**Name :** T.B.Madhan **Reg No :** 23BCE1087

**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>

            <img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcSDCMRxJWNFoYVSwktQrPMbYwNYDyak5VHulQ&s"

            alt="Madhan">

        </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>

        <img src="../Assets/Canvas.jpg">

        </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;"/>

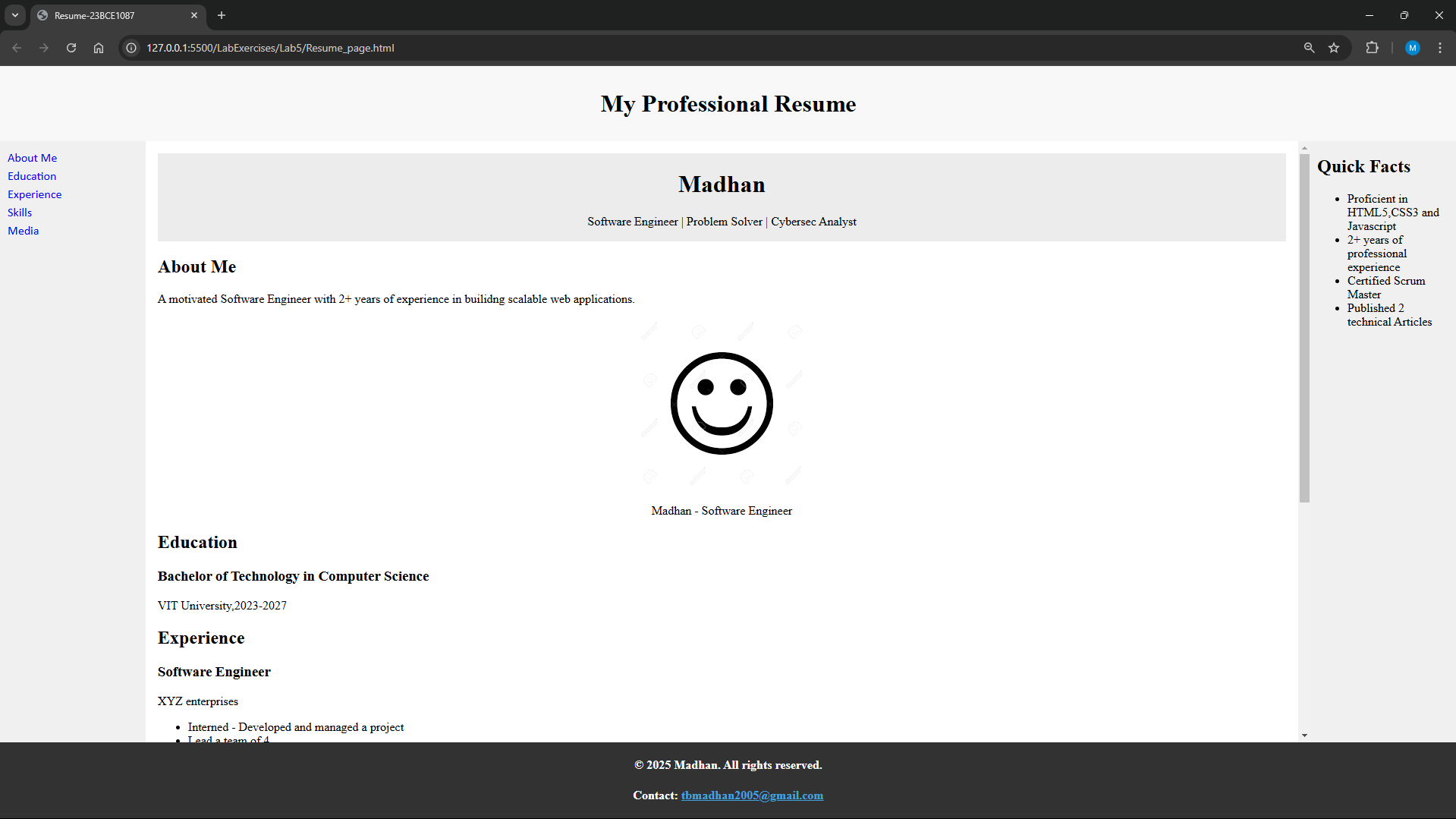
    <circle cx="640" cy="80" r="30"

