



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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PRACTICE 1, 2,3

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Semester: 5th

Subject Name: Fullstack development

Aim: LIVE CHARACTER COUNTER

CODE:

index.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Live Character Counter</title>
<style>
body {
font-family: Arial, sans-serif;
margin: 20px;
}
.counter-box {
border: 1px solid #000;
padding: 15px;
margin-bottom: 20px;
max-width: 900px;
}
textarea {
width: 100%;
height: 120px;
padding: 10px;
font-size: 16px;
box-sizing: border-box;
}
h3 {
font-size: 28px;
margin: 0 0 12px 0;
}
```

```

    p {
    font-size: 20px;
    margin: 10px 0 0 0;
    }
</style>
</head>
<body>

<div class="counter-box">
<h3>Live Character Counter</h3>
<textarea id="text1" placeholder="Start typing..."></textarea>
<p>Characters: <span id="count1">0</span></p>
</div>

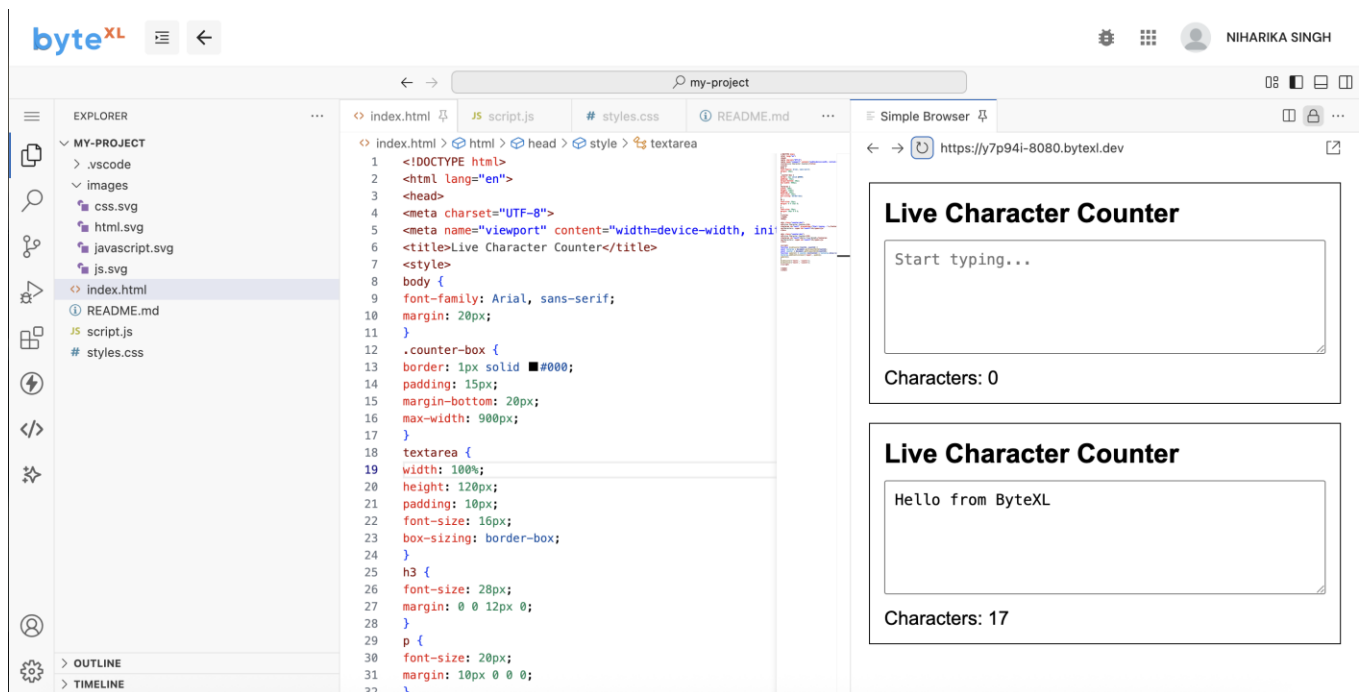
<div class="counter-box">
<h3>Live Character Counter</h3>
<textarea id="text2">Hello from ByteXL</textarea>
<p>Characters: <span id="count2">0</span></p>
</div>

