**Comprehensive Prompt for Canvas AI Assistant Development**

I'm creating a Chrome extension that extracts and organizes my Canvas assignments and deadlines. The extension scans my Canvas LMS to identify assignments, deadlines, and important dates across all courses, then presents them in an organized dashboard. The idea is that I can have an assistant that scans every class in canvas then give me a recommended to do list for today and a task list for the week. For example, it would tell me to do every assignment due today, but would also recommend I start on my lab report due in two days. Or it at least finds every assignment due and either adds it to my google calendar or presents that information in a convenient way. That way I do not accidentally overlook small assignments or forget to start on big assignments. The main goal is something easy and intuitive for the user to use.

**My Background**

I have experience with Python, Java, Assembly, and C for embedded systems, but I'm new to web development. I need detailed guidance on implementing features and fixing bugs in my Chrome extension, with thorough explanations of web development concepts.

**Project Context**

The project is a multi-phase implementation:

Phase 1: Enhanced Canvas API Integration (1-2 weeks)

* Extend current extension to fetch assignments from all courses
* Implement basic assignment categorization by due date
* Add simple assignment display

Phase 2: Text Pattern Matching (1 week)

* Add syllabus and announcement text parsing
* Implement date extraction from unstructured text
* Combine API and extracted data

Phase 3: AI Integration (1-2 weeks)

* Choose AI approach (local NLP vs. external API)
* Implement AI text analysis for complex content
* Add confidence scoring and human review

Phase 4: Advanced Features (ongoing)

* Google Calendar sync
* Smart notifications
* Assignment complexity estimation
* Study time recommendations

**Current Issues:**

I'm currently working through Phase 1 and facing several specific issues:

The minimize button worked before, then it stopped working after I fixed an issue with the misidentification of complete assignments. When it worked before this was in the code:

function setupImprovedEventListeners() {

// Minimize button

const minimizeBtn = document.getElementById('ai-minimize-btn');

const contentArea = document.querySelector('.ai-content-scrollable');

if (minimizeBtn && contentArea) {

minimizeBtn.addEventListener('click', () => {

const isMinimized = contentArea.style.display === 'none';

contentArea.style.display = isMinimized ? 'flex' : 'none';

minimizeBtn.textContent = isMinimized ? '−' : '+';

minimizeBtn.title = isMinimized ? 'Minimize' : 'Expand';

});

}

Could this solution work now or do we have to still search because of additional changes? I can give more code from when it worked if necessary

**How To Help Me**

Complete Function Replacements: When suggesting code changes, provide complete function replacements that I can copy and paste directly. I should be able to find a function by name, select it entirely, and replace it with your solution.

Explicit Step-by-Step Instructions: Explain exactly where to add or replace code, and what changes I'm making.

Explain Concepts: Relate web development concepts to embedded systems concepts I'm familiar with to help me understand.

Debugging Guidance: Help me understand console errors and how to interpret them.

UI/UX Suggestions: Recommend improvements to make the extension more intuitive while maintaining functionality.

**GitHub Repository**

My code is available at: https://github.com/BradleyBrewington/CanvasAssistant/tree/master/canvas-ai-assistant

Please reference my latest code when suggesting changes, and provide thorough explanations suitable for someone new to web development but experienced in other programming paradigms. I have the most recent files also available in the project knowledge.