car1-container").toggle();
```

```
    });
```

```
    $(".car2-btn").click(function () {
```

```
        $(".car2-container").toggle();
```

```
    });
```

```
    $(".car3-btn").click(function () {
```

```
        $(".car3-container").toggle();
```

```
    });
```

```
    $(".car4-btn").click(function () {
```

```
        $(".car4-container").toggle();
```

```
    });
```

```
});

$(document).ready(function () {

    $("#start-btn").click(function () {

        var random1 = Math.floor(Math.random() * (8000 - 500)) + 500;

        $('.car1-container').animate({ left: "85%" }, random1);

        console.log(random1);

        var random2 = Math.floor(Math.random() * (8000 - 500)) + 500;
        $('.car2-container').animate({ left: "85%" }, random2);

        var random3 = Math.floor(Math.random() * (8000 - 500)) + 500;
        $('.car3-container').animate({ left: "85%" }, random3);

        var random4 = Math.floor(Math.random() * (8000 - 500)) + 500;
        $('.car4-container').animate({ left: "85%" }, random4);

    });

});

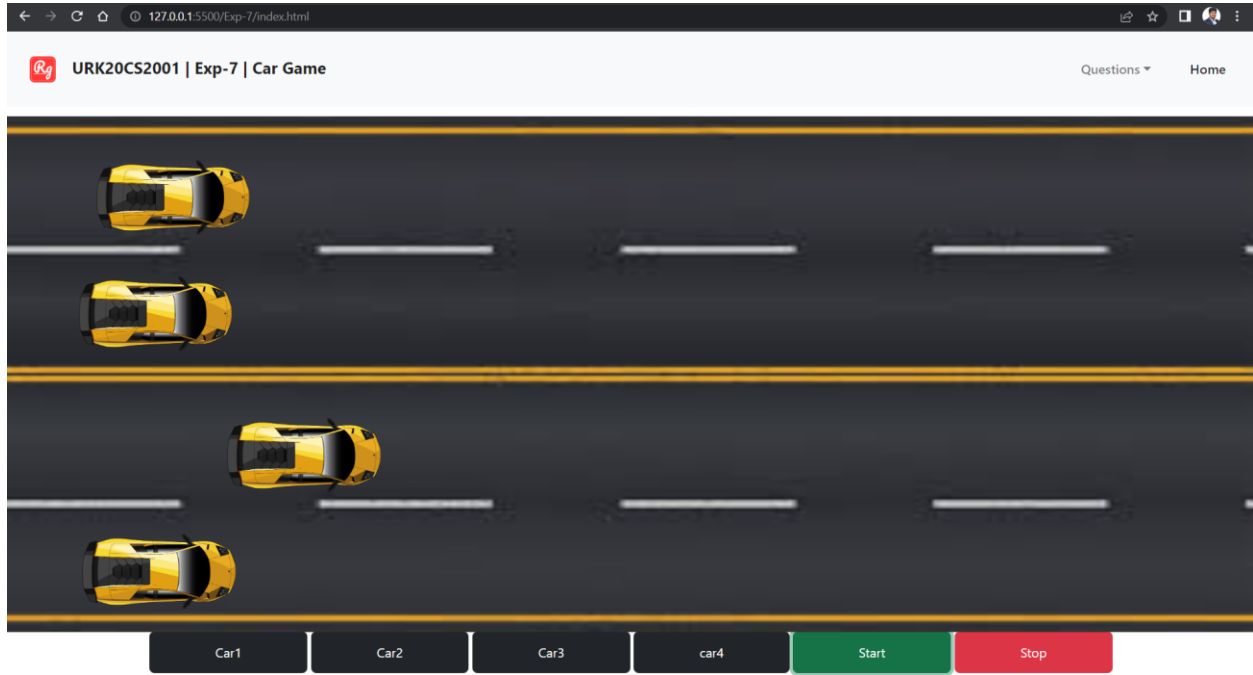
$("#stop-btn").click(function () {

    location.reload();

});
```

```
});
```

## OUTPUT:



## QUESTION – 2:

Create a dynamic text operation and display it in the same page using JQuery

## HTML:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

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

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

<title>URK20CS2001 Exp-7 | JQuery Form </title>


<!-- Bootstrap Cdn -->

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
rel="stylesheet"

    integrity="sha384-
gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNI/vI1Bx"
crossorigin="anonymous">


<!-- External CSS -->

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


<!-- JQuery cdn -->

<script src="https://code.jquery.com/jquery-3.6.1.min.js"

    integrity="sha256-o88AwQnZB+VDvE9tvIXrMQaPlFFSUTR+nldQm1LuPXQ="
crossorigin="anonymous"></script>


<!-- Favicon -->

<link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">

</head>
```

```

<body>

<header id="navigation">

  <nav class="navbar navbar-expand-lg bg-light fixed-top">

    <div class="container-fluid">

      <a class="navbar-brand" href="#">

        &emsp;URK20CS2001 | Exp-7 | Form</a>

      <button class="navbar-toggler" type="button" data-bs-toggle="collapse"

        data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"

        aria-expanded="false" aria-label="Toggle navigation">

        <span class="navbar-toggler-icon"></span>

      </button>

      <div class="collapse navbar-collapse" id="navbarSupportedContent">

        <ul class="navbar-nav mb-2 mb-lg-0">

          <li class="nav-item dropdown">

            <a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"

            aria-expanded="false">Questions</a>

            <ul class="dropdown-menu">

              <li><a href="index.html" class="dropdown-item">Question-1</a></li>

              <li><a href="car-body-shop.html" class="dropdown-item">Question-
2</a></li>

```

```

        <li><a href="car-body-shop.html" class="dropdown-item">Question-
3</a></li>

    </ul>

</li>

<li class="nav-item">

    <a class="nav-link active" aria-current="page" href="index.html">Home</a>

</li>

</ul>

</div>

</div>

</nav>

</header>

<main>

<section>

<div class="container">

    <h3 class="mb-3">Question - 2</h3>

    <h5 class="mb-3">JQuery Dynamic text operations</h5>

    <div class="q2-btns my-5">

        <button class="btn btn-dark px-4 py-2" id="append_to_text">Append
Text</button>

        <button class="btn btn-dark px-4 py-2" id="append_to_list">Append to
List</button>

```

```
<button class="btn btn-dark px-4 py-2" id="prepend_to_text">Prepend
Text</button>

<button class="btn btn-dark px-4 py-2" id="prepend_to_list">Prepend to
List</button>

<button class="btn btn-dark px-4 py-2" id="dynamic_form">Add Form</button>

<button class="btn btn-dark px-4 py-2" id="input">Add Data to input</button>

<button class="btn btn-dark px-4 py-2" id="reset-btn">Reset</button>

</div>

<div class="append_prepend">

  <p id="txt">Dynamic!</p>

  <ol id="lst" class="list-group">

    <li class="list-group-item">Block</li>

    <li class="list-group-item">Blood</li>

    <li class="list-group-item">Board</li>

  </ol>

</div>

<br><br>

</div>

</section>

</main>

<!-- Bootstrap Popper JS -->

<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"
```

```
integrity="sha384-
Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"
```

```
crossorigin="anonymous"></script>
```

```
<!-- Bootstrap JS -->
```

