Lab Practice -2 [404184C] : ELECTIVE-III(C) - JavaScript

ACADEMIC YEAR: 2024-25

CLASS	: BE	DIV	: 6	Batch	: P6	DATE	: / /24
Roll No	42130	ABC ID	:			SEMESTER	: I

Experiment No.: 9

Code:

```
<!DOCTYPE html>
<html>

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Area</title>
    <style>
        .calculator-box {
            border: 1px solid #000;
            padding: 20px;
            margin: 20px auto;
            border-radius: 10px;
            max-width: 300px;
            text-align: left;
        }
    </style>
</head>

<body style="text-align: center;">
    <h1>Area of different shapes</h1>
    <div class="calculator-box">
        <h2>Area of Triangle</h2>
        <label for="side1">Enter Side 1: </label>
        <input type="number" id="side1"><br><br>
        <label for="side2">Enter Side 2: </label>
        <input type="number" id="side2"><br><br>
        <label for="side3">Enter Side 3: </label>
        <input type="number" id="side3"><br><br>
        <button id="calculateTriangleButton" onclick="areaofTriangle()">Calculate Area</button>
        <p id="triangleResult"></p>
    </div>
    <div class="calculator-box">
        <h2>Area of Rectangle</h2>
        <label for="length">Enter the Length: </label>
        <input type="number" id="len"></br>

        </br>
        <label for="breadth">Enter the Breadth: </label>
        <input type="number" id="bre"></br>
        <br>
```

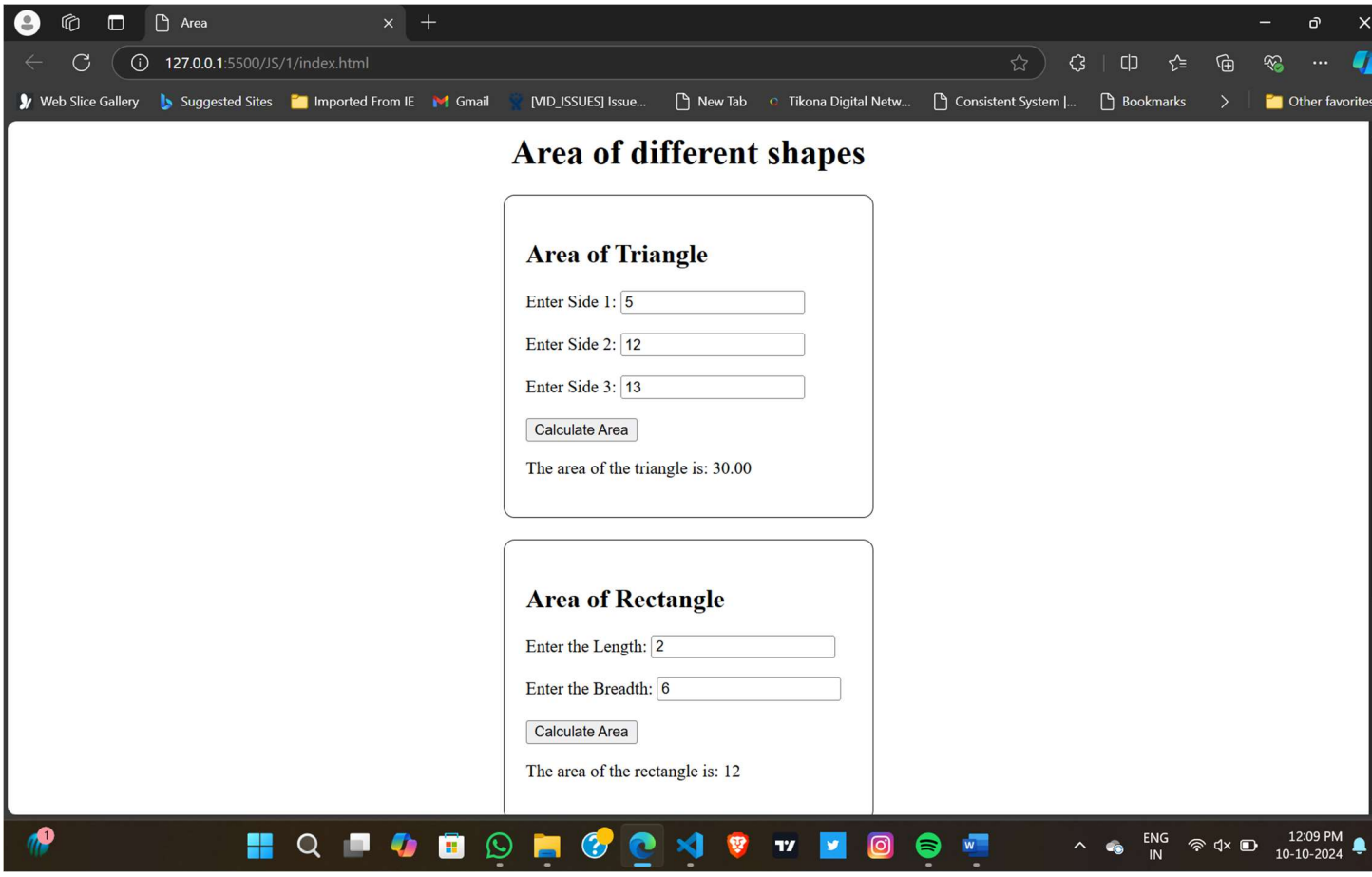
```
        <button id="calculateButton" onclick="areaofRectangle()">Calculate Area</button>
        <p id="result"></p>
    </div>
    <div class="calculator-box">
        <h2>Area of Circe</h2>
        <label for="length">Enter the Radius: </label>
        <input type="number" id="rad"></br>
        <br>
        <button id="calculateButton" onclick="areaofCircle()">Calculate Area</button>
        <p id="result2"></p>
    </div>
    <script src="scripts.js"></script>
</body>

</html>
```

