Bug List - TablePage.tsx

Critical Bugs



- 1. **Race Condition in Auto-save**: scheduleAutoSave() uses stale closure values for updatesSnapshot and deletionsSnapshot instead of current state values when the timeout executes.
- 2. **Infinite Re-renders**: displayArr is calculated on every render without memoization, potentially causing infinite re-renders in child components.
- 3. **Memory Leak**: (idleTimeoutRef.current) timeout is never cleared on component unmount.
- 4. **Stale State in Save Function**: The save button onClick creates snapshots immediately but executes them later, potentially using outdated data.

Logic Errors

- 5. **Inconsistent Headers Logic**: The code checks (headers.length === 0) but doesn't handle the case where headers exist but cells don't.
- 6. **Missing Error Handling**: replaceCellInArray function doesn't handle the case where the cell to replace is not found.
- **State Update Race**: (handleCellUpdate) calls (scheduleAutoSave) before the state update is complete, potentially saving incomplete data.
- * plicate Pending Updates: (updatePendingUpdates) can create duplicate entries if called multiple times with the same cell ID.

UI/UX Issues

- Menu Positioning: Right-click menu position (pageX), pageY) doesn't account for scrolling or viewport boundaries.
- Clipboard Compatibility: Clipboard operations don't handle all edge cases (empty clipboard, permission denied, etc.).
- 11. **Save Button Visibility**: Save button visibility logic (hidden = {isSaving}) conflicts with (disabled={isSaving}).

Performance Issues

- 12. **Unnecessary Re-calculations**: generateCellsForPlot is called on every render without dependency checking.
- 13. **Large Object Serialization**: (getByteSize) function serializes entire objects to JSON for size calculation, which is expensive.
- 14. Unoptimized Bulk Operations: Bulk operations process all chunks sequentially instead of in parallel where possible.

Data Integrity Issues

- sync State Updates: Multiple async operations can interfere with each other when updating the same state simultaneously.
- 16. Missing Validation: Cell updates don't validate data types or constraints before saving.
- 17. **Incomplete Cleanup**: Deleted cells might remain in pendingUpdates even after being added to cellsToDelete).