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
```

```
integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JjnFsRydbmQbmL5t1tQ0culUzyK"
```

```
crossorigin="anonymous"></script>
```

```
</body>
```

```
</html>
```

### JS:

```
$("#dynamic_form").click(function () {
    $(".append_prepend").append("<input type='text' id='i1' value='Hello'><br><br>");
})
$("#input").click(function () {
    data = 'dynamic';
    $("#i1").val(data);
})
$("#append_to_text").click(function () {
    $("#txt").append(" <b>Appended text</b>.");
});
```



```

$("#append_to_list").click(function () {
    $("#lst").append("<li class='list-group-item'>Appended Item</li>");
});

$("#prepend_to_text").click(function () {
    $("#txt").prepend(" <b>Prepended text</b>.");
});

$("#prepend_to_list").click(function () {
    $("#lst").prepend("<li class='list-group-item'>Prepended Item</li>");
});

$("#reset-btn").click(function () {
    location.reload(true);
});

```

**OUTPUT:**

Question - 2

JQuery Dynamic text operations

Append Text Append to List Prepend Text Prepend to List Add Form Add Data to input Reset

Prepended text

Prepended Item

Block

Blood

Board

Appended Item

Appended Item

dynamic

Hello

**QUESTION – 3:**

Create a car body workshop using JQuery where in you should be able to change the color of the car, glass tint, size of the tyres.

**HTML:**

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

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

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

```
  <title>URK20CS2001 Exp-7 | JQuery Car Body Shop</title>
```

```
  <!-- Bootstrap Cdn -->
```

```
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
  rel="stylesheet"
```

```
    integrity="sha384-
  gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNl/vI1Bx"
  crossorigin="anonymous">
```

```
  <!-- External CSS -->
```

```
  <link rel="stylesheet" href="css/body-shop.css">
```

```
<!-- JQuery cdn -->

<script src="https://code.jquery.com/jquery-3.6.1.min.js"
        integrity="sha256-o88AwQnZB+VDvE9tvIXrMQaPlFFSUTR+nldQm1LuPXQ="
        crossorigin="anonymous"></script>

<!-- Favicon -->

<link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">

</head>

<body>

<header id="navigation">

<nav class="navbar navbar-expand-lg bg-light fixed-top">

<div class="container-fluid">

<a class="navbar-brand" href="#">

&nbsp;URK20CS2001 | Exp-7 | Car
Bodyshop</a>

<button class="navbar-toggler" type="button" data-bs-toggle="collapse"

data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"

aria-expanded="false" aria-label="Toggle navigation">

<span class="navbar-toggler-icon"></span>

</button>

<div class="collapse navbar-collapse" id="navbarSupportedContent">
```

```

        <ul class="navbar-nav mb-2 mb-lg-0">
            <li class="nav-item dropdown">
                <a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"
                aria-expanded="false">Questions</a>
                <ul class="dropdown-menu">
                    <li><a href="index.html" class="dropdown-item">Question-1</a></li>
                    <li><a href="jquery-form.html" class="dropdown-item">Question-
2</a></li>
                    <li><a href="car-body-shop.html" class="dropdown-item">Question-
3</a></li>
                </ul>
            </li>
            <li class="nav-item">
                <a class="nav-link active" aria-current="page" href="index.html">Home</a>
            </li>
        </ul>
    </div>
</div>
</nav>
</header>

<main>
    <section>
        <div class="container">

```

```
<h3>Question - 3</h3><br>
<h5>Car Body Shop using JQuery</h>
<br>
<div class="shapes">
  <div class="trapezoid"></div>
  <div class="rectangle "></div>
  <div class="tyre">
    <div class="circle"></div>
    <div class="circle"></div>
  </div>
  <div class="control_buttons">
    <button class="btn btn-dark" id="change_glass_color">Change Glass
Color</button>
    <button class="btn btn-dark" id="change_body_color">Change Body
Color</button>
    <button class="btn btn-dark" id="increase_tyre_size">Tyre Size
Increase</button>
    <button class="btn btn-dark" id="decrease_tyre_size">Tyre Size
Decrease</button>
    <button class="btn btn-dark" id="r11">Reset</button>
  </div>
</div>
</section>
</main>
```

```
<!-- Bootstrap Popper JS -->

<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"
  integrity="sha384-
Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"
  crossorigin="anonymous"></script>

<!-- Bootstrap JS -->

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
  integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JnFsRydbmQbmL5t1tQ0culUzyK"
  crossorigin="anonymous"></script>

</body>

</html>
```

**CSS:**

```
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}

:root{
  --glass-color: #404258;
```

```
--body-color: #916BBF;  
--tyre-color: #1B2430;  
}
```

```
body {  
    overflow-x: hidden;  
}
```

```
main {  
    padding: 10rem 0 0 0;  
}
```

```
/* Navigation Section */  
.navbar-collapse {  
    justify-content: end;  
}
```

```
.nav-item,  
.search,  
.navbar-brand {  
    margin: 1rem;  
}
```

```
.navbar {  
    font-weight: 600;  
}  
  
.navbar-brand {  
    font-weight: 700;  
}  
  
.navbar-toggler:focus,  
.navbar-toggler:active,  
.navbar-toggler-icon:focus {  
    outline: none;  
    box-shadow: none;  
    border: 0;  
}  
  
/* Car Body Shop */  
  
.shapes {  
    text-align: center;  
    display: flex;  
    flex-direction: column;  
    justify-content: center;  
    align-items: center;
```



```
}
```

```
.tyre {  
    display: flex;  
}
```

```
.trapezoid {  
    border-bottom: 50px solid var(--glass-color);  
    border-left: 25px solid transparent;  
    border-right: 25px solid transparent;  
    height: 0;  
    width: 125px;  
}
```

```
.circle {  
    height: 50px;  
    width: 50px;  
    background-color: var(--tyre-color);  
    border-radius: 50%;  
    margin: 0 50px;  
}
```

```
.rectangle {
```

```
height: 60px;
width: 277px;
background-color: var(--body-color);
}
```

```
.control_buttons {
margin-top: 5rem;
}
```

**JS:**

```
<script type="text/javascript">

$("#change_glass_color").click(function () {

    const randomColor = Math.floor(Math.random() * 16777215).toString(16);
    var color = "#" + randomColor;

    $(".trapezoid").css("border-bottom-color", color);

});

$("#change_body_color").click(function () {

    const randomColor = Math.floor(Math.random() * 16777215).toString(16);
    var color = "#" + randomColor;

    $(".rectangle").css("background-color", color);

});

$("#increase_tyre_size").click(function () {

    $(".circle").css("width", "+=10");
```

```
$(".circle").css("height", "+=10");

});

$("#decrease_tyre_size").click(function () {

    $(".circle").css("width", "-=10");

    $(".circle").css("height", "-=10");

