

Indian Institute of Information Technology Surat



Lab Report on Web Engineering (CS 603) Practical

Submitted by

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Lab No: 2

Aim: HTML/CSS3/Bootstrap

Description: Perform all the 12 Tasks:

1. Write HTML code to embed any video in a web document.
2. Write HTML code to embed any audio in a document.
3. Write HTML code to place the following web page into your web page. <http://www.iiitsurat.ac.in/>
4. Draw a square using HTML SVG, fill that square with yellow color and make a 5px blue stroke width.
5. Write HTML code to draw the given image using Canvas.
6. Write HTML code to draw a rectangle using Canvas and fill color in gradient from red to pink from start to end.
7. Creating HTML code using CSS3 selectors
8. Creating HTML code using CSS3 backgrounds and transparency
9. Creating HTML code Using CSS3 fonts and text effects
10. Creating HTML code 2D and 3D transformations, transitions, animations and resize property with CSS3
11. Build a Good Vibes Form Using HTML, CSS3 and Bootstrap
12. Build a Product Landing Page Using HTML5, CSS3 and Bootstrap

Source Code:

Task 1:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  |   <meta charset="UTF-8">
5  |   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6  |   <title>Embedded Video</title>
7  </head>
8  <body>
9
10 <h1>Embedded Video</h1>
11
12 <video width="640" height="360" controls>
13 |   <source src="assets/vid.mkv" type="video/mp4">
14 |   Error
15 </video>
16
17 </body>
18 </html>
19 |
```

Task 2:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  |   <meta charset="UTF-8">
5  |   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6  |   <title>Embedded Audio</title>
7  </head>
8  <body>
9
10 <h1>Embedded Audio</h1>
11
12 <audio controls>
13 |   <source src="assets/mus.wav" type="audio/mp3">
14 |   Error
15 </audio>
16
17 </body>
18 </html>
```

Task 3:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Embedded Website</title>
7  </head>
8  <body>
9
10 <h1>Embedded Website</h1>
11 <iframe src="http://www.iiitsurat.ac.in/" width="100%" height="600"></iframe>
12
13 </body>
14 </html>
```

Task 4:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>SVG Square</title>
7  </head>
8  <body>
9
10 <svg width="100" height="100" xmlns="http://www.w3.org/2000/svg">
11     <rect x="5" y="5" width="90" height="90" rx="10" ry="10" fill="yellow" stroke="blue" stroke-width="5"/>
12 </svg>
13
14 </body>
15 </html>
```

Task 5:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Canvas Drawing</title>
7      <style>
8          canvas {
9              border: 1px solid #000;
10             background-color: #0000ff33;
11         }
12     </style>
13 </head>
14 <body>
15 <canvas id="myCanvas" width="300" height="300"></canvas>
16 <script>
17     const canvas = document.getElementById('myCanvas');
18     const ctx = canvas.getContext('2d');
19
20     const centerSquareSize = 185;
21     const centerSquareColor = 'red';
22     const centerSquareOpacity = 0.5;
23
24     ctx.fillStyle = centerSquareColor;
25     ctx.globalAlpha = centerSquareOpacity;
26     ctx.fillRect(10, 10, centerSquareSize, centerSquareSize);
27
28     const outerSquareSize = centerSquareSize;
29     const outerSquareColor = 'green';
30     const outerSquareOpacity = 0.5;
31
32     ctx.fillStyle = outerSquareColor;
33     ctx.globalAlpha = outerSquareOpacity;
34     ctx.fillRect(10 + outerSquareSize/2, 10 + outerSquareSize/2, outerSquareSize, outerSquareSize);
35 </script>
36 </body>
37 </html>
```

Task 6:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Gradient Rectangle</title>
7      <style>
8          canvas {
9              border: 1px solid #000;
10         }
11     </style>
12 </head>
13 <body>
14 <canvas id="myCanvas" width="300" height="200"></canvas>
15 <script>
16     const canvas = document.getElementById('myCanvas');
17     const ctx = canvas.getContext('2d');
18
19     const gradient = ctx.createLinearGradient(0, 0, canvas.width, 0);
20     gradient.addColorStop(0, 'red');
21     gradient.addColorStop(1, 'pink');
22
23     ctx.fillStyle = gradient;
24     ctx.fillRect(10, 10, 280, 180);
25 </script>
26
27 </body>
28 </html>
```

