**Templates Engine**

**1. Unused Code:**

* **frontend/src/components/templates\_engine/TestLibraryPanel.tsx** (lines 1-68)
* Test component explicitly marked as temporary in its own comments: "This is a test component to demonstrate the usage of LibraryPropertyPanel. It can be removed after integration is complete"
* No imports of this component found in the codebase, confirming it's unused
* **frontend/src/components/templates\_engine/ToastProvider.tsx** (lines 1-43)
* This component appears to be redundant as multiple Toast implementations exist in the codebase
* No references or imports of this specific ToastProvider found in frontend code
* Functionality is duplicated by other toast implementations like react-hot-toast directly and other Toast components
* **frontend/src/components/templates\_engine/HtmlEditorModal.tsx** (lines 237-280)
* AI generation functionality that appears incomplete:

text

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  const handleAiGenerate = async () => {

    if (!aiPrompt.trim()) {

      toast.error('Please enter a prompt for the AI generator');

      return;

    }

    setIsGenerating(true);

    try {

      // TODO: Replace with actual AI code generation call

      // This is a placeholder

      await new Promise(resolve => setTimeout(resolve, 1500));

      // Mock response for now

      const generatedCode = `<!-- AI Generated Component -->

<div class="ai-generated-component">

  <h2>AI Generated: ${aiPrompt}</h2>

  <p>This would be your AI-generated component based on the prompt.</p>

  <button class="btn btn-primary">Example Button</button>

</div>`;

      setContent(prevContent => generatedCode);

      setAiPrompt('');

      setShowAiInput(false);

      toast.success('AI code generated successfully');

    } catch (error) {

      console.error('Error generating code:', error);

      toast.error('Failed to generate code. Please try again.');

    } finally {

      setIsGenerating(false);

    }

  };

* Contains "TODO" comment with placeholder mock response instead of real implementation
* **frontend/src/components/templates\_engine/ComponentRenderer.tsx** (lines 83-104)
* The component has several unused or duplicate switch cases
* Multiple component types are imported but never used in the renderer, creating dead code paths.

**2. Unwanted Pages:**

* **frontend/src/components/templates\_engine/TestLibraryPanel.tsx** (lines 1-68)
* This is a complete unwanted page/component as it's only a test component with no inbound links
* Contains a self-documenting comment stating it "can be removed after integration is complete"

**3. Deprecated & Unused Features:**

* **frontend/src/components/templates\_engine/HtmlEditorModal.tsx** (lines 127-180)
* Contains incomplete AI generation feature that is a placeholder with TODOs
* The AI generation function is incomplete and returns mock data with a comment explicitly stating it's a placeholder: "// TODO: Replace with actual AI code generation call"
* **frontend/src/components/templates\_engine/HtmlEditorModal.tsx** (lines 300-315)
* Deprecated shortcut menu feature that's currently commented out:

text

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  {/\* Keyboard shortcuts help - disabled for now

  <div className="absolute bottom-4 left-4 flex items-center text-gray-500 text-xs">

    <FiCommand className="mr-1" />

    <span>+ S: Save</span>

    <span className="mx-2">|</span>

    <FiCommand className="mr-1" />

    <span>+ Enter: Generate with AI</span>

    <span className="mx-2">|</span>

    <FiCommand className="mr-1" />

    <span>+ /: Help</span>

  </div>

  \*/}

* This suggests keyboard shortcuts were planned but not implemented or were disabled
* **frontend/src/components/templates\_engine/CalendarRenderer.tsx** (lines 66-107)
* Contains event handler code for a custom event 'calendar:update' that doesn't appear to be emitted anywhere in the codebase
* This appears to be a deprecated feature or incomplete implementation

**4.** **Summary and Recommendations:**

The templates\_engine module contains several pieces of unused, deprecated, or incomplete code that should be addressed:

1. **Delete:**

* **TestLibraryPanel.tsx** - Should be completely removed as it's explicitly marked as temporary and has no imports
* **ToastProvider.tsx** - Should be removed as it's redundant with other toast implementations in the codebase

1. **Refactor:**

* **HtmlEditorModal.tsx** - The AI generation functionality should either be properly implemented or removed if not needed
* **ComponentRenderer.tsx** - Should be refactored to remove unused component type cases
* **CalendarRenderer.tsx** - The custom event listener should be reviewed and either properly implemented or removed

1. **Clean up:**

* Remove commented-out code sections in HtmlEditorModal.tsx and other files that represent