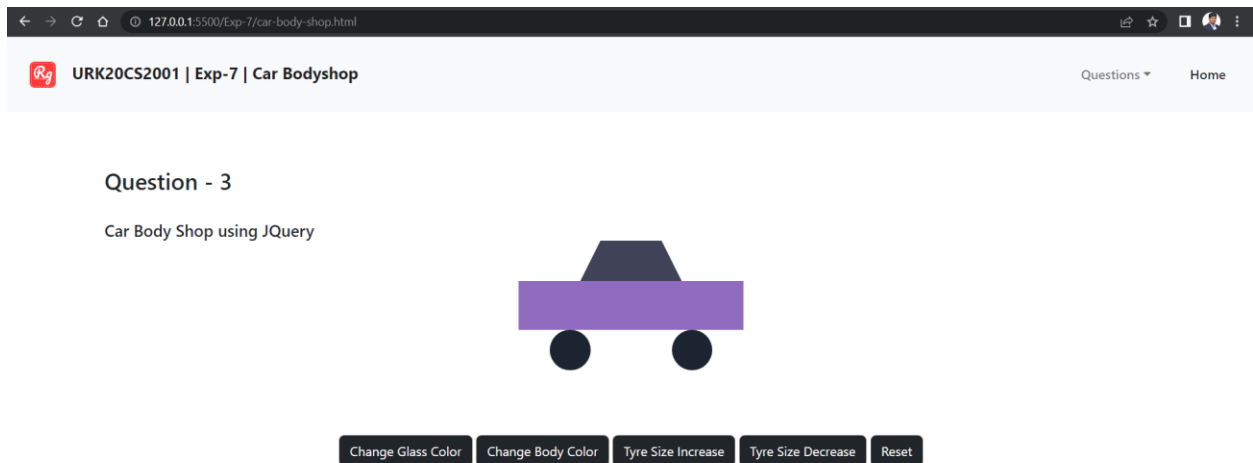
});

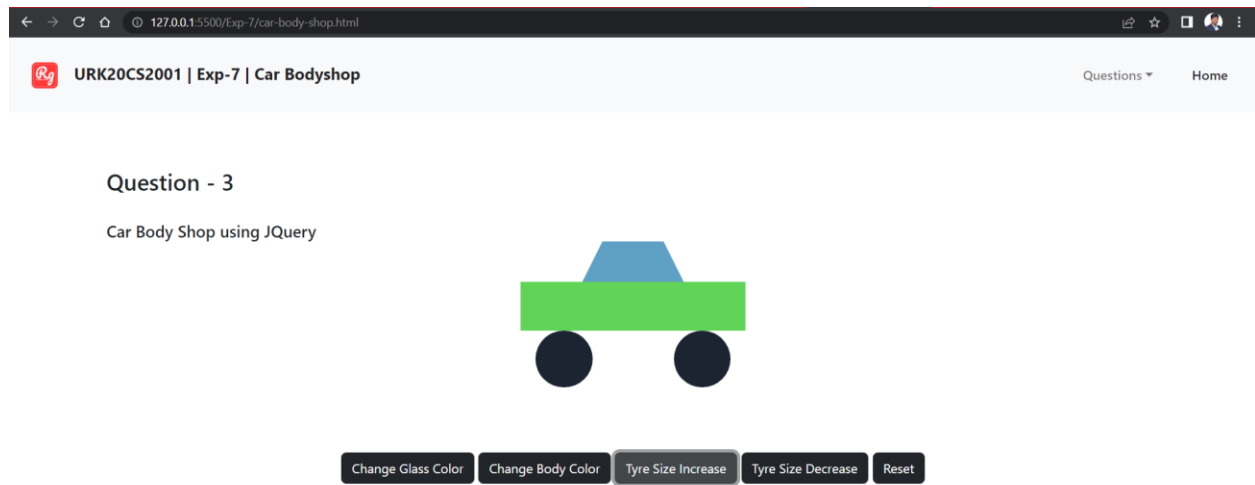
$("#r11").click(function () {

    location.reload(true);

});

</script>
```

**OUTPUT:**



## Result

Thus, The Experiment for creating a web page with dynamic function of JQuery objects has created and hosted successfully.

<b>Ex. No. 8</b>	<b>Working with Angular JS Derivatives</b>
<b>Date of Exercise</b>	10/10/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-8/index.html">https://ruban2205.github.io/Web-Technology/Exp-8/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1-CRxQRIxywpZ7PEnWyfp6kywuR7Y3knv/view?usp=share_link">https://drive.google.com/file/d/1-CRxQRIxywpZ7PEnWyfp6kywuR7Y3knv/view?usp=share_link</a>

### Aim

To implement the Angular JS framework to work with various programs to get the required output.

### Description

AngularJS is an open JavaScript framework developed and maintained by Google. It implements the MVC (Model View Controller) pattern to separate data, presentation and logical components.

AngularJS Architecture Angular.js follows the MVC architecture, the diagram of the MVC framework as shown below.

The Controller represents the layer that has the business logic. User events trigger the functions which are stored inside your controller. The user events are part of the controller.

- Views are used to represent the presentation layer which is provided to the end users.

- Models are used to represent your data. The data in your model can be as simple as just having primitive declarations. For example, if you are maintaining a student application, your data model could just have a student id and a name. Or it can also be complex by having a structured data model. If you are maintaining a car ownership application, you can have structures to define the vehicle itself in terms of its engine capacity, seating capacity, etc.

**QUESTION 1:**

Simple Comment Box using Controller

**SOURCE CODE:****HTML:**

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

  <title>URK20CS2001 Exp - 8 | Working with angular js directives</title>

  <!-- Bootstrap Cdn -->
```

```
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
rel="stylesheet"
```

```
integrity="sha384-
gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNl/vI1Bx"
crossorigin="anonymous">
```

```
<!-- External CSS -->
```

```
<link rel="stylesheet" href="css/style.css">
```

```
<!-- Angular JS CDN -->
```

```
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>
```

```
<!-- Favicon -->
```

```
<link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">
```

```
</head>
```

```
<body>
```

```
<header id="navigation">
```

```
<nav class="navbar navbar-expand-lg bg-light fixed-top">
```

```
<div class="container-fluid">
```

```
<a class="navbar-brand" href="#">
```

```
&emsp;URK20CS2001 | Exp-8 | Post  
Comment app</a>

```
<button class="navbar-toggler" type="button" data-bs-toggle="collapse"
data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"
aria-expanded="false" aria-label="Toggle navigation">
<span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse" id="navbarSupportedContent">
<ul class="navbar-nav mb-2 mb-lg-0">
<li class="nav-item dropdown">
<a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"
aria-expanded="false">Questions</a>
<ul class="dropdown-menu">
<li><a href="index.html" class="dropdown-item">Question-1</a></li>
<li><a href="calculator.html" class="dropdown-item">Question-2</a></li>
<li><a href="todo.html" class="dropdown-item">Question-3</a></li>
</ul>
</li>
<li class="nav-item">
<a class="nav-link active" aria-current="page" href="index.html">Home</a>
</li>
</ul>
</div>
```