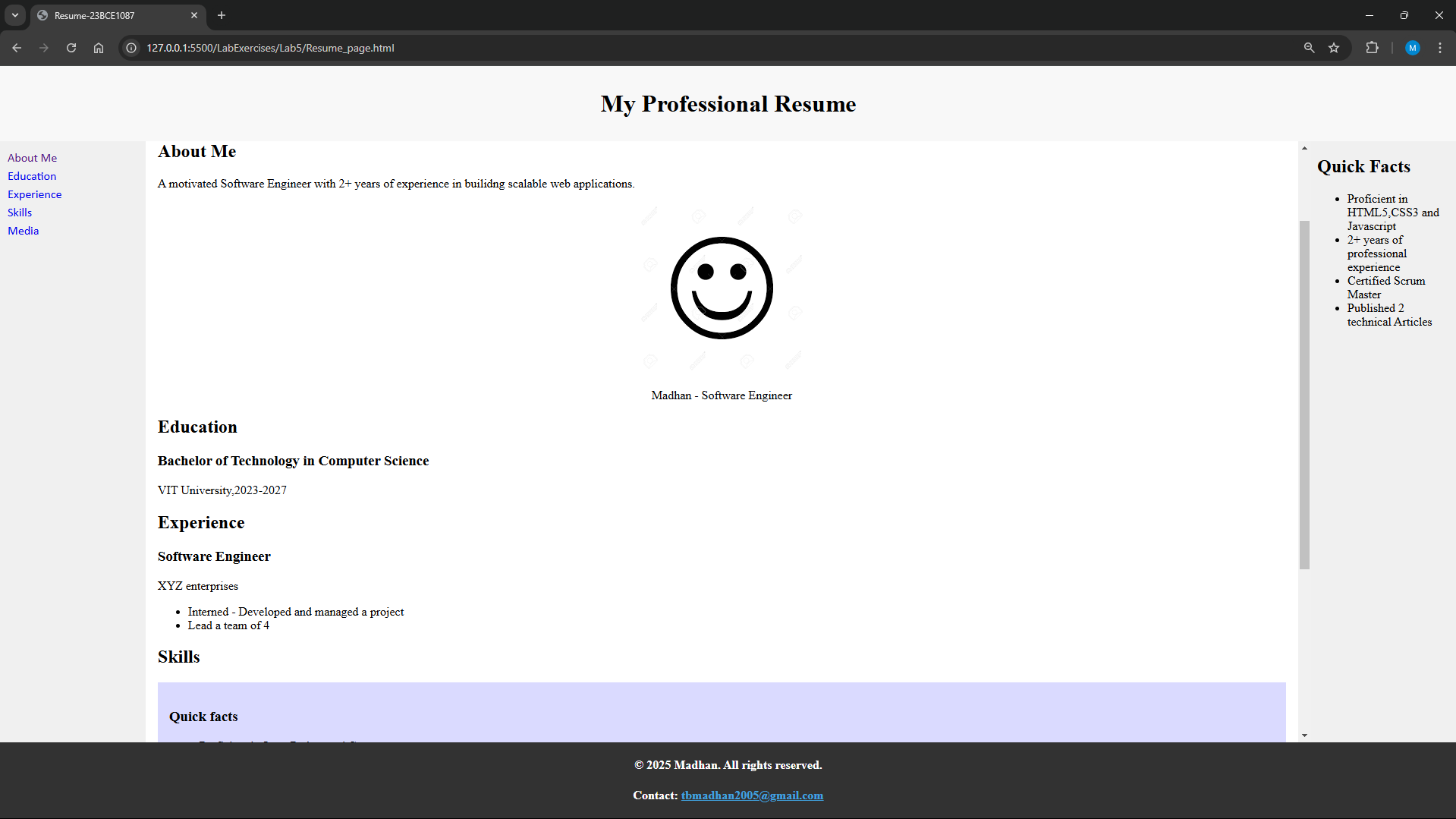
    style="fill:white;"/>

