##### **Prompting**

Review the attached files and understand how they work together and standby ready for receive requests from me. When requests are submitted, no analysis needed. Provide a basic summarized outline including what you think I want completed and which files and blocks of code will need updated. When I approve, provide the first block of code, in full and wait for confirmation to continue to the next block or next file. It is very important to not break other functionality when updating code. Code blocks should be from start comment to end comment and include the comment. After providing a block of code provide a summarized outline of which files and blocks still need updates.

##### **Broken Functions**

Mouseover the tasks on the full calendar view should provide a popup window that lists all tasks scheduled for that date. As long as the mouse is over the task or anywhere inside the popup window, the window should remain and allow me to click on any tasks listed in the popup window.

##### **Aesthetics**

* ~~Any automatic rescaling of the gantt chart should have a popup box notifying the scale change and tell the end-user why. Require a confirmation to close the window. Window styling needs to match the rest of the application.~~
* ~~When editing dates through the right-click context menu, make the screen that pops up draggable~~
* ~~Popup window for editing dates dragging does not work correctly. The styling of the window is solid grey, it should be a dark black with a blue header that matches other blues in the applications and the black should have slight transparency.~~
* ~~On the Gantt chart page, the Project Name should be listed at the top of the page.~~
* ~~The notes icon on the gantt chart page got moved to the draggable bar and now does nothing when I click on it. Move the note icon back next to the task name. Add a notes icon next to the tasks on the dashboard also. Clicking the notes icon should open a floating notes icon that lets the user store notes about the task clicked on.~~
* ~~Notes popup menu and context menus are opening with significant offset from cursor. Offset should be only 2px from the location of the cursor when clicking the notes icon.~~
* Reorganize the tabs buttons into a collapsible menu on the left side of the screen. Be sure to make this a highly aesthetic addition.
* In the Popup task list, the word “Task List” appears at the top of the popup window. Make the background behind “Task List” appear slightly less transparent than the rest of the window. Center the words “Task List”. “Task List” and the close button should remain visible even when the list is scrolled down.

##### **New Function**

* I need an archive function. This would let me select which projects to archive and then would append them to a file of other archived projects. This might require opening the file, reading in all the projects there, then adding the selected project to that file.
* Gantt chart scaling should initially be 1 month and scale up from there if necessary
* On the dashboard, make it so I can click the start date or deadline date, bring up a calendar and select a new date. Styling should be in-line with other objects in the application.
* Add ability to Edit Project name to the right-click context menu if you right click a project.
* On Gantt chart, we currently can print schedule. Give option to print the gantt chart. The gantt chart will need to be printed in landscape and fit to the page.
* Make gantt chart collapsible so sub-tasks can be hidden
* Add filter to the calendar view so you can filter by Project Title
* Adjust the gantt scaling to be minimum of 1 month and scale up from there based on minimum start date and maximum end date of project tasks.

##### **Optimizations**

**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.

##### **Completed**

* ~~Right click context menu should open at cursor.~~
* ~~Remove the “Gantt Chart” button from the tabs menu~~
* ~~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.~~
* ~~There is a block at the bottom of the dashboard page with the “SSA Maintenance Projects v1.0…” footer. This renders over top of the bottom project and makes it unclickable.~~
* ~~Toggling to list view on calendar page should hide the full view calendar and only shot the list view. Toggling back to full view should hide the list view and show only the full view.~~
* ~~Toggle Calendar is still not working on gantt page~~
* ~~Toggling full view and list view does not work on the Calendar tab.~~
* ~~Do not reorder items regardless of start or end dates. Only the user should be able to drag and drop them to reorder.~~

**~~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.~~