```

</div>

</nav>

</header>

<main>

<!-- Simple comment box using controller -->
<section id="qn1" ng-app="postComnt">
  <div class="container">
    <h3>Question - 1</h3><br>
    <h4>Simple Comment box controller using Angular JS</h4>
    <br>
    <form ng-controller="formController">
      <div class="form-group">
        <label for="textarea" class="h5">Post Your Comments</label>
        <textarea ng-model="txtcomment" class="form-control mt-3" id="comment-box"
cols="30" rows="5"
        placeholder="Your comment here..."></textarea>
        <button ng-click="btn_add()" class="btn btn-primary px-5 mt-4">Post
comment</button>

        <h4 class="mt-4">Comments</h4>

        <ul>
          <li ng-repeat="comnt in comment">{{ comnt }} <a href="" class="btn btn-
dark"

```

```
        ng-click="remItem($index)">x</a> </li>

    </ul>

</div>

</form>

</div>

</section>

</main>

<script type="text/javascript">

    var app = angular.module("postComnt", []);

    app.controller("formController", function ($scope) {

        $scope.comment = [];

        $scope.btn_add = function () {

            if ($scope.txtcomment != "") {

                $scope.comment.push($scope.txtcomment);

                $scope.txtcomment = "";

            }

        }

        $scope.remItem = function ($index) {

            $scope.comment.splice($index, 1);

        }

    });

</script>
```

```
});

</script>

<!-- Bootstrap Popper JS -->

<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"
    integrity="sha384-
Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"
    crossorigin="anonymous"></script>

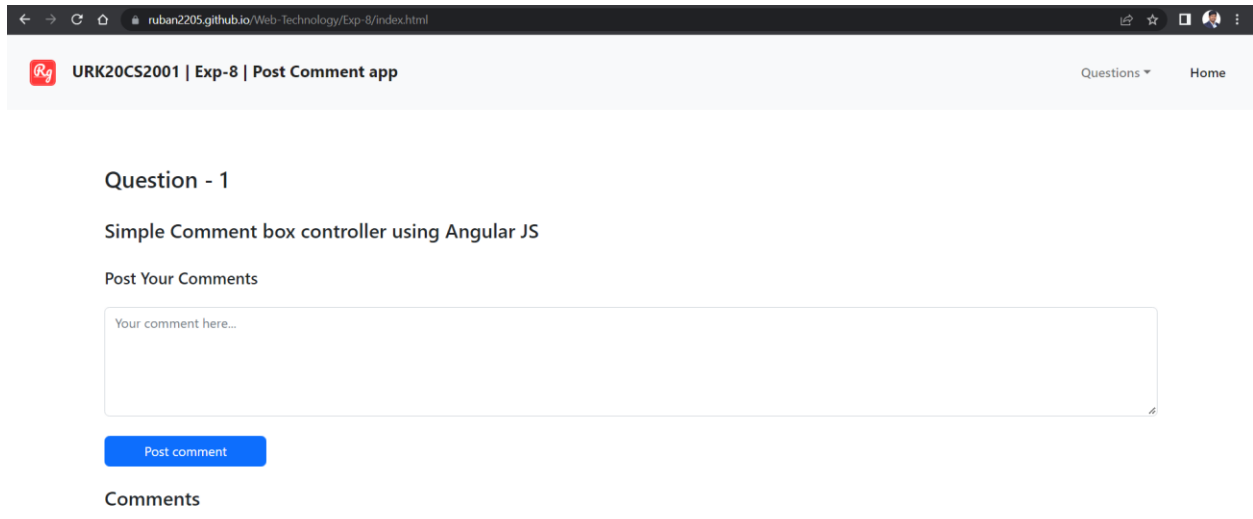
<!-- Bootstrap JS -->

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
    integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JnFsRydbmQbmL5t1tQ0culUzyK"
    crossorigin="anonymous"></script>