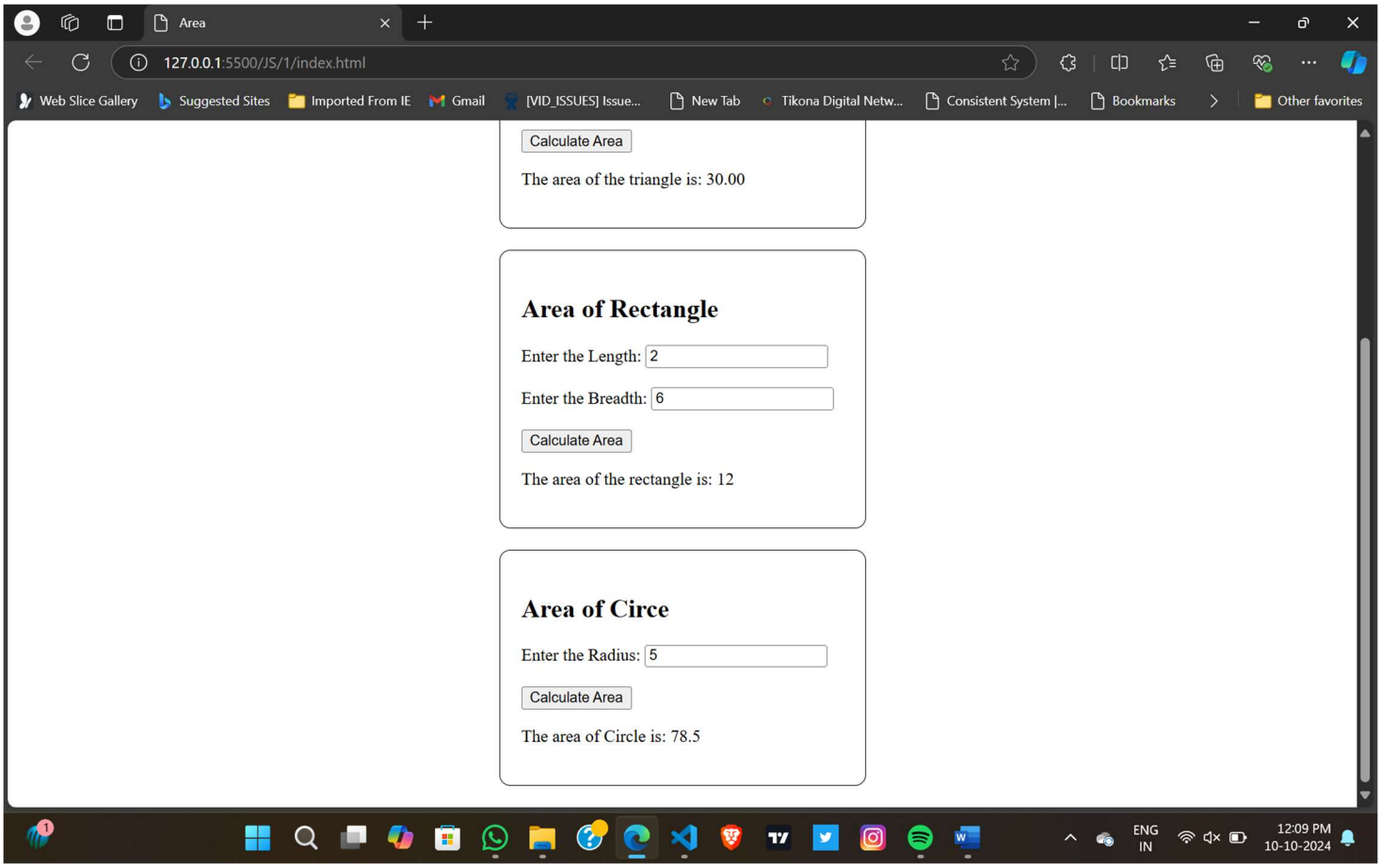
Index.js

```
function areaofRectangle() {
    const length = parseFloat(document.getElementById("len").value);
    const breadth = parseFloat(document.getElementById("bre").value);
    if (isNaN(length) || isNaN(breadth) || breadth <= 0 || length <= 0) {
        alert("Please enter correct values.");
    } else {
        const area = length * breadth;
        document.getElementById("result").textContent =
            "The area of the rectangle is: " + area;
    }
}
function areaofCircle() {
    const radius = parseInt(document.getElementById("rad").value);
    if (isNaN(radius) || radius <= 0) {
        alert("Please enter valid Radius");
    } else {
        const areaCircle = 3.14 * radius * radius;
        document.getElementById("result2").textContent =
            "The area of Circle is: " + areaCircle;
    }
}
function areaofTriangle() {
    const s1 = parseInt(document.getElementById("side1").value);
    const s2 = parseInt(document.getElementById("side2").value);
