



University at Buffalo

School of Engineering and Applied Sciences

# **EXPRESS ME: Transforming AAC with Personalized, Emotionally Intelligent Conversational AI**

**LLMs for Societal Good**

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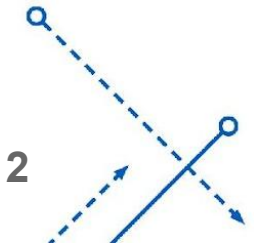
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# PROJECT OBJECTIVES

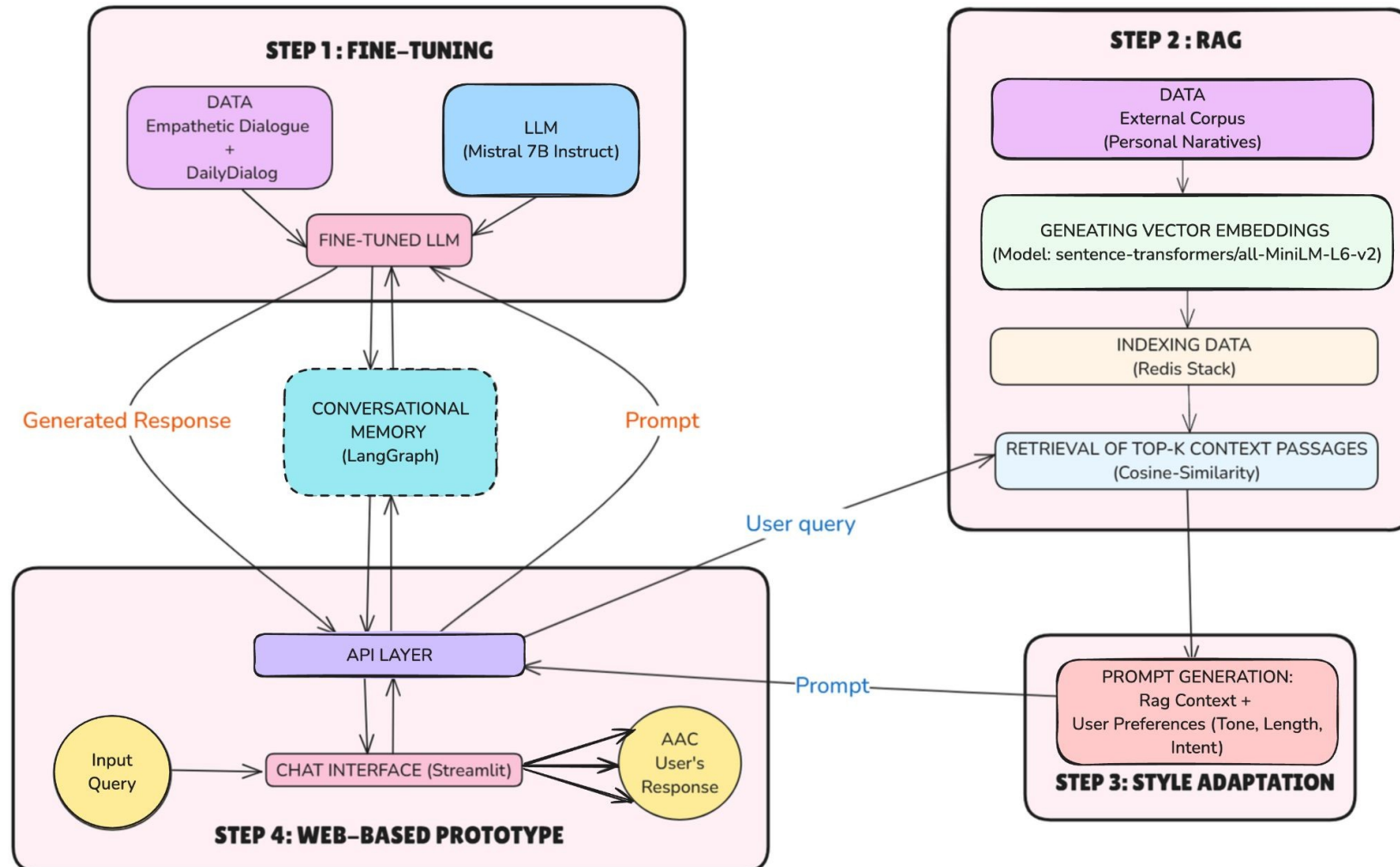
**Primary Goal:** Enhance communication for AAC users by providing personalized, contextually relevant, and emotionally intelligent conversational responses.

## Key Objectives:

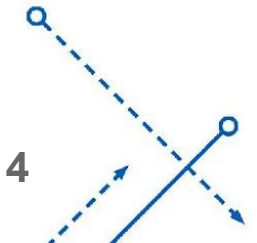
- Generate empathetic, personalized dialogues reflecting user personality.
- Implement Retrieval-Augmented Generation (RAG) for factual grounding.
- Adapt conversational style dynamically to AAC users' preferences.
- Develop a functional web-based prototype demonstrating improvements.



# SOLUTION ARCHITECTURE



# DEMO



THANK YOU

