MICHIGAN STATE UNIVERSITY

Alpha Presentation

On-Premises ASR Pipeline for Michigan English

The Capstone Experience

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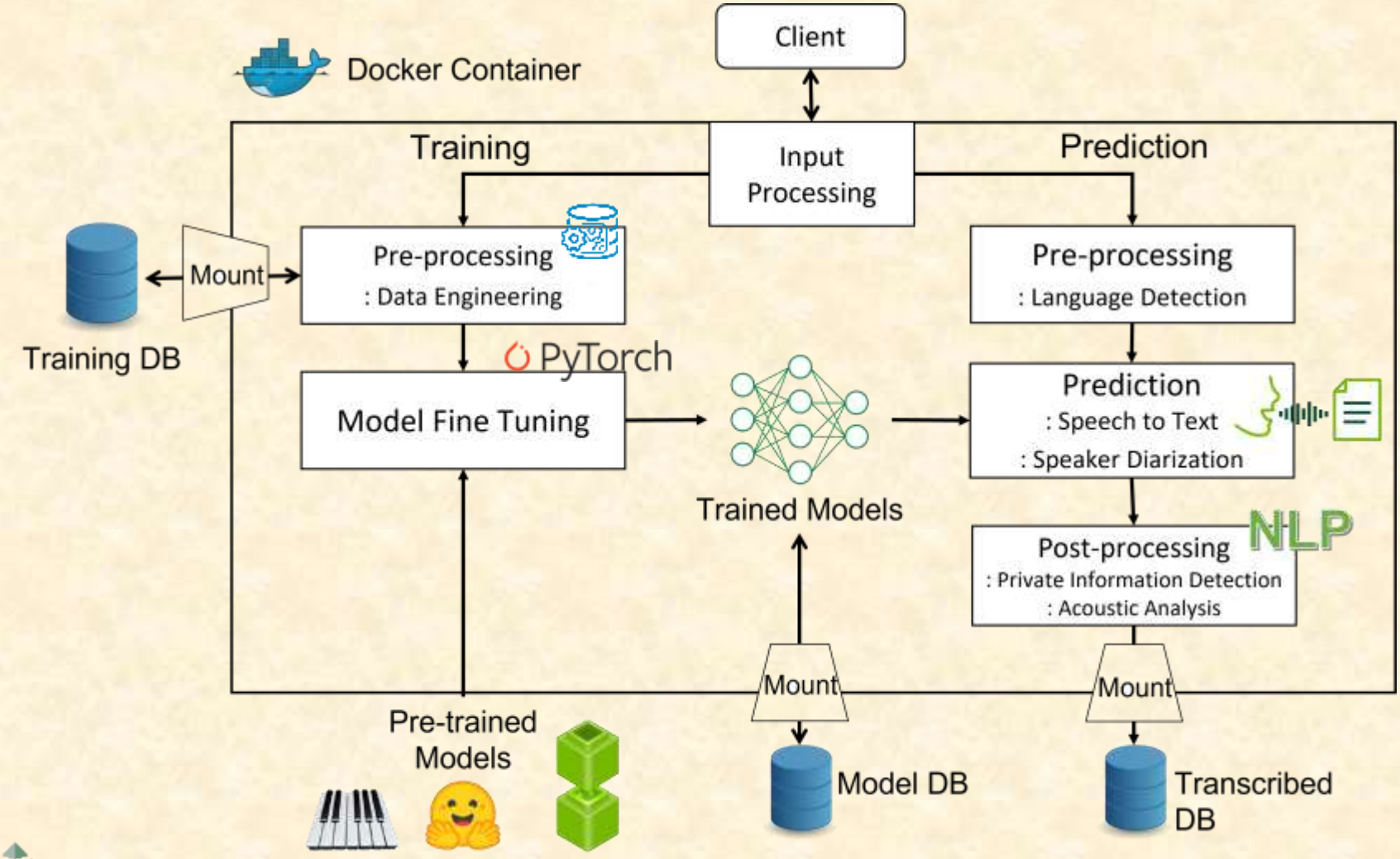
From Students…
…to Professionals

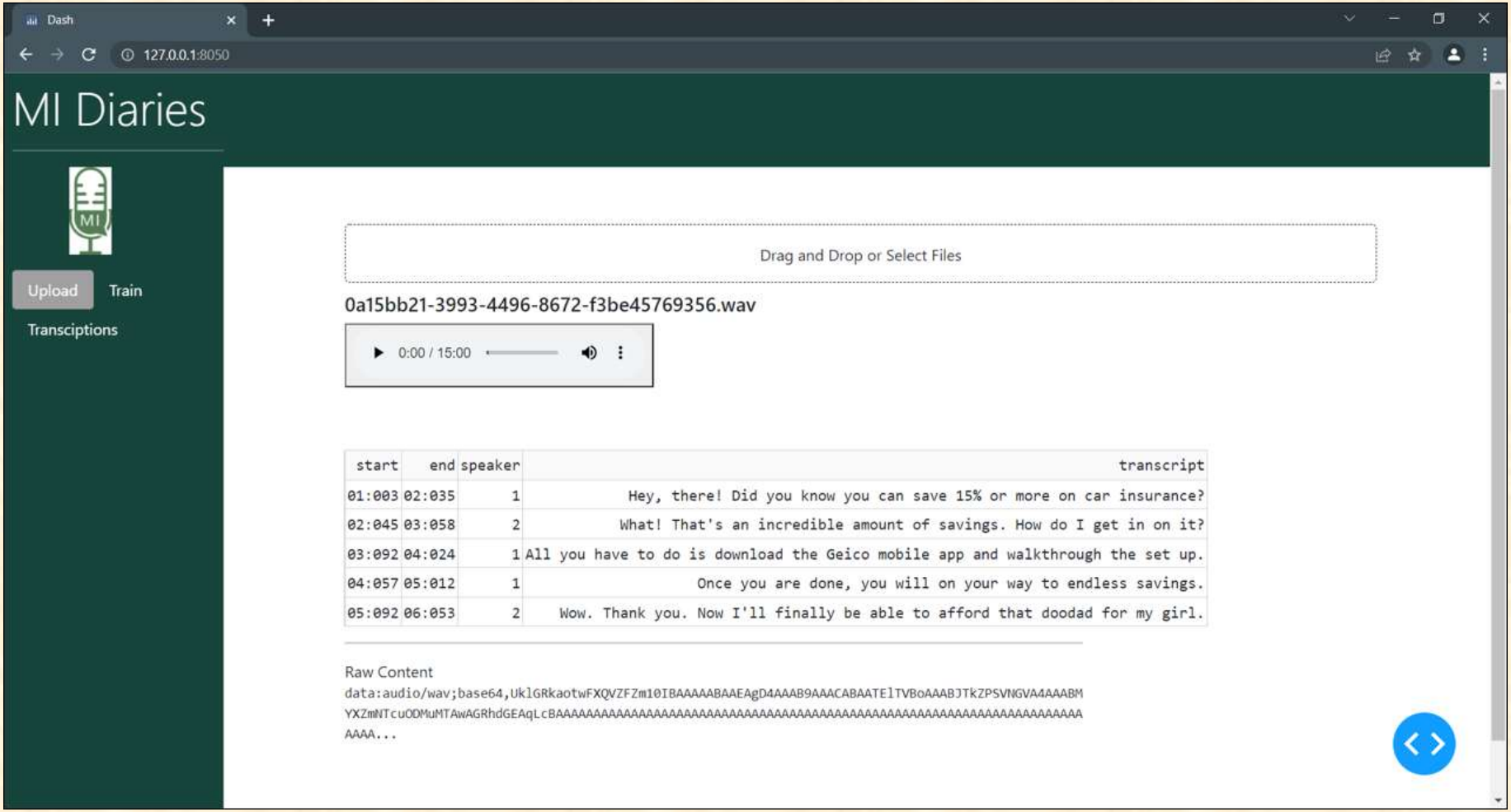
Project Overview

- Problem: The Department of Linguistics, Languages and Cultures' MI Diaries project needs to replace their outsourced speech-to-text software from Google to an in-house package
- Motivation: Privacy and monetary concerns
- Solution: All-in-one speech-to-text machine learning pipeline which takes in audio files and outputs time-aligned transcripts

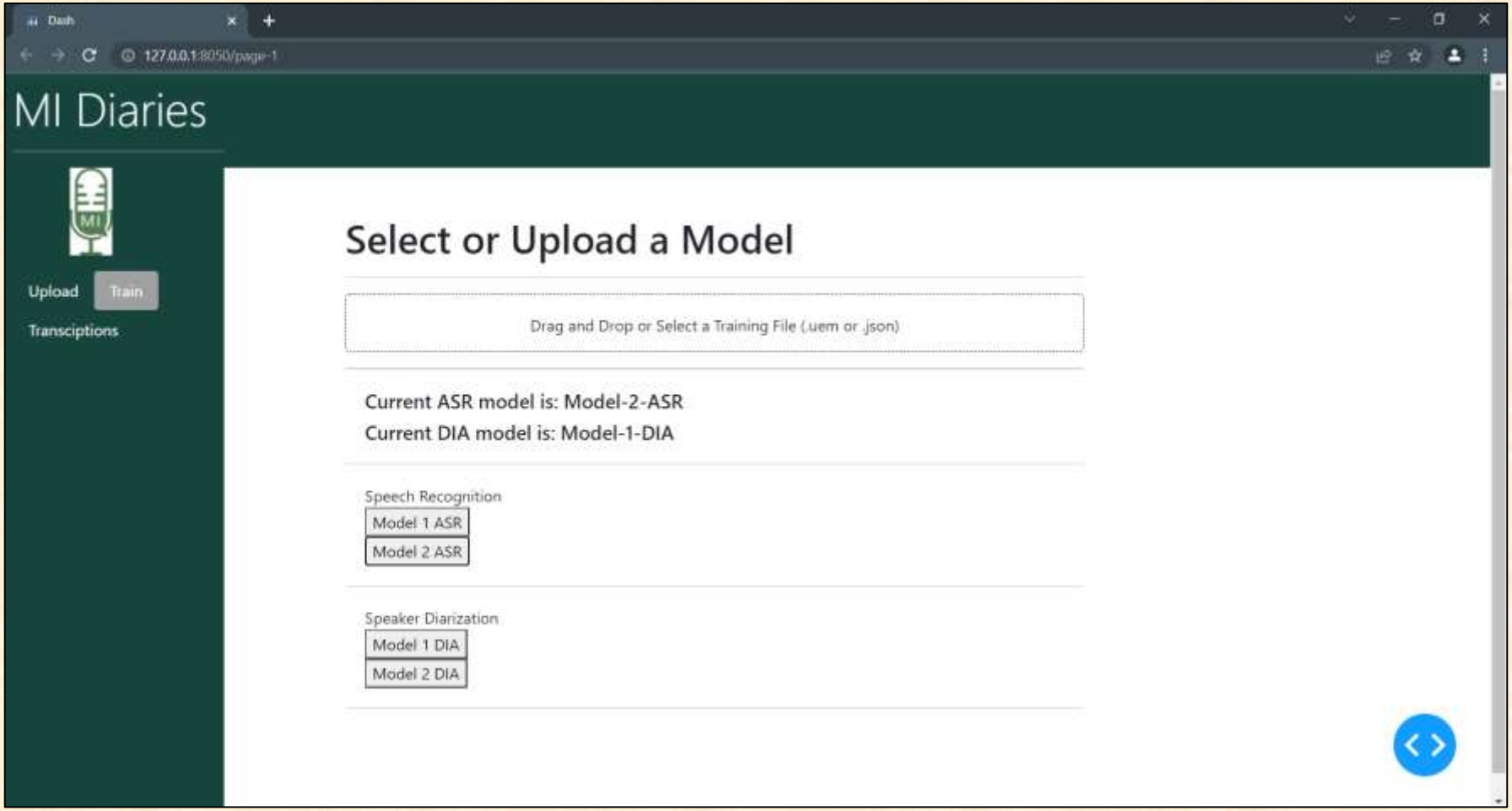
System Architecture



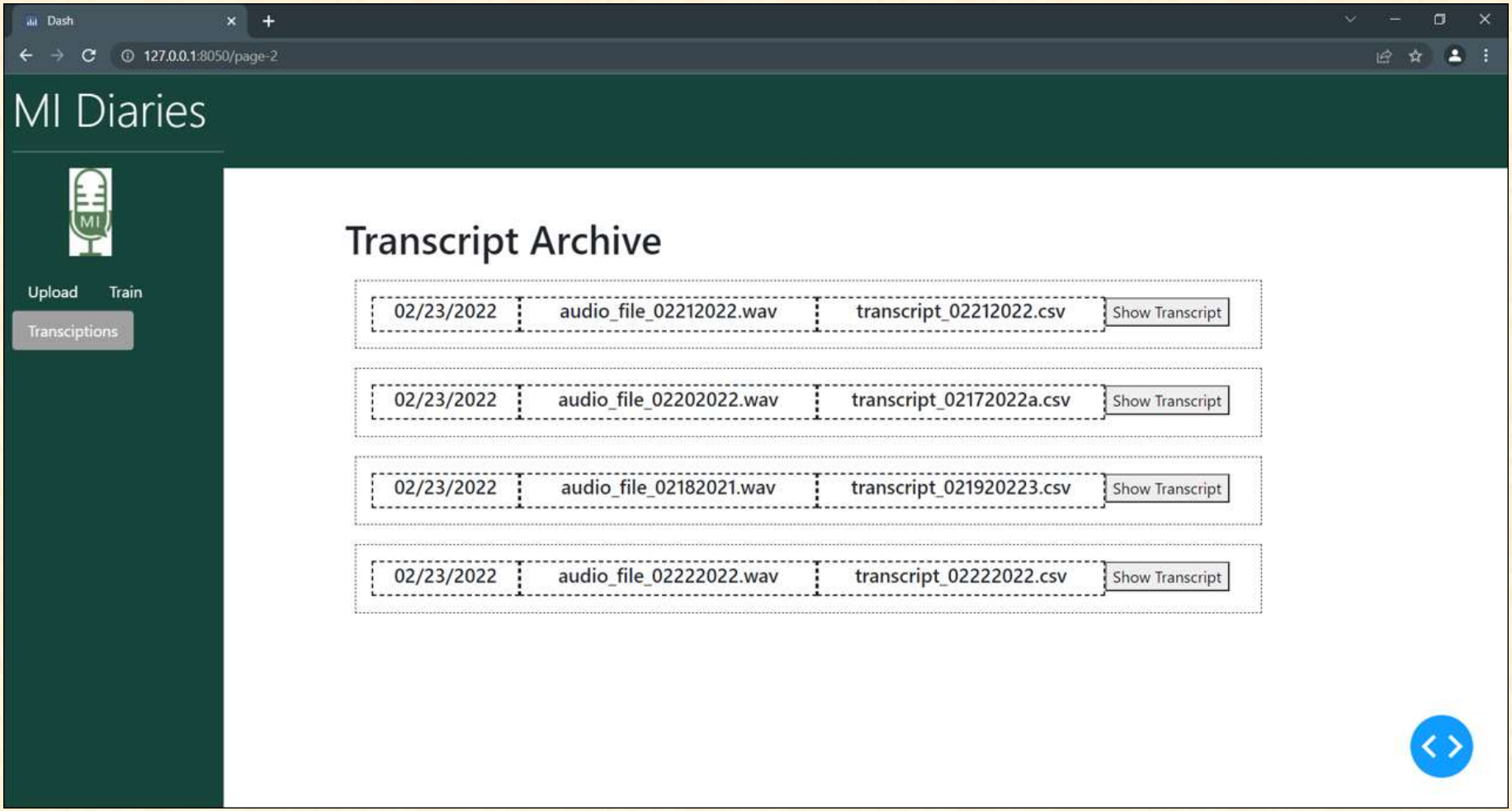
Uploaded File Outputs Transcript



