

**Course Code: CSE3150**

**Course Title: Front End Full Stack Development**

## **Lab sheet 2 - Module 1**

### **Problem Statement:**

The problem statement: To create a canvas drawing application that allows users to draw on the canvas by clicking and dragging the mouse. To achieve this, use HTML5 code that includes a canvas element with an event attribute that listens for mousedown, mousemove, and mouseup events. These events should trigger JavaScript functions that draw lines on the canvas based on the user's mouse movements. The canvas element can be styled using CSS to have a black border. Use article, section, attributes to enhance the web page.

### **Solution**

```
<!DOCTYPE html>

<html>

<head>

    <title>Canvas Example</title>

    <style>

        canvas {

            border: 1px solid black;

        }

    </style>

</head>

<body>

    <header>

        <h1>Canvas Example</h1>

        <p>Draw on the canvas by clicking and dragging the mouse</p>

    </header>

    <article>

        <h2>Canvas</h2>
```

```
<canvas id="myCanvas" width="400" height="400"
onmousedown="startDrawing(event)" onmousemove="drawLine(event)"
onmouseup="stopDrawing(event)"></canvas>
```

```
</article>
```

```
<script>
```

```
var canvas = document.getElementById("myCanvas");
```

```
var ctx = canvas.getContext("2d");
```

```
var isDrawing = false;
```

```
function startDrawing(event) {
```

```
    isDrawing = true;
```

```
    var x = event.clientX - canvas.offsetLeft;
```

```
    var y = event.clientY - canvas.offsetTop;
```

```
    ctx.beginPath();
```

```
    ctx.moveTo(x, y);
```

```
}
```

```
function drawLine(event) {
```

```
    if (isDrawing) {
```

```
        var x = event.clientX - canvas.offsetLeft;
```

```
        var y = event.clientY - canvas.offsetTop;
```

```
        ctx.lineTo(x, y);
```

```
        ctx.stroke();
```

```
    }
```

```
}
```

```
function stopDrawing(event) {
```

```
    isDrawing = false;
```

```
}
```

```
</script>
```

```
</body>
```

</html>

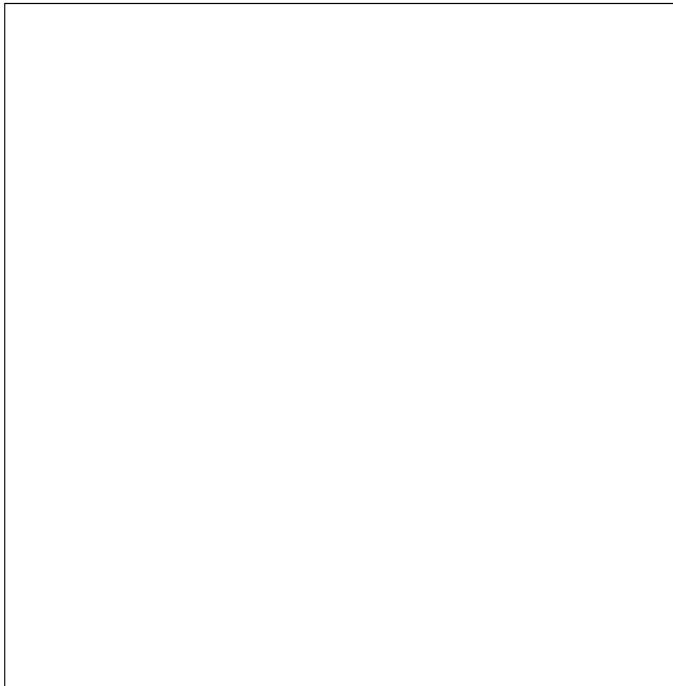
Output:

File | D:/PO/Full%20stack/HTML5/1absheet2%20canvas.html

# Canvas Example

Draw on the canvas by clicking and dragging the mouse

## Canvas



# Canvas Example

Draw on the canvas by clicking and dragging the mouse

## Canvas

