

WEB ENGINEERING

ASSIGNMENT # 02



SUBMITTED BY:

Muhammad Uzair Nisar (sp21026)

SUBMITTED TO:

MA'AM NABEELA BIBI

DEPARTMENT OF SOFTWARE ENGINEERING

FACULTY OF ENGINEERING & COMPUTER SCIENCES

NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

Create a basic HTML structure with input fields, buttons, and a display area for the to-do list. Use CSS to style the elements, making the interface visually appealing.

Implement JavaScript functionality to:

- Add tasks to the to-do list when the user enters a task and clicks an "Add" button.
- Display the list of tasks with checkboxes to mark tasks as completed.
- Allow users to mark tasks as completed by checking the checkboxes.
- Provide an option to remove tasks from the list.
- Include validation to prevent empty task submissions.

The sample output is attached below:

CODE

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>To-Do List</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f4f4f4;
      margin: 0;
      display: flex;
      align-items: center;
      justify-content: center;
      height: 100vh;
    }

    #todo-container {
      width: 300px;
      background-color: #fff;
      border-radius: 8px;
      padding: 20px;
      box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    }

    input[type="text"] {
      width: 100%;
      padding: 8px;
      margin-bottom: 10px;
      box-sizing: border-box;
    }

    button {
      background-color: #4caf50;
```

```

        color: white;
        padding: 8px 16px;
        border: none;
        border-radius: 4px;
        cursor: pointer;
    }

    button:hover {
        background-color: #45a049;
    }

    ul {
        list-style-type: none;
        padding: 0;
    }

    li {
        margin-bottom: 8px;
    }

    label {
        display: flex;
        align-items: center;
    }

    input[type="checkbox"] {
        margin-right: 8px;
    }
</style>
</head>
<body>

<div id="todo-container">
    <h2>To-Do List</h2>
    <input type="text" id="taskInput" placeholder="Enter a new task">
    <button onclick="addTask()">Add</button>
    <ul id="taskList"></ul>
</div>

<script>
    function addTask() {
        var taskInput = document.getElementById("taskInput");
        var taskList = document.getElementById("taskList");

        var taskText = taskInput.value.trim();

        if (taskText === "") {
            alert("Please enter a task");

```

```

        return;
    }

    var listItem = document.createElement("li");
    var checkbox = document.createElement("input");
    checkbox.type = "checkbox";
    checkbox.addEventListener("change", function () {
        updateTaskStatus(listItem, checkbox);
    });

    var label = document.createElement("label");
    label.appendChild(checkbox);
    label.appendChild(document.createTextNode(taskText));

    var deleteButton = document.createElement("button");
    deleteButton.innerHTML = "Delete";
    deleteButton.addEventListener("click", function () {
        removeTask(listItem);
    });

    listItem.appendChild(label);
    listItem.appendChild(deleteButton);
    taskList.appendChild(listItem);

    taskInput.value = "";
}

function updateTaskStatus(listItem, checkbox) {
    if (checkbox.checked) {
        listItem.style.textDecoration = "line-through";
    } else {
        listItem.style.textDecoration = "none";
    }
}

function removeTask(listItem) {
    var taskList = document.getElementById("taskList");
    taskList.removeChild(listItem);
}
</script>

</body>
</html>

```

OUTPUT

To-Do List

Add

☐ Task One

Delete

☐ Task Two

Delete