React Calculator Enhancement Plan

Project Overview

- Project Name: React Calculator
- Goal: Enhance functionality and user experience using Aider AI-assisted development tool.

Implemented Features

Feature 1: Keyboard Input Support

- User Story: As a user, I want to use my keyboard to input numbers, operators, and actions.
- Technical Requirements:
- Add global keydown event listener
- Map keys (0–9, +, -, *, /, Enter, Escape, .) to calculator logic
- Reuse existing button handlers where possible
- Files Modified:
- src/component/App.js
- Challenges:
- Conflicting default browser shortcuts
- Ensuring numeric inputs matched button-based logic

Feature 2: Backspace Functionality

- User Story: As a user, I want to correct input mistakes without clearing everything.

- Technical Requirements:
- Add backspace button
- Remove last character from display input
- Handle decimals, negatives, and operators
- Files Modified:
- App.js
- ButtonPanel.jsx

Aider Commands Used

- Challenges:
- Managing state correctly when editing partial expressions
- Avoid breaking calculations mid-edit

| Command | Purpose |-----| ∣/add | Added relevant files to context | | Asked about code structure ∣/ask | /implement | Implemented keyboard input logic| /diff | Reviewed code changes /edit | Made refinements /test | Tested functionality | Ran dev server /run | Committed final changes /commit

Testing Notes

Total: 8+ Aider commands used

All features were tested manually using `npm start`.

Both features work reliably across multiple sessions and support consistent user behavior.