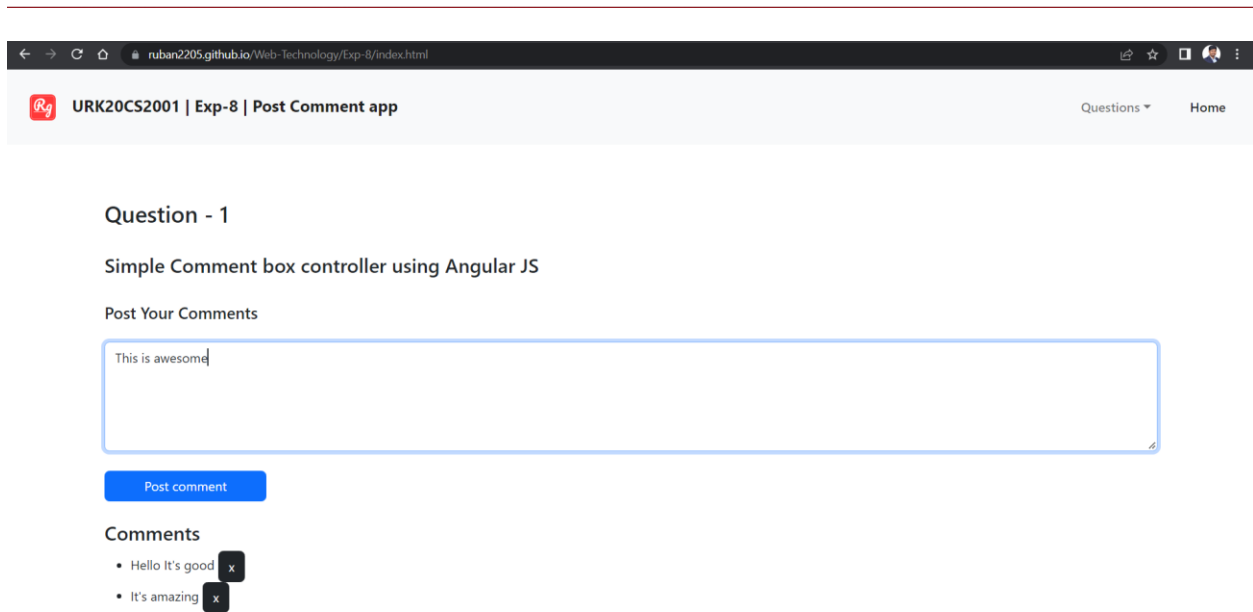
</body>

</html>
```

## OUTPUT:



The screenshot shows a web browser window with the address bar displaying 'ruban2205.github.io/Web-Technology/Exp-8/index.html'. The page title is 'URK20CS2001 | Exp-8 | Post Comment app'. The main content area is titled 'Question - 1' and 'Simple Comment box controller using Angular JS'. Below this, there is a section 'Post Your Comments' with a text input field containing the placeholder 'Your comment here...'. A blue 'Post comment' button is located below the input field. At the bottom, there is a section titled 'Comments'.



The screenshot shows the same web browser window as the previous one, but with a submitted comment. The text input field now contains 'This is awesome!'. The blue 'Post comment' button is still present. Below the input field, there is a section titled 'Comments' which displays a list of comments: 'Hello It's good' and 'It's amazing'. Each comment has a small 'x' icon next to it, indicating it can be removed.

**QUESTION 2:**

Simple Calculator

**SOURCE CODE:****HTML:**

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

  <title>URK20CS2001 Exp - 8 | Calculator App with Angular</title>

  <!-- Bootstrap Cdn -->

  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
rel="stylesheet"

  integrity="sha384-
gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNl/vI1Bx"
crossorigin="anonymous">

  <!-- External CSS -->

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

  <!-- Angular JS CDN -->
```

```
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>

<!-- Favicon -->

<link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">

</head>

<body>

  <header id="navigation">

    <nav class="navbar navbar-expand-lg bg-light fixed-top">

      <div class="container-fluid">

        <a class="navbar-brand" href="#">

          &emsp;URK20CS2001 | Exp-8 | Calculator
app</a>

        <button class="navbar-toggler" type="button" data-bs-toggle="collapse"

          data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"

          aria-expanded="false" aria-label="Toggle navigation">

          <span class="navbar-toggler-icon"></span>

        </button>

        <div class="collapse navbar-collapse" id="navbarSupportedContent">

          <ul class="navbar-nav mb-2 mb-lg-0">

            <li class="nav-item dropdown">
```

```
<a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"
    aria-expanded="false">Questions</a>
<ul class="dropdown-menu">
    <li><a href="index.html" class="dropdown-item">Question-1</a></li>
    <li><a href="calculator.html" class="dropdown-item">Question-2</a></li>
    <li><a href="todo.html" class="dropdown-item">Question-3</a></li>
</ul>
</li>
<li class="nav-item">
    <a class="nav-link active" aria-current="page" href="index.html">Home</a>
</li>
</ul>
</div>
</div>
</nav>
</header>

<main>
<!-- Simple Calculator using Angular -->
<section id="calculatorApp">
    <div class="container pt-5">
        <h3>Question - 2</h3><br>
        <h4>Simple Calculator using Angular JS</h4><br>
```

```
<form ng-app="CalculatorApp" ng-controller="CalculatorCtrl">
  <div class="mb-3">
    <label class="form-label">Number 1: </label>
    <input type="number" class="form-control mt-2" ng-model="num1">
    <label for="form-label" class="mt-3">Number 2:</label>
    <input type="number" class="form-control mt-2" ng-model="num2">
  </div>
  <label class="form-label">Select the operator:</label>
  <select class="form-select" aria-label="SelectBootstrap" ng-model="operator">
    <option value="default">Arithmetic Operations</option>
    <option>+</option>
    <option>*</option>
    <option>-</option>
    <option>/</option>
  </select>
  <h5 class="mt-4">Result: <span>{{ result() }}</span></h5>
</form>
</div>
</section>
</main>

<script type="text/javascript">
  var calcApp = angular.module("CalculatorApp", []);
```



```
calcApp.controller("CalculatorCtrl", function ($scope) {  
    $scope.result = function () {  
        if ($scope.operator == '+') {  
            return $scope.num1 + $scope.num2;  
        }  
        if ($scope.operator == '-') {  
            return $scope.num1 - $scope.num2;  
        }  
        if ($scope.operator == '*') {  
            return $scope.num1 * $scope.num2;  
        }  
        if ($scope.operator == '/') {  
            return $scope.num1 / $scope.num2;  
        }  
    };  
});
```

</script>

<!-- Bootstrap Popper JS -->

<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"

integrity="sha384-Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"

```
crossorigin="anonymous"></script>

<!-- Bootstrap JS -->


<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
    integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JjnFsRydbmQbmL5t1tQ0culUzyK"
    crossorigin="anonymous"></script>

</body>

</html>
```

## OUTPUT:

← → ↻ 📄 ruban2205.github.io/Web-Technology/Exp-8/calculator.html ⌵ ☆ 📱 👤 ⋮

 **URK20CS2001 | Exp-8 | Calculator app** Questions ▾ Home

---

### Question - 2

Simple Calculator using Angular JS

Number 1:

Number 2:

Select the operator:

+

▼

Result: 10

**QUESTION 3:**

Simple To Do List

**HTML:**

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

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

```
  <title>URK20CS2001 Exp - 8 | Todo List</title>
```

```
  <!-- Bootstrap Cdn -->
```

```
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
  rel="stylesheet"
```

```
    integrity="sha384-
  gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNI/vIIBx"
  crossorigin="anonymous">
```

```
  <!-- External CSS -->
```

```
  <link rel="stylesheet" href="css/style.css">
```

```
  <!-- Angular JS CDN -->
```

```
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>
```

```

<!-- Favicon -->

<link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">

</head>

<body>

<header id="navigation">

  <nav class="navbar navbar-expand-lg bg-light fixed-top">

    <div class="container-fluid">

      <a class="navbar-brand" href="#">

        &emsp;URK20CS2001 | Exp-8 | Todo
List</a>

      <button class="navbar-toggler" type="button" data-bs-toggle="collapse"

        data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"

        aria-expanded="false" aria-label="Toggle navigation">

        <span class="navbar-toggler-icon"></span>

      </button>

      <div class="collapse navbar-collapse" id="navbarSupportedContent">

        <ul class="navbar-nav mb-2 mb-lg-0">

          <li class="nav-item dropdown">

            <a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"

```

```
        aria-expanded="false">Questions</a>

        <ul class="dropdown-menu">

            <li><a href="index.html" class="dropdown-item">Question-1</a></li>

            <li><a href="calculator.html" class="dropdown-item">Question-2</a></li>

            <li><a href="todo.html" class="dropdown-item">Question-3</a></li>

        </ul>

    </li>

    <li class="nav-item">

        <a class="nav-link active" aria-current="page" href="index.html">Home</a>

    </li>

</ul>

</div>

</div>

</nav>

</header>

<main>

    <!-- Simple todo list using controller -->

    <section id="todo-list" ng-app="todoList" ng-controller="todoController">

        <div class="container">

            <h3>Question - 3</h3>

            <h4 class="my-3">Simple Todo List app using Angular JS</h4>

            <label class="form-label mt-3">Add your To-do items: </label>
```

```
<div class="input-group mb-3">

    <input ng-model="title" type="text" class="form-control" placeholder="Enter your
To-Do list" aria-label="todo-data"

        aria-describedby="button-addon2">

    <button ng-click="add()" class="btn btn-outline-dark" type="button" id="button-
addon2">Add</button>

</div>


<h6 class="mt-4">Your Tasks: </h6>

<ul class="list-group">

    <li class="list-group-item" ng-repeat="t in tasks">{{ t }} </li>

</ul>

</div>

</section>

</main>


<script type="text/javascript">

    var app = angular.module("todoList", []);


    app.controller("todoController", function($scope){

        $scope.tasks = [];


        $scope.add = function(){
```

```
        $scope.tasks.push($scope.title);
    };
});
</script>

<!-- Bootstrap Popper JS -->
<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"
        integrity="sha384-
Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"
        crossorigin="anonymous"></script>

<!-- Bootstrap JS -->
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
        integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JjnFsRydbmQbmL5t1tQ0culUzyK"
        crossorigin="anonymous"></script>
</body>

</html>
```

## OUTPUT:

Question - 3

Simple Todo List app using Angular JS

Add your To-do items:

Have to Sign all the records Add

Your Tasks:

- Have to finish Web tech
- Have to Take print out

## Result

Thus, The Experiment for performing the works with Angular JS Derivatives has created and hosted successfully.



