



### Internet Programming Assignment

## Interactive Task Manager Web Application

### Objective:

Create a simple fully functional task manager web application using HTML, CSS, and JavaScript. The application should allow users to:

1. Add new tasks.
2. Mark tasks as completed.
3. Clear completed tasks.
4. Delete tasks.
5. Filter tasks by:
  - All tasks
  - Active tasks (not completed)
  - Completed tasks.

### Features:

1. **Add Tasks:** The user should be able to input a task through a text box and add it to a task list by clicking the "Add Task" button. Each task should be displayed with its name and a delete button.
2. **Mark Tasks as Completed:** Users can click on a task's name to toggle its completion status. When a task is marked as completed, it should have a strikethrough effect and change color (e.g., gray).
3. **Delete Tasks:** Users can remove tasks from the list by clicking a "Delete" button next to each task.
4. **Task Filtering:** The application should allow users to filter tasks based on their status:
  - **All Tasks:** Displays all tasks, regardless of whether they are completed or active.
  - **Active Tasks:** Displays only tasks that are yet to be completed.
  - **Completed Tasks:** Displays only tasks that have been marked as completed.

5. **Remaining Tasks Counter:** The application should display the number of **remaining active tasks** at the bottom of the task list. This counter should automatically update whenever tasks are added, completed, or removed.
6. **Clear Completed Tasks:** Provide a button that, when clicked, removes all tasks that have been marked as completed from the task list.

### Implementation Requirements:

- **HTML:**
  - Use HTML tags to structure the layout of the web page.
  - Include input fields to add a new task.
  - Include buttons for adding a new task, clearing completed tasks, and filtering tasks by status (All, Active, Completed).
- **CSS:**
  - Style the app to make it visually appealing, responsive and user-friendly.
  - Create distinct styles for completed tasks.
  - Style buttons and inputs for usability (make the buttons with awesome hover effects).
- **JavaScript:**
  - Implement the functionality of the task manager, including:
    - Task addition.
    - Task deletion.
    - Marking tasks as completed.
    - Filtering tasks by their status (All, Active, Completed).
    - Updating the remaining active task number.

### Submission Guidelines:

- The assignment is **individual**.
- Submit the full HTML, CSS, and JavaScript code in a single zipped folder (in case of there are 3 separate files) and name it with (your Name\_your ID).
- Upload your assignment to [this Form](#).
- **Deadline:** Thursday: 24/4/2025 at 11:59 PM.

**NOTE:** Strictly avoid copying your colleague's assignment. That would amount to **plagiarism**. Penalty in case plagiarism is detected: **zero marks** will be assigned for all students whose assignment would be considered as plagiarized OR copies of each other.