CMPT281 - JavaScript To-Do List:

Step 1: Set up the project

Download the starter HTML file, CSS file. Once that is done, create a new .JS file and place it in the same directory as the HTML and CSS file. The JS file name should be "script.js"

Step 2: Set up the JS file

```
document.addEventListener("DOMContentLoaded", function() {
    // Our code will go here
});
```

Step 3: Add constant variables

Within the event listener, add three constant variables.

```
document.addEventListener("DOMContentLoaded", function() {
    const taskInput = document.getElementById("taskInput");
    const addTaskButton = document.getElementById("addTaskButton");
    const taskList = document.getElementById("taskList");
});
```

Step 4: Create an event listener for the Add Task button

```
document.addEventListener("DOMContentLoaded", function() {
   const taskInput = document.getElementById("taskInput");
   const addTaskButton = document.getElementById("addTaskButton");
   const taskList = document.getElementById("taskList");

addTaskButton.addEventListener("click", function() {
   // Task addition logic will go here
   });
```

Step 5: Inside the event listener, check that the input box isnt empty

```
addTaskButton.addEventListener("click", function() {
    const taskValue = taskInput.value.trim();

    if (taskValue.length) {
        // Task creation logic will go here
    }
});
```

Step 6: Create a new event listener to check if the task is completed

Inside the new conditional, add logic to add or remove list items.

```
if (taskValue.length) {
    const listItem = document.createElement("li");
    const checkbox = document.createElement("input");
    checkbox.type = "checkbox";
    checkbox.addEventListener("change", function() {
        if (checkbox.checked) {
            listItem.classList.add("completed");
        } else {
            listItem.classList.remove("completed");
        }
    });
}
```

Step 7: Add other logic to handle remaining functionality

Add the checkbox and task value to the list item.

Append the list item to the task list.

After adding a task, clear the input box for the next task.

```
if (taskValue.length) {
    const listItem = document.createElement("li");
    const checkbox = document.createElement("input");
    checkbox.type = "checkbox";
    checkbox.addEventListener("change", function() {
        if (checkbox.checked) {
            listItem.classList.add("completed");
        } else {
            listItem.classList.remove("completed");
        }
    });

    listItem.appendChild(checkbox);
    listItem.appendChild(document.createTextNode(taskValue));

    taskList.appendChild(listItem);

    taskInput.value = "";
}
```

Step 8: Code Review

```
document.addEventListener("DOMContentLoaded", function() {
    const taskInput = document.getElementById("taskInput");
    const addTaskButton = document.getElementById("addTaskButton");
    const taskList = document.getElementById("taskList");
    addTaskButton.addEventListener("click", function() {
        const taskValue = taskInput.value.trim();
        if (taskValue.length) {
            const listItem = document.createElement("li");
            const checkbox = document.createElement("input");
            checkbox.type = "checkbox";
            checkbox.addEventListener("change", function() {
                if (checkbox.checked) {
                    listItem.classList.add("completed");
                } else {
                    listItem.classList.remove("completed");
            });
            listItem.appendChild(checkbox);
            listItem.appendChild(document.createTextNode(taskValue));
            taskList.appendChild(listItem);
            taskInput.value = "";
    });
});
```

Step 9: Test

Run your HTML file to test that the script works.

Continue making additions to the code to suit your needs.