

Web Programming Lab (BCSE203E)

LAB – 5

HTML – Semantic tags, Frames and Media Elements

- 1) (A) Design a web page using HTML frames to divide it into multiple sections, including a header, navigation, main content, aside, and footer. In the main content frame, create a professional resume using semantic HTML5 tags. Incorporate the following elements:

<header>: For the top section, showcasing your name, professional title, and a tagline.

<nav>: To provide navigation links for easy access to various sections of the resume (e.g., About Me, Education, Experience, Skills).

<section>: To structure key content areas, such as education, work experience, and technical skills.

<article>: To detail specific achievements, projects, or publications.

<aside>: To display supplementary information, such as quick facts, a brief profile summary, or links to a portfolio.

<figure>: To include images (e.g., profile photo or project visuals) with captions.

<progress>: To visually represent proficiency levels for different skills.

<meter>: To highlight measurable achievements, certifications, or milestones.

<details> and <summary>: To toggle additional information, such as hobbies, extracurricular activities, or future goals.

<footer>: To include contact details, social media links, and additional resources.

Ensure the page is divided as follows:

The header is displayed in a dedicated frame at the top.

The navigation is shown in a vertical frame on the left.

The **main content** occupies the central frame.

The aside is placed in a frame on the right for supplementary information.

The footer is displayed in a frame at the bottom.

Focus on creating a visually appealing, accessible, and well-structured layout. The sample webpage is shown below.

(B) Display media and graphic elements (given below) on the centre frame by clicking the navigation link Media (Audio, Video, SVG and Canvas). Use iframe for displaying SVG

Code:***Resume_Page.html***

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Resume-23BCE1087</title>
</head>
<frameset rows = "10%,80%,10%" border = "0">
    <frame name = "Header" src = "header.html">
    <frame name = "Middle" src = "middle.html">
    <frame name = "Footer" src = "footer.html">
</frameset>
</html>
```

header.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
    <style>
        body{
            padding: 0.1rem;
        }
    </style>
</head>
```

```
<body bgcolor="#F8F8F8">
    <header>
        <center>
            <h1>My Professional Resume</h1>
        </center>
    </header>
</body>
</html>
```

footer.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
</head>
<body bgcolor="#323232">
    <footer>
        <center>
            <font color = "white">
                <h4>&copy; 2025 Madhan. All rights reserved.</h4>
                <h4>Contact: <a href="mailto:tbmadhan2005@gmail.com"
style="color:#41A3E0">tbmadhan2005@gmail.com </a></h4>
            </font>
        </center>
    </footer>
</body>
</html>
```

middle.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
</head>
<frameset cols="10%,*,10%" border="0">
    <frame src = "navigation.html">
    <frame name = "MainContent" src = "main_content.html">
    <frame src = "quick_ref.html">
</frameset>
</html>
```

navigation.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <style>
        a{
            text-decoration: none;
        }
    </style>
    <title>Document</title>
</head>
<body bgcolor="#F0F0F0">
```

```

<nav style="padding:2px; line-height: 1.5;">

    <font color = "#4F4F4F" face="Calibri" size = "3.5">

        <a href="./main_content.html#AboutMe"
target="MainContent">About Me</a><br>

        <a href="./main_content.html#Education"
target="MainContent">Education</a><br>

        <a href="./main_content.html#Experience"
target="MainContent">Experience</a><br>

        <a href="./main_content.html#Skills"
target="MainContent">Skills</a><br>

        <a href="./media.html" target="MainContent">Media</a>

    </font>

</nav>
</body>
</html>

```

quick_ref.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
</head>
<body bgcolor="#F0F0F0">
    <H2>Quick Facts</H2>
    <UL>
        <li>Proficient in HTML5,CSS3 and Javascript</li>
        <li>2+ years of professional experience</li>
        <li>Certified Scrum Master</li>

```

```
        <li>Published 2 technical Articles</li>
    </UL>
</body>
</html>
```

main_content.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
    <style>
        body{
            margin:2vh;
            padding:0px;
        }
        #Top{
            margin-bottom: 2vh;
            padding: 1px;
            /* border: 1px solid black; */
            background-color: rgb(236, 236, 236);
        }
        #Quick{
            background-color: rgb(218, 218, 255);
            padding: 1%;
        }
        progress{
            width:100%;
        }
```

```

        #end{
            background-color: gray;
            text-align: center;
            padding: 1px;
        }