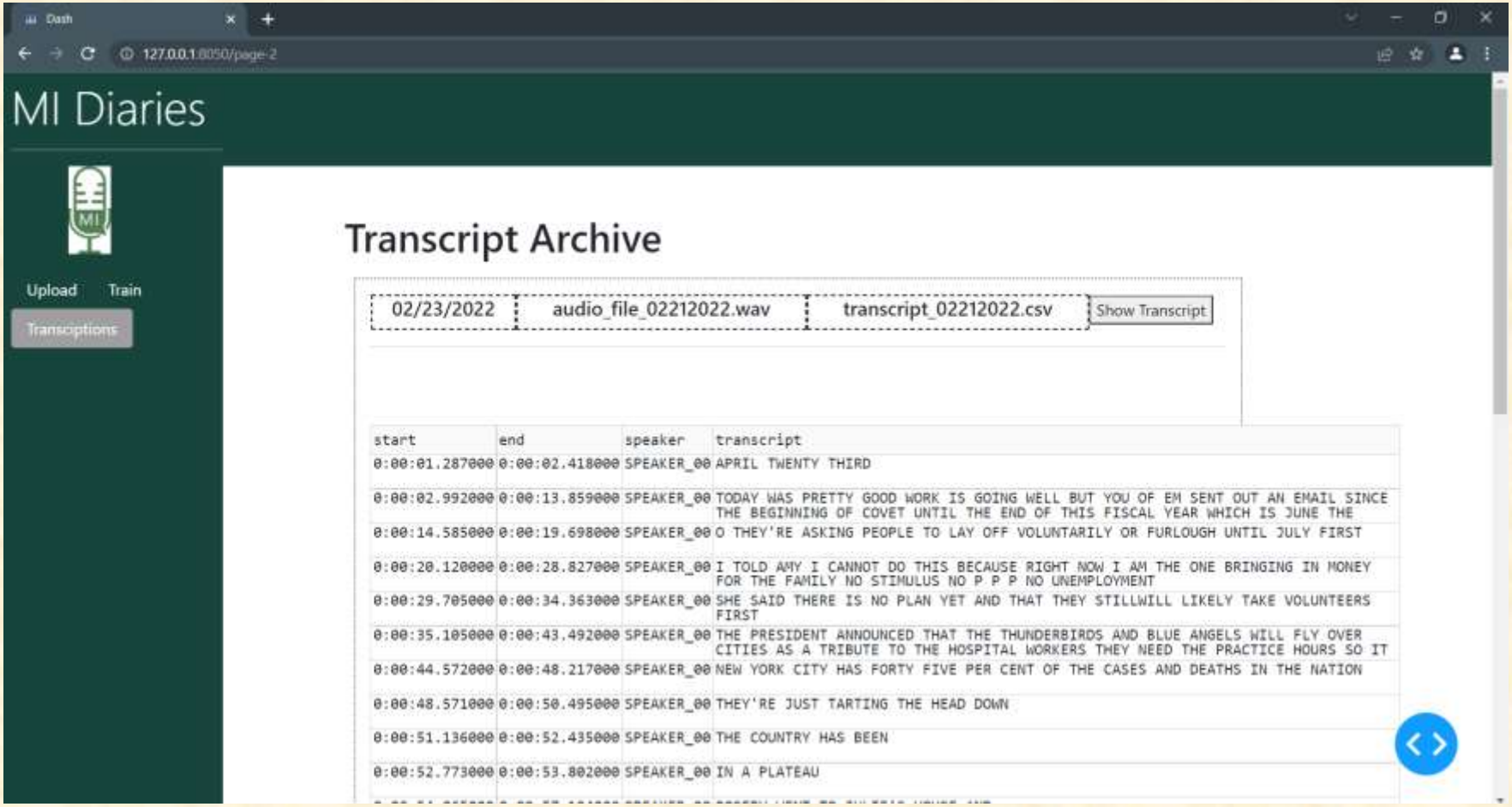
Selecting a Model



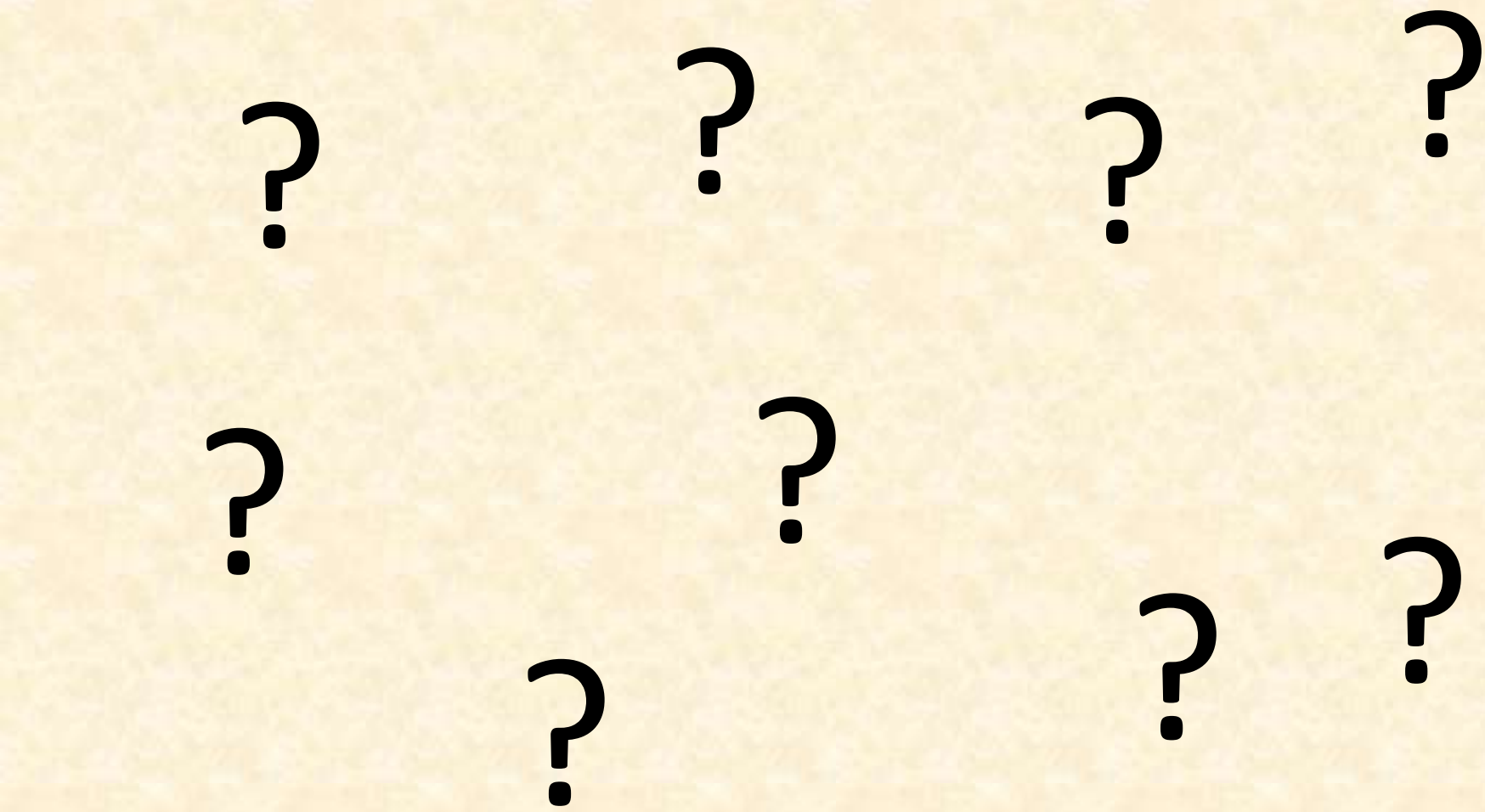
Archive of all submitted



Displaying Archived Transcription



What's left to do?

- Core Features
  - Switch training process to NVIDIA NeMo
  - Overlap detection
  - Docker
  - Integrate into MI Diaries App
- Additional Features
  - FAVE acoustic analysis
  - Sensitive Information Extraction
  - More models for dialects and languages

Questions?