    const s3 = parseInt(document.getElementById("side3").value);
    if (isNaN(s1) || isNaN(s2) || isNaN(s3)) {
        alert("All fields are required.");
    }
    else if (s1 <= 0 || s2 <= 0 || s3 <= 0 || (s1 + s2) <= s3 || s2 + s3 <= s1 || s3 + s1 <= s2) {
        alert("All fields must be valid.");
    } else {
        const s = (s1 + s2 + s3) / 2;
        const area = Math.sqrt(s * (s - s1) * (s - s2) * (s - s3));
        document.getElementById("triangleResult").textContent =
            "The area of the triangle is: " + area.toFixed(2);
```

```
    }
}
```

Output:


Area
127.0.0.1:5500/JS/1/index.html
Web Slice Gallery
Suggested Sites
Imported From IE
Gmail
[VID_ISSUES] Issue...
New Tab
Tikona Digital Netw...
Consistent System |...
Bookmarks
Other favorites
Area of different shapes
Area of Triangle
Enter Side 1: 5
Enter Side 2: 12
Enter Side 3: 13
Calculate Area
The area of the triangle is: 30.00
Area of Rectangle
Enter the Length: 2
Enter the Breadth: 6
Calculate Area
The area of the rectangle is: 12
ENG
IN
12:09 PM
10-10-2024



Date: Course Teacher Sign