<script>
function bindCounter(textId, countId) {
const textarea = document.getElementById(textId);
const counter = document.getElementById(countId);
function update() { counter.textContent = textarea.value.length; }
textarea.addEventListener('input', update);
update();
}
bindCounter('text1', 'count1');
bindCounter('text2', 'count2');
</script>

</body>
</html>

```

RESULT:



PRACTICE 2

AIM: Dynamic Product Filter with Dropdown using JavaScript DOM Manipulation

CODE:

Index.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Dynamic Product Filter</title>
<link rel="stylesheet" href="style.css">
</head>
<body>

<div class="container">
<h3>Product List</h3>
<label for="category">Filter by Category:</label>
<select id="category">
<option value="all">All</option>
<option value="clothing">Clothing</option>
<option value="electronics">Electronics</option>
<option value="books">Books</option>
</select>
<div id="product-list"></div>
</div>

<script src="script.js"></script>
</body>
</html>
```

STYLE.CSS:

```
body {
font-family: Arial, sans-serif;
margin: 20px;
}
.container {
border: 1px solid #000;
padding: 15px;
max-width: 700px;
margin-bottom: 20px;
}
h3 {
font-size: 28px;
margin: 0 0 12px 0;
}
label {
font-size: 18px;
margin-right: 10px;
}
select {
font-size: 16px;
padding: 5px;
margin-bottom: 15px;
}
.product {
border: 1px solid #ddd;
padding: 8px;
margin-bottom: 5px;
border-radius: 5px;
font-size: 18px;
}
```

SCRIPT.JS:

```
const products = [
{ name: 'T-Shirt', category: 'clothing' },
{ name: 'Jeans', category: 'clothing' },
{ name: 'Headphones', category: 'electronics' },
{ name: 'Smartphone', category: 'electronics' },
{ name: 'Novel', category: 'books' },
{ name: 'Cookbook', category: 'books' }
];

function displayProducts(filter) {
const list = document.getElementById('product-list');
list.innerHTML = "";
products.forEach(product => {
if (filter === 'all' || product.category === filter) {
const item = document.createElement('div');
```

```

item.className = 'product';
item.textContent = product.name;
list.appendChild(item);
}
});
}

```

```

document.getElementById('category').addEventListener('change', function() {
displayProducts(this.value);
});

```

```
displayProducts('all');
```

RESULT:

The screenshot displays a web application interface titled "Product List". It features a "Filter by Category:" dropdown menu currently set to "All". Below the dropdown, there are six input fields, each containing a product name: "T-Shirt", "Jeans", "Headphones", "Smartphone", "Novel", and "Cookbook". The background shows the VS Code editor with the index.html file open, displaying the HTML code for the product list. The code includes a container div, a heading, a label for the filter, a select element with options for "all", "clothing", "electronics", and "books", and a script tag for script.js.

PRACTICE 3

AIM: Interactive SVG Drawing Tool with Mouse Event Handlers

CODE:

Index.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>SVG Drawing Tool</title>
<link rel="stylesheet" href="style.css">
</head>
<body>
<div class="container">
<h3>SVG Drawing Tool</h3>
<svg id="drawingArea" width="500" height="300"></svg>
</div>
<script src="script.js"></script>
</body>
</html>
```

STYLE.CSS:

```
body {
font-family: Arial, sans-serif;
margin: 20px;
}
.container {
border: 1px solid #000;
padding: 10px;
width: fit-content;
}
h3 {
font-size: 22px;
margin-bottom: 10px;
}
#drawingArea {
border: 2px solid #555;
background-color: #f9f9f9;
cursor: crosshair;
}
```

SCRIPT.JS

```
const svg = document.getElementById("drawingArea");
```

```

let isDrawing = false;
let currentPath = null;
svg.addEventListener("mousedown", (e) => {
isDrawing = true;
currentPath = document.createElementNS("http://www.w3.org/2000/svg", "path");
currentPath.setAttribute("stroke", "blue");
currentPath.setAttribute("stroke-width", "2");
currentPath.setAttribute("fill", "none");
currentPath.setAttribute("d", `M${e.offsetX} ${e.offsetY}`);
svg.appendChild(currentPath);
});
svg.addEventListener("mousemove", (e) => {
if (!isDrawing) return;
let d = currentPath.getAttribute("d");
d += ` L${e.offsetX} ${e.offsetY}`;
currentPath.setAttribute("d", d);
});
svg.addEventListener("mouseup", () => {
isDrawing = false;
});

```

RESULT:

