#### Minor Improvements

On the Gantt chart page, the Project Name should be listed at the top of the page.

Right click context menu should open at cursor.

Gantt chart scaling should initially be 1 month and scale up from there if necessary

~~Do not reorder items regardless of start or end dates. Only the user should be able to drag and drop them to reorder.~~

When editing dates through the right-click context menu, make the screen that pops up draggable with 20% transparency.

The index page has a fixed height, if the list grows very long I can’t scroll to the bottom of the list. Make it so I can scroll to the bottom of the list regardless of how long the list is.

On the dashboard, make it so I can click the start date or deadline date, bring up a calendar and select a new date. The date should save immediately.

On the gantt chart, rendered inside the blue bar, list the number of days from start to finish for that task or sub-task

Add ability to Edit Project name to the right-click context menu if you right click a project.

Gantt chart bars: when hovering the bars, make a small popup information box showing the labeling the start date and end dates. Style it to fit the rest of the application.

Make gantt chart collapsible so sub-tasks can be hidden

#### Optimizations

**~~1. Overdue Status Calculation and Display Inconsistency~~**

* **~~Severity~~**~~: High~~
* **~~Explanation~~**~~: The overdue status of tasks is not consistently shown across the Dashboard, Gantt chart, and other views. For instance, a task due before today (e.g., March 31, 2025) might not be marked as overdue if its sub-tasks’ statuses aren’t properly considered, misleading users about project progress.~~
* **~~Fix~~**~~: Update the application’s logic to consistently calculate and display overdue status. Create a function to check if a task or any of its sub-tasks is past due, and ensure this status is reflected everywhere by applying a visual indicator (e.g., a specific class like .overdue-row) across all views.~~

**2. Sub-Task Dependency Handling**

* **Severity**: High
* **Explanation**: When a parent task’s due date is changed (e.g., via drag-and-drop in the Gantt chart), sub-tasks with dependencies may not adjust correctly, losing their original durations or causing scheduling conflicts. This disrupts accurate project timelines.
* **Fix**: Improve the dependency logic to preserve sub-task durations. When rescheduling a parent task, calculate each sub-task’s new due date by maintaining its original duration (due date minus start date) relative to the updated parent task’s start date.

**3. Calendar Popup Not Present in HTML**

* **Severity**: Medium
* **Explanation**: The calendar popup, meant to help users pick dates, isn’t working because the HTML element doesn’t match the JavaScript code’s expectations (e.g., it uses a data-id instead of an id). This limits date selection functionality.
* **Fix**: Add the calendar popup to the HTML with the correct identifier (e.g., id="calendar-popup") to match the JavaScript code, ensuring it displays and functions as intended.

**4. Drag-and-Drop Overlap Check Limitation**

* **Severity**: Medium
* **Explanation**: The current drag-and-drop feature only checks for overlapping tasks assigned to the same person (PIC), ignoring potential conflicts across different people or unassigned tasks. This could lead to overlapping schedules.
* **Fix**: Update the overlap check to consider all tasks by default, not just those with the same PIC. Add an optional filter for users to limit checks to specific PICs if desired.

**5. Gantt Timeline Header Scaling Issue**

* **Severity**: Low
* **Explanation**: In the Gantt chart, the timeline header labels can overlap or become unreadable for projects with short durations, making it harder to interpret visually. This is a usability issue rather than a functional one.
* **Fix**: Adjust the timeline header dynamically based on project length. For short projects, reduce label frequency (e.g., show every other day) or shrink the font size to improve readability.

**6. Task List Popup Rendering**

* **Severity**: Low
* **Explanation**: The task list popup shows tasks in a flat, date-ordered list, which can be confusing when many tasks share the same due date or belong to different projects, reducing clarity.
* **Fix**: Reorganize the task list to group tasks by project first, then sort by date within each group, making it easier for users to understand task context and priority.

As I make a requests I want you to review my request. Provide a brief summary of what you think I’m asking for. I’ll give you permission to proceed or clarify further. You will notice that all my code is broken into logical blocks and each block is numbered with a title. To provide the updates I ask for, tell me what file it is in then provide updates 1 block of code at a time. After each block give a brief explanation of the expected results. Once I confirm you can move onto the next block. Ensure to include the block header and block footer. If the block does not have a footer, create one that is inline with the other footers.