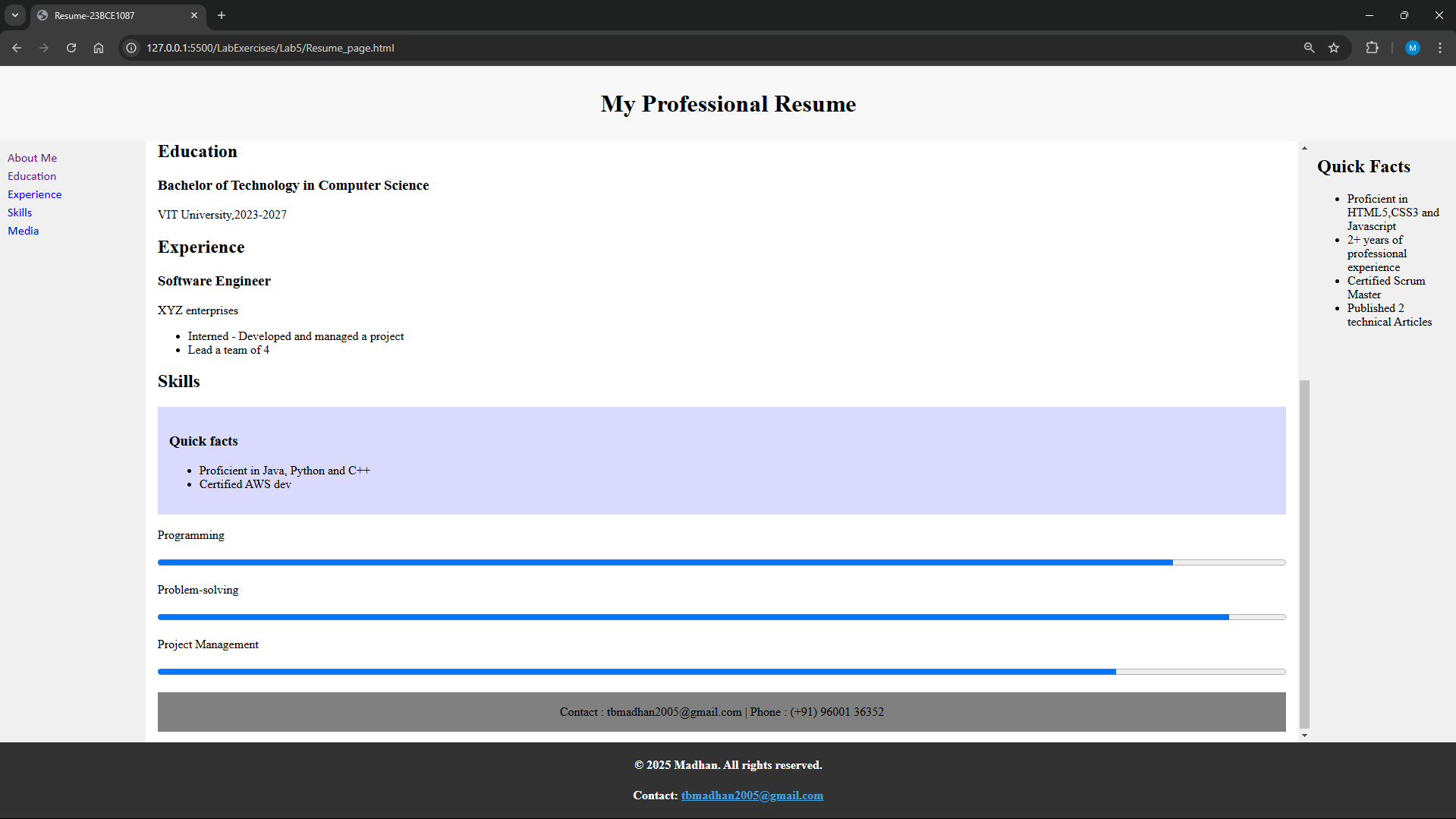
</svg>