    </style>
</head>
<body>
    <div id = "Top">
        <header>
            <center>
                <h1>Madhan</h1>
                <p>Software Engineer | Problem Solver | Cybersec
Analyst<p>
            </center>
        </header>
    </div>
    <section id="AboutMe">
        <h1>About Me</h1>
        <p> A motivated Software Engineer with 2+ years of
experience in builidng scalable web applications.</p>
        <center>
            <figure>
                
            </figure>
            <caption>Madhan - Software Engineer</caption>
        </center>
    </section>

```

```
<section id="Education">
  <h1>Education</h1>
  <h3>Bachelor of Technology in Computer Science</h3>
  <p>VIT University,2023-2027</p>
</section>
<section id="Experience">
  <h1>Experience</h1>
  <h3>Software Engineer</h3>
  <p>XYZ enterprises</p>
  <ul>
    <li>Interned - Developed and managed a project</li>
    <li>Lead a team of 4</li>
  </ul>
</section>
<section id="Skills">
  <h1>Skills</h1>
  <div id = "Quick">
    <h3>Quick facts</h3>
    <ul>
      <li>Proficient in Java, Python and C++</li>
      <li>Certified AWS dev</li>
    </ul>
  </div>
</section>
<br>
<section>
  <label for = "prog">Programming</label><br><br>
  <progress id ="prog" value="90" max =
100></progress><br><br>
  <label for = "prob">Problem-solving</label><br><br>
```



```

        <progress id ="prob" value="95" max =
100></progress><br><br>
        <label for = "proj">Project Management</label><br><br>
        <progress id ="proj" value="85" max =
100></progress><br><br>
    </section>
    <footer>
        <div id = "end">
            <p>Contact : tbmadhan2005@gmail.com | Phone : (+91)
96001 36352</p>
        </div>
    </footer>
</body>
</html>

```

media.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
</head>
<frameset cols="25%,*">
    <frame src="./media_nav.html"></frame>
    <frame src="./media_canvas.html"></frame>
</frameset>
</html>

```

media_nav.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <style>
        body{
            padding:2%;
        }
    </style>
    <title>Document</title>
</head>
<body>
    <nav>
        <h1>Audio</h1>
        <audio controls = "controls">
            <source src="../Assets/Train-Station-Scene-
MassTamilan.io.mp3"/>
        </audio>
        <h1>Video</h1>
        <video
            width = "360px" controls loop muted autoplay
            poster = "../Assets/abstract-blurred-multi-colored-
background-generative-ai_169016-30200.avif">
            <source src="../Assets/LG DEMO 4K 2019 FRESH - Hisar
Suganda (720p, h264).mp4">
        </video>
        <H1>Canvas</H1>
        
```

```
        </iframe>
    </nav>
</body>
</html>
```

media_canvas.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Document</title>
</head>
<body><center>
    <h1>My House in SVG</h1>
    <iframe src="house.html" width="100%" height="700">
    </iframe>
</center>
</body>
</html>
```

house.html

```
<html>
<svg width="650" height="650">
    <polygon points = "100,300 241,140 382,300"
    style="fill:brown; stroke-width: 3;stroke: black;"/>
    <rect x="100" y="300" width= "282" height="282"
    style="fill:brown; stroke-width: 3;stroke: black;"
    />
    <circle cx="241" cy="240" r ="25"
```

```

    style="fill:yellow; stroke-width: 3;stroke: black;"/>
    <rect x="120" y="320" width="80" height="80"
    style="fill:rgb(178, 178, 234); stroke-width: 3;stroke: black;"
/>
    <rect x="280" y="320" width="80" height="80"
    style="fill:rgb(178, 178, 234); stroke-width: 3;stroke: black;"
/>
    <rect x="207" y="430" height ="140" width = "70"
    style="fill:darkgreen;stroke-width: 3;stroke:black;"/>
    <rect x="207" y="570" height ="20" width = "70"
    style="fill:rgb(196, 196, 196);stroke-width: 3;stroke:black;"/>
    <rect x="197" y="550" height ="30" width = "90"
    style="fill:rgb(196, 196, 196);stroke-width: 3;stroke:black;"/>

    <polygon points = "450,70 550,70 475,120 500,30  525,120      "
    style="fill:yellow; stroke-width: 3;stroke: black;" />

    <circle cx="610" cy="80" r="40"
    style="fill:rgb(255, 255, 177); stroke-width: 3;stroke:
black;"/>

    <circle cx="640" cy="80" r="30"
    style="fill:white;"/>
</svg>
</html>

```

Output:



