

EXPERIMENT-2.1

Aim:

To create a simple web feature that displays a live character count as the user types into a textarea, using HTML, CSS, and JavaScript.

Objective:

- Practice real-time event handling in JavaScript.
- Update webpage content dynamically without refreshing.
- Improve user interaction by giving instant feedback.
- Understand DOM manipulation using JavaScript.

Theory:

In web development, real-time user feedback is crucial for enhancing user experience. A live character counter is a common feature that uses JavaScript event listeners to track input changes in a textarea. The 'input' event fires whenever the user types, deletes, or pastes content. Using DOM manipulation, the script updates the character count instantly. This approach avoids page reloads and provides smooth interactivity.

CODE-

```
<!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: 30px;
```

```
}
```

```
textarea {
```

```
    width: 100%;
```

```
    height: 100px;
```

```
    font-size: 16px;
```

```
    padding: 10px;
```

```
    box-sizing: border-box;
```

```
}
```

```
.counter {
```

```
    margin-top: 10px;
```

```
    font-size: 16px;
```

```
    color: #555;
```

```
}
```

```
.counter span {
```

```
    font-weight: bold;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h2>Live Character Counter</h2>
```

```
<textarea id="textInput" placeholder="Type something..."></textarea>
```

```
<div class="counter">
```

```
    Characters: <span id="charCount">0</span>
```

```
</div>
```

<script>

```
const textarea = document.getElementById("textInput");
```

```
const counter = document.getElementById("charCount");
```

```
textarea.addEventListener("input", () => {
```

```
    counter.textContent = textarea.value.length;
```

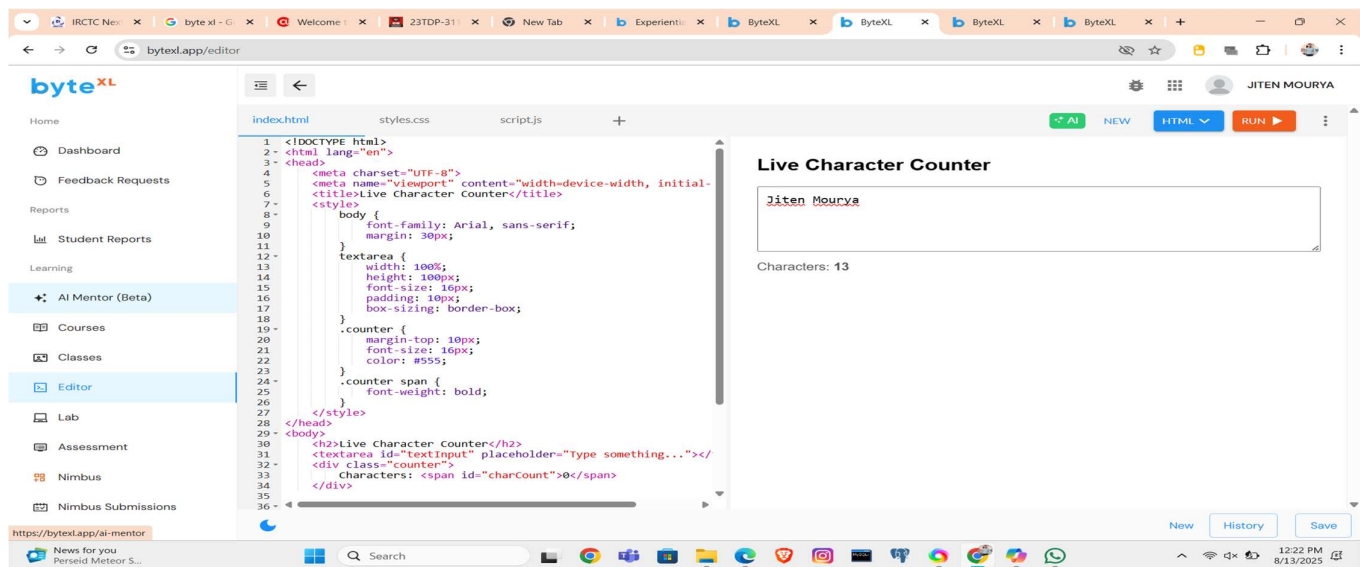
```
});
```

</script>

</body>

</html>

OUTPUT-



Learning Outcome:

- Ability to create dynamic features using JavaScript.
- Understanding of event handling in the browser.
- Knowledge of DOM methods for updating webpage elements.
- Skill in combining HTML, CSS, and JavaScript for interactive UI.