<b>Ex. No. 9</b>	<b>Form validation and routing using Angular JS</b>
<b>Date of Exercise</b>	26/10/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-9/index.html">https://ruban2205.github.io/Web-Technology/Exp-9/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1dY9IBcinc_TW9joUKqtQu_T3N2dSmozA/view?usp=share_link">https://drive.google.com/file/d/1dY9IBcinc_TW9joUKqtQu_T3N2dSmozA/view?usp=share_link</a>

### Aim

Design User Registration Page as per the following design and perform validation of each fields and generate error message if the field is not correct as per the following constraints a constraints

### Description:

Form Validation in AngularJS is the process of ensuring whether the data entered in a form is correct and complete. When a user submits the form, validation occurs first before the details are sent to the server. The validation process ensures at best possible extent that the details for input fields are entered in the right manner.

In a real-world example, let's assume a site which requires a registration form to be completed before getting full access to this site. The registration page would have input fields for username, password, email id and so forth.

For example, the email id always needs to be in a format of username@site.domain;  
if someone enters just the username in the email id, then ideally the validation should fail. So, validation looks at doing these basic checks before the details are sent to the server for further processing.

**QUESTION 1:**

Create Christmas Mega play 2022 registration form and perform validation using angular JS

**SOURCE CODE:****HTML:**

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

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

```
  <title>URK20CS2001 Exp - 9 | Working with angular js Forms and Routing</title>
```

```
  <!-- Bootstrap Cdn -->
```

```
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
  rel="stylesheet"
```

```
integrity="sha384-
gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNI/vI1Bx"
crossorigin="anonymous">
```

```
<!-- External CSS -->
```

```
<link rel="stylesheet" href="css/style.css">
```

```
<!-- Angular JS CDN -->
```

```
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>
```

```
<!-- Favicon -->
```

```
<link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">
```

```
</head>
```

```
<body>
```

```
<header id="navigation">
```

```
<nav class="navbar navbar-expand-lg bg-light fixed-top">
```

```
<div class="container-fluid">
```

```
<a class="navbar-brand" href="#">
```

```
&emsp;URK20CS2001 | Exp-9 | Forms</a>
```

```
<button class="navbar-toggler" type="button" data-bs-toggle="collapse"
```

```
data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"

aria-expanded="false" aria-label="Toggle navigation">

<span class="navbar-toggler-icon"></span>

</button>

<div class="collapse navbar-collapse" id="navbarSupportedContent">

  <ul class="navbar-nav mb-2 mb-lg-0">

    <li class="nav-item dropdown">

      <a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"

        aria-expanded="false">Questions</a>

      <ul class="dropdown-menu">

        <li><a href="index.html" class="dropdown-item">Question-1</a></li>

        <li><a href="routing.html" class="dropdown-item">Question-2</a></li>

      </ul>

    </li>

    <li class="nav-item">

      <a class="nav-link active" aria-current="page" href="index.html">Home</a>

    </li>

  </ul>

</div>

</div>

</nav>

</header>
```

```
<main ng-app="">

  <div class="container">

    <h2>Megaplay Registration 2022</h2>

    <form name="myForm" id="event-form">

      <div class="my-3">

        <label class="form-label "><b>Name: </b></label>

        <input type="text" class="form-control" ng-model="myName" name="myName"
aria-describedby="name"

          placeholder="Your name" required>

        <span id="name" class="form-text text-danger" ng-
show="myForm.myName.$error.required">Name is

          required!</span>

      </div>

      <div class="my-3">

        <label class="form-label"><b>Register number: </b></label>

        <input type="text" class="form-control" ng-model="myRegNo" name="myRegNo"
aria-describedby="regno"

          placeholder="Your register number" required>

        <span id="regno" class="form-text text-danger" ng-
show="myForm.myRegNo.$error.required">Register

          Number is Required!!!</span>

      </div>
```

```
<div class="my-3">

  <label class="form-label"><b>Year of Study: </b></label>&emsp;

  <input type="radio" class="form-check-input" ng-model="myYear"
name="myYear" required>

  <label class="form-check-label">1st</label>&emsp;

  <input type="radio" class="form-check-input" ng-model="myYear"
name="myYear" required>

  <label class="form-check-label">2nd</label>&emsp;

  <input type="radio" class="form-check-input" ng-model="myYear"
name="myYear" required>

  <label class="form-check-label">3rd</label>&emsp;

  <input type="radio" class="form-check-input" ng-model="myYear"
name="myYear" required>

  <label class="form-check-label">4th</label>&emsp;

  <span class="form-text text-danger" ng-
show="myForm.myYear.$error.checked">Year is required!!!</span>

</div>

<div class="my-3">

  <label class="form-label"><b>Department: </b></label>

  <select class="form-select" ng-model="department" name="department">
```

```
<option value="">Select your department</option>

<option value="1" aria-required="true">Computer Science and
Engineering</option>

<option value="2" aria-required="true">Mechanical Engineering</option>

<option value="3" aria-required="true">Civil Engineering</option>

</select>

<span class="form-text text-danger" ng-
show="myForm.department.$error.invalid">Department is required!!!</span>

</div>

<div class="my-3">

  <label class="form-label"><b>Type of Event: </b></label>&emsp;

  <input type="checkbox" value="" class="form-check-input" ng-model="myEvent1"
name="myEvent1" required>

  <label class="form-check-label">Musician</label>&emsp;

  <input type="checkbox" value="" class="form-check-input" ng-model="myEvent2"
name="myEvent2">

  <label class="form-check-label">Singing</label>&emsp;

  <input type="checkbox" value="" class="form-check-input" ng-model="myEvent3"
name="myEvent3">

  <label class="form-check-label">Choreography</label>&emsp;
```

```
<input type="checkbox" value="" class="form-check-input" ng-model="myEvent4"
name="myEvent4">
```

```
<label class="form-check-label">Volunteer</label>&nbsp;
```

```
<span class="form-text text-danger" ng-
show="myForm.myEvent1.$error.required">Event field is required!!!</span>
```

```
</div>
```

```
<div class="my-3">
```

```
<button id="submit-btn" onclick="return alert('Form details submitted
Successfully!!!)" class="btn btn-dark">Submit</button>
```

```
</div>
```

```
</form>
```

```
</div>
```

```
</main>
```

```
<!-- Bootstrap Popper JS -->
```

```
<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"
integrity="sha384-
Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"
crossorigin="anonymous"></script>
```

```
<!-- Bootstrap JS -->
```

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
```



```
integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JjnFsRydbmQbmL5t1tQ0culUzyK"

crossorigin="anonymous"></script>

</body>

</html>
```

## OUTPUT:

URK20CS2001 | Exp-9 | Forms

Questions ▾ Home

### Megaplay Registration 2022

**Name:**

Name is required!!

**Register number:**

Register Number is Required!!!

**Year of Study:** ☐ 1st ☐ 2nd ☐ 3rd ☒ 4th

**Department:**

**Type of Event:** ☐ Musician ☐ Singing ☐ Choreography ☐ Volunteer Event field is required!!!

**QUESTION 2:**

Create a webpage to perform show multiple regno and display the profile of the on clicking the regno selected using Routing concept in the Angular JS.

**SOURCE CODE:****HTML:**

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

  <title>URK20CS2001 Exp - 9 | Working with angular js Forms and Routing</title>

  <!-- Favicon -->

  <link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">

  <!-- Bootstrap Cdn -->

  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
rel="stylesheet"

  integrity="sha384-
gH2yIJqKdNHPEq0n4Mqa/HGKIhSkIHeL5AyhkYV8i59U5AR6csBvApHHNI/vI1Bx"
crossorigin="anonymous">
```

```
<!-- External CSS -->
```

```
<link rel="stylesheet" href="css/style.css">
```

```
<!-- Angular JS CDN -->
```

```
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>
```

```
<!-- Angular JS Routing -->
```

```
<script src="https://cdnjs.cloudflare.com/ajax/libs/angular-route/1.8.3/angular-route.min.js"
```

```
  integrity="sha512-
y1qD3hz/IAf8W4+/UMLZ+CN6LIoUGi7srWJ3r1R17Hid8x0yXe+1B5ZelkaL1Mjzedzu0Cg3H
BvDG02SAgSzBw=="
```

```
  crossorigin="anonymous" referrerpolicy="no-referrer"></script>
```

```
</head>
```

```
<body>
```

```
<header id="navigation">
```

```
<nav class="navbar navbar-expand-lg bg-light fixed-top">
```

```
<div class="container-fluid">
```

```
<a class="navbar-brand" href="#">
```

```
&emsp;URK20CS2001 | Exp-9 |
Routing</a>
```

```
<button class="navbar-toggler" type="button" data-bs-toggle="collapse"
  data-bs-target="#navbarSupportedContent" aria-
controls="navbarSupportedContent"
  aria-expanded="false" aria-label="Toggle navigation">
  <span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse" id="navbarSupportedContent">
  <ul class="navbar-nav mb-2 mb-lg-0">
    <li class="nav-item dropdown">
      <a href="#" class="nav-link dropdown-toggle" role="button" data-bs-
toggle="dropdown"
        aria-expanded="false">Questions</a>
      <ul class="dropdown-menu">
        <li><a href="index.html" class="dropdown-item">Question-1</a></li>
        <li><a href="routing.html" class="dropdown-item">Question-2</a></li>
      </ul>
    </li>
    <li class="nav-item">
      <a class="nav-link active" aria-current="page" href="index.html">Home</a>
    </li>
  </ul>
</div>
</div>
</nav>
```

```
</header>
```

```
<main ng-app="routeApp">
```

```
  <div class="container">
```

```
    <a href="#/!"><button class="btn btn-dark">Home</button></a>
```

```
    <a href="#!urk20cs20"><button class="btn btn-dark">URK20CS20</button></a>
```

```
    <a href="#!urk20cs200"><button class="btn btn-dark">URK20CS200</button></a>
```

```
    <a href="#!urk20cs2001"><button class="btn btn-dark">URK20CS2001</button></a>
```

```
  </div>
```

```
<div class="container m-5 p-5">
```

```
  <div ng-view></div>
```

```
</div>
```

```
</main>
```

```
<script type="text/javascript">
```

```
  var app = angular.module("routeApp", ["ngRoute"]);
```

```
  app.config(function($routeProvider){
```

```
    $routeProvider
```

```
    .when("/",{
```

```
      templateUrl: "server/home.htm"
```

```
    })
    .when("/urk20cs20", {
        templateUrl: "server/urk20cs20.htm"
    })
    .when("/urk20cs200", {
        templateUrl: "server/urk20cs200.htm"
    })
    .when("/urk20cs2001", {
        templateUrl: "server/urk20cs2001.htm"
    });
});
</script>

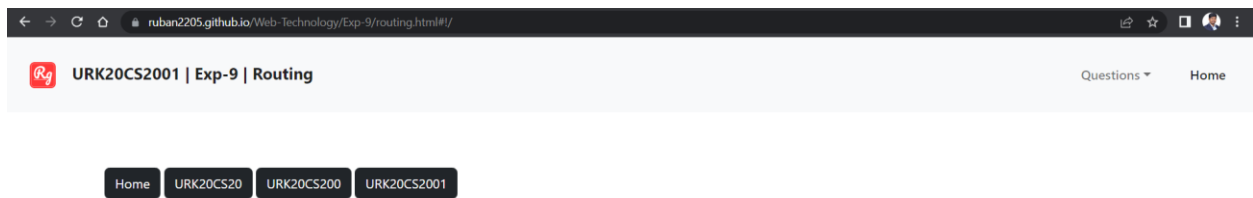
<!-- Bootstrap Popper JS -->
<script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.5/dist/umd/popper.min.js"
    integrity="sha384-
Xe+8cL9oJa6tN/veChSP7q+mnSPaj5Bcu9mPX5F5xIGE0DVittaqT5lorf0EI7Vk"
    crossorigin="anonymous"></script>

<!-- Bootstrap JS -->
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/js/bootstrap.min.js"
    integrity="sha384-
ODmDIVzN+pFdexxHEHFBQH3/9/vQ9uori45z4JjnFsRydbmQbmL5t1tQ0culUzyK"
    crossorigin="anonymous"></script>
```

