

Task: "Task Manager Application"

Objective:

Build a **Task Manager Application** where the user can add, edit, delete, and display tasks with different categories and color codes. The tasks will be stored in an array of objects, and the DOM will be updated dynamically to show the task list.

Requirements:

1. Gather User Input:

- a. Create a form to ask the user for:
 - i. **Task Name** (using `prompt()`). (if you can use input text html)
 - ii. **Task Type** (Options: "Task", "In Progress", "Done"). (can you select options)

2. Store Tasks in an Array:

- a. Use an array to store all the tasks. Each task should be an object with:
 - i. **taskName** (String),
 - ii. **taskType** (String),
 - iii. **dateAdded** (using `Date()`).

3. Add Tasks to the Array:

- a. Use the `push()` method to add tasks to the array.

4. Display Tasks in the DOM:

- a. Use `getElementById()` and `querySelector()` to dynamically display the tasks in a `<div>` or ``.
- b. Each task should show:
 - i. **Name**,
 - ii. **Type**,
 - iii. **Date Added**.
- c. Use `innerHTML` to display the data.

5. Task Colors Based on Type:

- a. If the task is **"In Progress"**, display it with **orange** color.
- b. If the task is **"Done"**, display it with **green** color.
- c. If the task is a **"Task"**, display it with **red** color.

6. Edit Task:

- a. When a user clicks on a task, prompt them to edit the task's name or type.

- b. After editing, re-display the tasks with the updated information.
- 7. **Delete Task:**
 - a. Add a **Delete** button next to each task. When clicked, delete the task from the array using **splice()**.
- 8. **Use Conditional Statements:**
 - a. Use **if/else** or **switch** to set the task color based on the type of task.
- 9. **Final Result Display:**
 - a. Use **console.log()**, **alert()**, and **document.getElementById()** to show the final result.

Important Notes:

- You **must use** the following JavaScript methods:
 - **getElementById()** to target specific elements in the HTML.
 - **querySelector()** and **querySelectorAll()** to target elements that may require event listeners (like the edit and delete buttons).
 - **innerHTML** to display the tasks dynamically in the HTML.
 - **push()** to add new tasks to the array.
 - **splice()** to remove tasks from the array.
 - **if/else** and **switch** to handle the conditions for displaying the task types and colors.

Expected Outcome:

- The tasks should be stored in an array of objects and displayed in the DOM.
- Each task will have its color coded based on its type.
- The user should be able to edit and delete tasks, and the DOM should update accordingly.

Bonus Features (Optional):

1. **Search Bar:** Add a search bar to filter tasks by name.
2. **Task Filter:** Add an option to filter tasks by type (e.g., only show "In Progress" tasks).

