

## ToDo List Project

### What it does (project description)

A clean, responsive To-Do app where users can:

- Add tasks with optional tag and due date
- Mark tasks complete/incomplete
- Edit task titles inline
- Filter by **All / Active / Completed**
- Search tasks by text
- Clear all completed tasks
- See live stats (e.g., “3 remaining, 2 completed”)
- Sort by **A–Z / Newest / Due date**

### How it meets the requirements

- **Variables:** tasks, filterMode, searchQuery, sortMode, counters.
- **Comments:** Inline docs explaining functions and tricky logic.
- **Operators:** Increment/decrement counts, comparisons for sorting/filtering.
- **Functions:** addTask(), toggleComplete(id), editTask(id, text), deleteTask(id), clearCompleted(), filterTasks(), render(), saveToLocal(), loadFromLocal().
- **Objects:** Each task: { id, text, completed, tag, due, createdAt }.

- **Events:** Form submit (add), button clicks (complete/delete/clear), input events (search/edit), tab clicks (filters), select change (sort).
- **Strings:** Task text, tags, search query, UI labels.
- **Arrays/Maps:** tasks array; optional Map for quick lookup by id.
- **Attractive HTML interface + interaction:**
  - Header with title + input bar
  - Filter tabs and search
  - Task list with checkboxes, tag pills, due dates, delete icons
  - Footer with stats, bulk actions, sort controls
  - Mobile-first C
  - SS (cards, spacing, hover/focus states)

Wireframe

Header: To-Do List App

Input: Add new task... (text)

Button: Add

All

Active

Completed

Search [ ]

Task List

[ ]

Task 1 title (click to edit)

Tag

Due

Del

[ ]

Task 2 title (click to edit)

Tag

Due

Del

[ ]

Task 3 title (click to edit)

Tag

Due

Del

[ ]

Task 4 title (click to edit)

Tag

Due

Del

[ ]

Task 5 title (click to edit)

Tag

Due

Del

Stats: 3 remaining | 2 completed

Bulk: Mark all done | Clear completed

Sort: A-Z | Newest | Due date