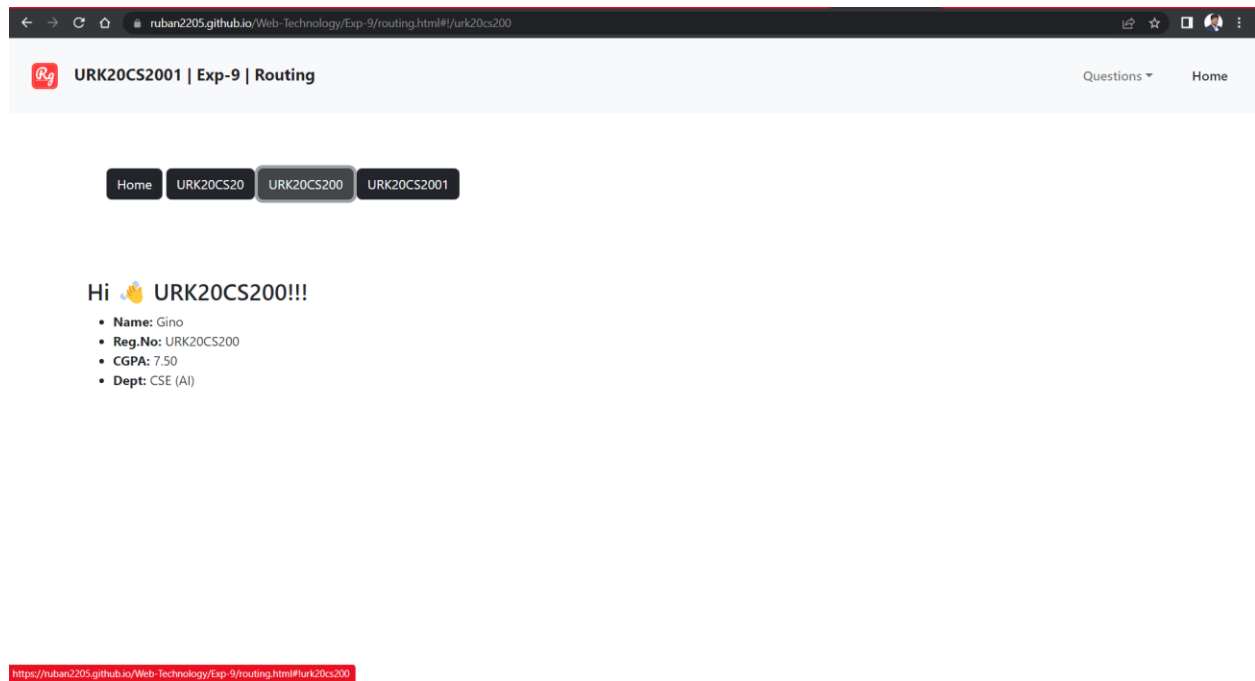
</body>

</html>

## OUTPUT:



Hi 🙌 Welcome to the Home page!!!



## Result

Thus, The Experiment for performing the works with Angular JS Form Validation and Angular JS Routing has created and hosted successfully.



<b>Ex. No. 10</b>	<b>Web Scrap using Node JS</b>
<b>Date of Exercise</b>	26/10/2022
<b>Web Link</b>	<a href="https://ruban2205.github.io/Web-Technology/Exp-10/index.html">https://ruban2205.github.io/Web-Technology/Exp-10/index.html</a>
<b>Dive Link</b>	<a href="https://drive.google.com/file/d/1KW3zbpwKaisOIVzO2V9RxH9Vbsnzxeha/view?usp=share_link">https://drive.google.com/file/d/1KW3zbpwKaisOIVzO2V9RxH9Vbsnzxeha/view?usp=share_link</a>

### Aim

Design User Registration Page as per the following design and perform Scrap the contents using node js to print it in the new page.

### Description:

**Node.js** is an open-source, cross-platform, back-end JavaScript runtime environment that runs on a JavaScript Engine (i.e. V8 engine) and executes JavaScript code outside a web browser, which was designed to build scalable network applications. Node.js lets developers use JavaScript to write command line tools and for server-side scripting—running scripts server-side to produce dynamic web page content before the page is sent to the user's web browser. Consequently, Node.js represents a "JavaScript everywhere" paradigm, unifying web-application development around a single programming language, rather than different languages for server-side and client-side scripts.

**QUESTION 1:**

Create Christmas Mega play 2022 registration form and web-scrap the posted form data to display in the values using node JS.

**SOURCE CODE:****HTML:**

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

  <title>URK20CS2001 Exp - 10 | Dynamic Forms using Node JS</title>

  <!-- Favicon -->

  <link rel="icon" type="image/png" href="assets/images/rubnagino-favicon-logo.png">

<style>

  *{

    margin: 0;

    padding: 0;

    box-sizing: border-box;
```

```
}  
table, tr, td{  
    padding: 1rem;  
}  
.megaplay{  
    display: flex;  
    justify-content: center;  
}  
</style>  
  
</head>  
  
<body>  
  
    <main>  
        <h1 style="display: flex; justify-content: center; padding-top: 10rem;">Megaplay  
registration form - 2022</h1>  
        <div>  
            <div class="megaplay">  
  
                <form action="/server" method="post">  
                    <table>  
                        <tr>  
                            <td>Name:</td>
```

```
<td><input type="text" name="username"></td>
</tr>
<tr>
<td>Register Number:</td>
<td><input type="text" name="userreg"></td>
</tr>
<tr>
<td>Year Of Study</td>
<td><input type="date" name="useryear"></td>
</tr>
<tr>
<td>Department:</td>
<td>
<select name="userdept">
<option value="CSE">CSE</option>
<option value="ECE">ECE</option>
<option value="Mech">Mech</option>
<option value="Civil">Civil</option>
<option value="Biotech">Biotech</option>
</select>
</td>
</tr>
<tr>
```

```

        <td>School:</td>

        <td>

            <select name="userschool" id="">

                <option value="BTech">BTech</option>

                <option value="MTech">MTech</option>

                <option value="BSc">BSc</option>

                <option value="Phd">Phd</option>

            </select>

        </td>

    </tr>

    <tr>

        <td>Type Of Event</td>

        <td>

            <div style="display: flex; flex-direction: row;">

                <div>

                    <input type="checkbox" id="musician" name="event"
value="musician">

                    <label for="musician">Musician</label><br>

                </div>

                <div>

                    <input type="checkbox" id="singing" name="event" value="singing">

                    <label for="singing">Singing</label><br>

                </div>

            </div>

        </td>

    </tr>

```

```
<div>

    <input type="checkbox" id="choreography" name="event"
value="choreography">

    <label for="choreography">Choreography</label><br>

</div>

<div>

    <input type="checkbox" id="backstage" name="event"
value="backstage">

    <label for="backstage">Backstage</label><br>

</div>

<div>

    <input type="checkbox" id="volunteer" name="event"
value="volunteer">

    <label for="volunteer">Volunteer</label><br>

</div>

</div>

</td>

</tr>

<tr>

    <td></td>

    <td><button>Submit</button></td>

</tr>

</table>

</form>

</div>
```

```
</div>
```

```
</main>
```

```
</body>
```

```
</html>
```

**JS:**

```
const http = require('http')
```

```
const fs = require('fs');
```

```
const server = http.createServer(function (req, res) {
```

```
  if (req.url === '/') {
```

```
    res.writeHead('200', { 'Content-Type': 'text/html' });
```

```
    fs.createReadStream('../index.html').pipe(res);
```

```
  }
```

```
  else if (req.url === '/server' && req.method === 'POST') {
```

```
    var rawData = '';
```

```
    req.on('data', function (data) {
```

```
      rawData += data;
```

```
    })
```

```
    req.on('end', function () {
```

```
      res.writeHead('200', { 'Content-Type': 'text/html' });
```

```
var inputdata = new URLSearchParams(rawData);

res.write("You have entered:" + '<br>');

res.write("User Name: " + inputdata.get('username') + '<br>');

res.write("User Register Number: " + inputdata.get('userreg') + '<br>');

res.write("Year Of Study: " + inputdata.get('useryear') + '<br>');

res.write("Department: " + inputdata.get('userdept') + '<br>');

res.write("School: " + inputdata.get('userschool') + '<br>');

res.write("Type Of Event: " + inputdata.get('event') + '<br>')

res.end();

})

}

})

server.listen(8080, function () {

    console.log('Server started at 8080');

})
```

## Result

Thus, The Experiment for performing the works with Node JS Scraping data's has created and hosted successfully.