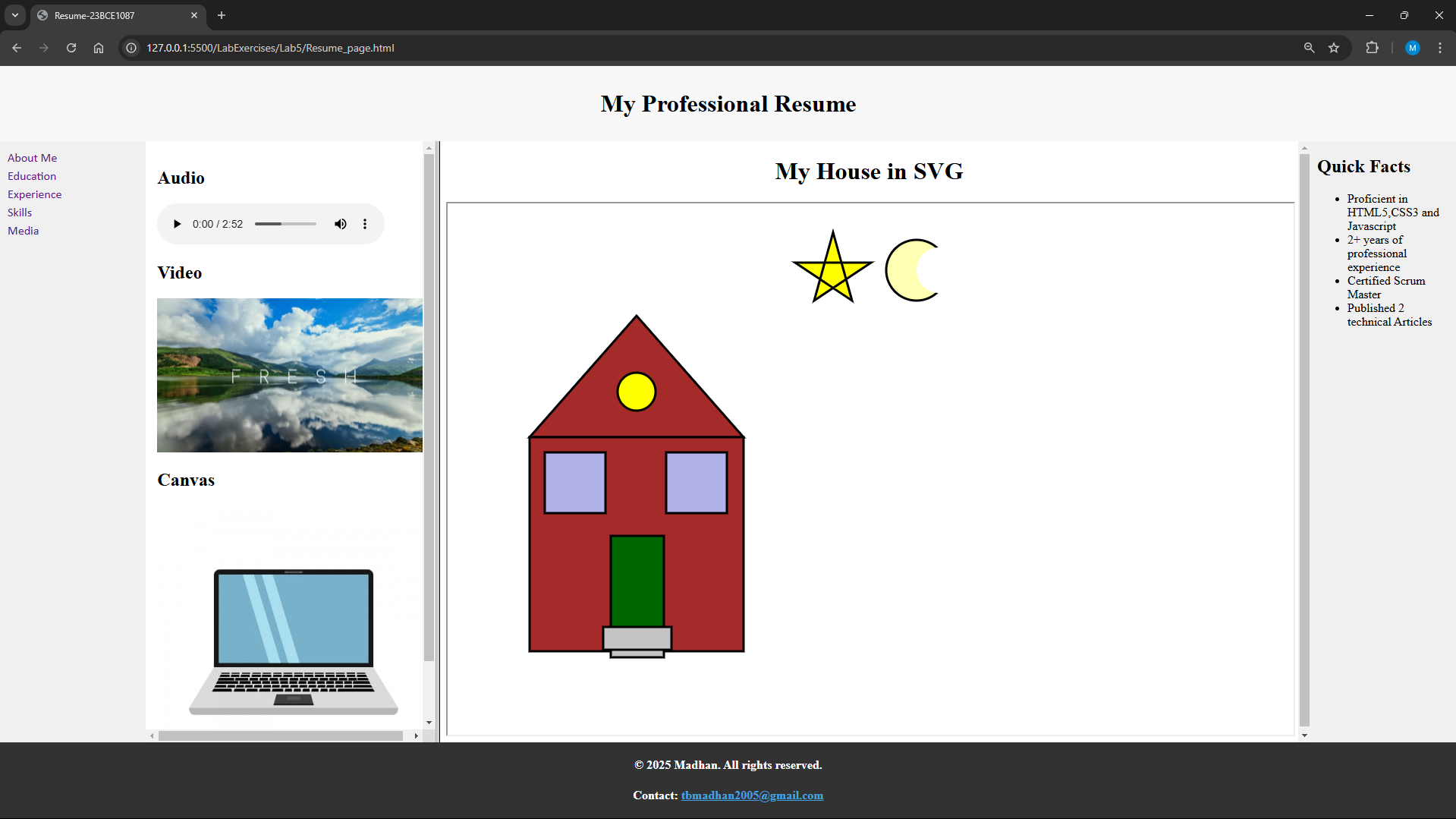
</html>

**Output:**

****

****

****

****