Task 7:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>HTML with CSS3 Selectors</title>
7      <style>
8          p {
9              color: #333;
10             font-size: 16px;
11         }
12         p.highlight {
13             background-color: yellow;
14         }
15         #container p {
16             border: 1px solid #ccc;
17             padding: 10px;
18             margin: 5px 0;
19         }
20         .box p {
21             font-weight: bold;
22         }
23         p:first-of-type {
24             font-style: italic;
25         }
26         p:nth-child(even) {
27             background-color: #f2f2f2;
28         }
29     </style>
30 </head>
31 <body>
32     <p>This is a regular paragraph.</p>
33     <p class="highlight">This paragraph has a highlight class.</p>
34     <div id="container"> <p>This paragraph is inside a container.</p></div>
35     <div class="box"> <p>This paragraph is inside a box.</p> </div>
36     <p>This is the first paragraph in the document.</p>
37     <p>Another regular paragraph.</p>
```

Task 8:

```
6  <title>HTML with CSS3 Backgrounds and Transparency</title>
7  <style>
8      body {
9          background-image: url('assets/1.jpg');
10         background-size: cover;
11         background-position: center;
12         background-attachment: fixed;
13         margin: 0;
14         padding: 0;
15         font-family: Arial, sans-serif;
16         color: #fff;
17     }
18     header {
19         background-color: #rgba(0, 0, 0, 0.7);
20         padding: 20px;
21         text-align: center;
22     }
23     section {
24         background: linear-gradient(to bottom, #rgba(255, 255, 255, 0), #rgba(255, 255, 255, 0.5)), url('assets/2.jpg');
25         background-size: cover;
26         padding: 50px;
27         color: #333;
28         text-align: center;
29     }
30     .transparent-box {
31         background-color: #rgba(0, 128, 255, 0.5);
32         padding: 20px;
33         margin: 20px;
34         border-radius: 10px;
35     }
36  </style>
37 </head>
38 <body>
39     <header> <h1>Header with Semi-Transparent Background</h1></header>
40     <section> <h2>Section with Background Image and Gradient</h2><div class="transparent-box"> <p>Semi-transparent background color.</p></div></sec
41 </body>
```

Task 9:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>HTML with CSS3 Fonts and Text Effects</title>
7  <style>
8      body {
9          font-family: 'Open Sans', sans-serif;
10     }
11     h1 {
12         color: #3498db;
13         text-shadow: 2px 2px 4px #rgba(0, 0, 0, 0.5);
14     }
15     p.gradient-text {
16         background: linear-gradient(to right, #3498db, #e74c3c);
17         -webkit-background-clip: text;
18         color: transparent;
19     }
20     p.stroke-text {
21         color: #fff;
22         -webkit-text-stroke: 2px #e74c3c;
23     }
24     p.rotate-text {
25         display: inline-block;
26         transform: rotate(-15deg);
27     }
28     p.scale-text:hover {
29         transform: scale(1.2);
30     }
31     p.animate-text {
32         animation: colorChange 4s infinite alternate;
33     }
34
35     @keyframes colorChange {
36         from {
37             color: #e74c3c;
38         }
39         to {
40             color: #3498db;
41         }
42     }
43  </style>
44 </head>
45 <body>
46     <h1>CSS3 Fonts and Text Effects</h1>
47     <p class="gradient-text">This text has a gradient background.</p>
48     <p class="stroke-text">This text has a stroke effect.</p>
49     <p class="rotate-text">This text is rotated.</p>
50     <p class="scale-text">Hover over this text to see a scale effect.</p>
51     <p class="animate-text">This text has a color change animation.</p>
52 </body>
53 </html>
```

Task 10:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>HTML with CSS3 Transforms, Transitions, Animations, and Resize</title>
7  <style>
8      .transform-2d:hover {
9          transform: rotate(45deg) scale(1.5);
10     }
11     .transform-3d:hover {
12         transform: rotateY(180deg) translateZ(50px);
13     }
14     .transition-example {
15         transition: transform 0.5s ease-in-out;
16     }
17     @keyframes rotate {
18         0% {
19             transform: rotate(0deg);
20         }
21         100% {
22             transform: rotate(360deg);
23         }
24     }
25     .animation-example {
26         animation: rotate 2s linear infinite;
27     }
28     .resize-example {
29         resize: both;
30         overflow: auto;
31         width: 200px;
32         height: 200px;
33         border: 2px solid #3498db;
34         padding: 10px;
35         margin: 20px;
36     }
37 </style>
38
39 <body>
40     <h2>2D and 3D Transformations</h2>
41     <div class="transform-2d transition-example">Hover to Rotate and Scale (2D Transform)</div>
42     <div class="transform-3d transition-example">Hover to Rotate (3D Transform)</div>
43     <h2>Animations</h2>
44     <div class="animation-example">This element rotates continuously (Animation)</div>
45     <h2>Resize Property</h2>
46     <div class="resize-example" contenteditable="true"></div>
47
48 </body>
49 </html>
```

Task 11:

```
5  <meta name="viewport" content="width=device-width, initial-scale=1.0">
6  <title>Good Vibes Form</title>
7  <!-- Bootstrap CSS -->
8  <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
9
10 <style>
11     body {
12         background-color: #f8f9fa;
13         font-family: 'Arial', sans-serif;
14     }
15     .container {
16         max-width: 600px;
17         margin: 50px auto;
18         background-color: #ffffff;
19         padding: 20px;
20         border-radius: 10px;
21         box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
22     }
23     h2 {
24         color: #007bff;
25     }
26     label {
27         font-weight: bold;
28     }
29     .form-group {
30         margin-bottom: 20px;
31     }
32     .btn-primary {
33         background-color: #28a745;
34         border-color: #28a745;
35     }
36     .btn-primary:hover {
37         background-color: #218838;
38         border-color: #218838;
```

```

38     }
39   </style>
40 </head>
41 <body>
42
43   <div class="container">
44     <h2 class="text-center mb-4">Good Vibes Form</h2>
45
46   <form>
47     <div class="form-group">
48       <label for="name">Name:</label>
49       <input type="text" class="form-control" id="name" placeholder="Enter your name">
50     </div>
51     <div class="form-group">
52       <label for="email">Email:</label>
53       <input type="email" class="form-control" id="email" placeholder="Enter your email">
54     </div>
55     <div class="form-group">
56       <label for="scale">On a scale of 1-10, how good was it?</label>
57       <input type="scale" class="form-control" id="scale" placeholder="Enter a number between 1 and 10">
58     </div>
59     <div class="form-group">
60       <label>Where did it happen?</label>
61       <select class="form-control" id="favoriteColor">
62         <option>At Home</option>
63         <option>At Office</option>
64         <option>At School</option>
65         <option>At College</option>
66         <option>At Play</option>
67       </select>
68     </div>
69     <div class="form-group">
70       <label>At what time did it happen?</label>
71       <div class="form-check">
72         <input class="form-check-input" type="radio" name="feeling" id="t1" value="1">
73         <label class="form-check-label" for="t1">Morning</label>
74       </div>
75     </div>
76   </div>
77   <div class="form-group">
78     <label>What emotions did you experience?</label>
79     <div class="form-check">
80       <input class="form-check-input" type="checkbox" name="feeling" id="e1" value="1">
81       <label class="form-check-label" for="e1">Excited</label>
82     </div>
83   </div>
84   <div class="form-group">
85     <label>Please describe your positive experience:</label>
86     <textarea class="form-control" id="message" rows="4" placeholder="Enter your response here..."/>
87   </div>
88   <div class="form-group">
89     <div class="form-check">
90       <input class="form-check-input" type="checkbox" id="subscribe">
91       <label class="form-check-label" for="subscribe">Subscribe to Good Vibes Newsletter</label>
92     </div>
93   </div>
94   <div class="form-group">
95     <button type="submit" class="btn btn-primary btn-block">Submit</button>
96   </div>
97
98 </div>
99
100 <!-- Bootstrap JS and Popper.js -->
101 <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>
102 <script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.9.3/dist/umd/popper.min.js"></script>
103 <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"></script>
104
105 </body>
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125

```

Task 12:

```

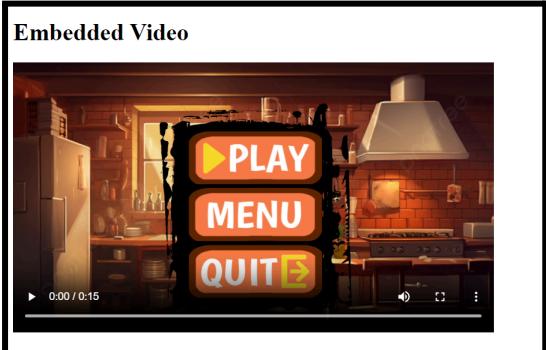
6   <title>Product Landing Page</title>
7   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
8   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.1/css/all.min.css">
9
10 <style>
11   body {
12     background-color: #f8f9fa;
13     font-family: 'Arial', sans-serif;
14   }
15
16   .navbar {
17     background-color: #373440;
18     color: #ffffff;
19   }
20
21   .jumbotron {
22     background-color: #005e60;
23     color: #ffffff;
24     padding: 80px;
25   }
26
27   .product-video {
28     width: 100%;
29     height: 400px;
30   }
31
32   .product-image {
33     width: 100%;
34     max-width: 500px;
35     margin-top: 20px;
36   }
37
38   .features {
39     margin-top: 50px;
40   }

```

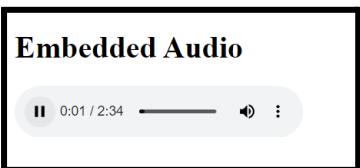
```
41 <!-- Feature Icon -->
42 .feature-icon {
43     font-size: 3rem;
44     color: #28a745;
45 }
46 .product-info {
47     background-color: #ffffff;
48     padding: 40px;
49     border-radius: 10px;
50     box-shadow: 0 0 20px rgba(0, 0, 0, 0.1);
51 }
52 .btn-cta {
53     background-color: #28a745;
54     color: #ffffff;
55 }
56 .btn-cta:hover {
57     background-color: #218838;
58 }
59 </style>
60 </head>
61 </body>
62
63 <!-- Navigation Bar -->
64 <nav class="navbar navbar-expand-lg navbar-dark">
65     <a class="navbar-brand" href="#">Product Landing
```

Output:

Task 1:



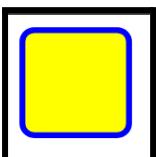
Task 2:



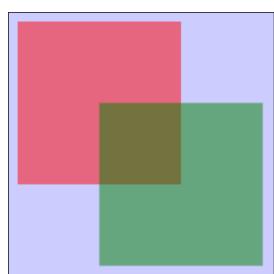
Task 3:



Task 4:



Task 5:



Task 6:



Task 7:

This is a regular paragraph.

This paragraph has a highlight class.

This paragraph is inside a container.

This paragraph is inside a box.

This is the first paragraph in the document.

Another regular paragraph.

Task 8:

Header with Semi-Transparent Background

Section with Background Image and Gradient

Semi-transparent background color.

Task 9:

CSS3 Fonts and Text Effects

This text has a gradient background.

This text has a stroke effect.

This text is rotated.

Hover over this text to see a scale effect.

This text has a color change animation.

Task 10:

2D and 3D Transformations

Hover to Rotate and Scale (2D Transform)
Hover to Rotate (3D Transform)

Animations

Resize Property



This element rotates continuously (Animation)

Task 11:

Good Vibes Form

Name:

Enter your name

Email:

Enter your email

On a scale of 1-10, how good was it?

Enter a number between 1 and 10

Where did it happen?

At Home

At what time did it happen?

- Morning
- Afternoon
- Evening

What emotions did you experience?

- Excited
- Humbled

What emotions did you experience?

- Excited
- Humbled
- Elated
- Loved
- Enthusiastic

Please describe your positive experience:

Enter your response here...

- Subscribe to Good Vibes Newsletter

Submit

Task 12:

Product Landing

Home Features Contact

Awesome Product

Discover the power of our amazing product.

 A thumbnail for the official trailer of Red Dead Redemption 2. It features a cowboy in a hat and coat holding a revolver, set against a red and yellow sunburst background. The text "ROCKSTAR GAMES PRESENTS RED DEAD REDEMPTION II" is overlaid on the left, and a YouTube play button icon is in the bottom right corner. The thumbnail is framed by a dark teal border.

 A promotional image for Red Dead Redemption 2. It shows a cowboy in a red coat and hat riding a horse, holding a revolver. In the background, a group of cowboys are riding horses across a landscape with red and yellow stars on the ground. The image is framed by a dark teal border.

Key Features

-  Feature 1: One of a kind
-  Feature 2: Affordable
-  Feature 3: Faster

Get all these amazing features and more with our awesome product.
Take your experience to the next level!

[Get Started](#)

 A photograph of a Mughal architectural structure, likely a tomb or mausoleum, featuring a large central dome and intricate carvings, set against a hazy sky.

Contact Us

Have questions or ready to get started? Contact us today!

Your Name

Your Email

Your Message

Send Message

Conclusion:

- Proper structure and semantics were maintained for better accessibility and SEO.
- The use of external libraries and frameworks, such as Bootstrap and Font Awesome, allowed for efficient styling and consistent design across various components.
- Techniques like transformations, transitions, and animations were employed to enhance user experience.