

Feature Specification: Training UI & Thinking Model Integration

Status: Draft

Owner: Engineering

Date: 2026-01-05

1. Overview

This document outlines the changes required for the “Second Me” training interface, specifically the introduction of the **Thinking Model** configuration and the overhaul of the training parameter controls.

2. User Interface Changes

2.1 Training Configuration Card

The main entry point is a new `TrainingConfig` component. It must handle the following states:

- **Idle:** Show “Start Training”.
- **Training:** Show “Stop Training” with a spinner.
- **Suspended:** Show “Resume Training”.

Key Requirements:

- **Support Model:** Users must be able to select between OpenAI and Custom models for data synthesis.
- **Base Model:** Dropdown selection for the base model (e.g., Llama 3, Mistral).
- **Advanced Params:** Learning rate, Epochs, and

Concurrency must be adjustable but protected during active training.

2.2 The “Thinking Model” Toggle

We are introducing a Chain-of-Thought (CoT) toggle. -

Constraint: The toggle must be disabled if the

ThinkingModelConfig is incomplete (missing API key or endpoint).

- **UX:** If a user tries to enable CoT without config, show a warning pulse animation on the “Thinking Model” button.

```
// Logic for handling the Thinking Model toggle
<Checkbox
    checked={trainingParams.is_cot}
    disabled={disabledChangeParams}
    onChange={(e) => {
        e.stopPropagation();
        if (!thinkingConfigComplete) {
            setShowThinkingWarning(true); // Triggers red pulse animation
            return;
        }
        updateTrainingParams({ ...trainingParams, is_cot: e.target.checked });
    }}
/>
```

3. Backend Integration

3.1 Data Synthesis

The backend needs to accept the new `data_synthesis_mode` parameter: * `Low`: Fast processing. * `Medium`: Balanced. * `High`: Rich synthesis (slower).

3.2 CUDA Acceleration

We need to detect system capabilities before enabling the checkbox. * If `cudaAvailable` is false, the checkbox is disabled and stylized as gray.

4. Open Questions / Review Items

1. **Validation:** Should we hard-limit the `learning_rate` to 0.005 on the backend as well?
2. **Resume Logic:** Does “Resume Training” preserve the *exact* epoch state, or does it restart the current epoch?
3. **Visuals:** Review the `custom-message-success` styling below. Is the green border (#b7eb8f) accessible?

```
/* Proposed success message styling */
.custom-message-success .ant-message-notice-content {
  background-color: #f6ffed;
  border: 1px solid #b7eb8f;
  padding: 0.5rem;
  border-radius: 0.25rem;
}
```

5. Next Steps

- Review this spec on the Supernote.
- Annotate UI concerns directly on the code blocks.
- Finalize the `ThinkingModelModal` layout.