

LLMs For Good: LLoMi

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Introduction

Motivation: To assist people in stressful situations in finding information about the resources available to them

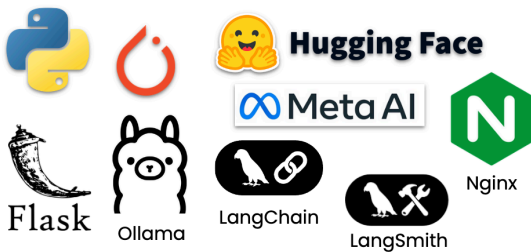
Solution: LLoMi, an interactive and intent-aware resource provider that understands users' needs and provides timely responses

Technical Details

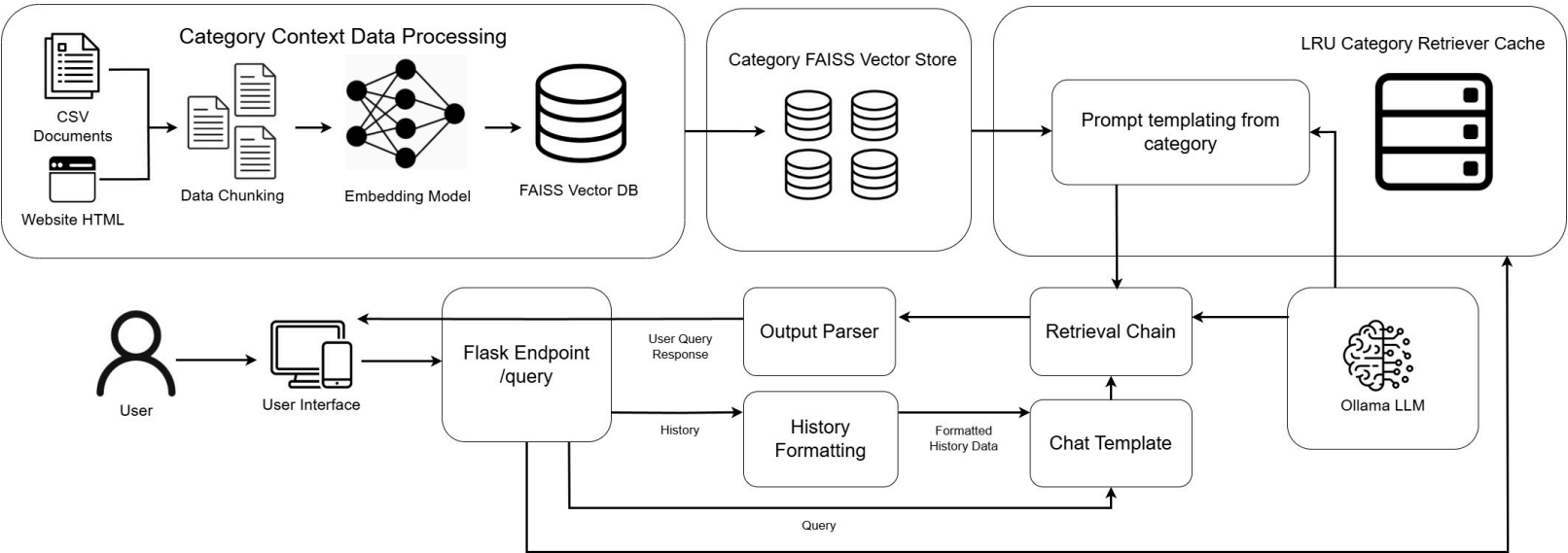
Frontend



Backend



Design Approach



Context

A helpful, empathetic resource that provides relevant information to individuals in times of stress and uncertainty.

Engineering Standards

- **ISO/IEC 27000:** Information Security Mgmt
- **ISO/IEC 42001:** Artificial Intelligence Mgmt System
- **IEEE Std 730-2014:** Standard for Software Quality Assurance Processes

Design Requirements

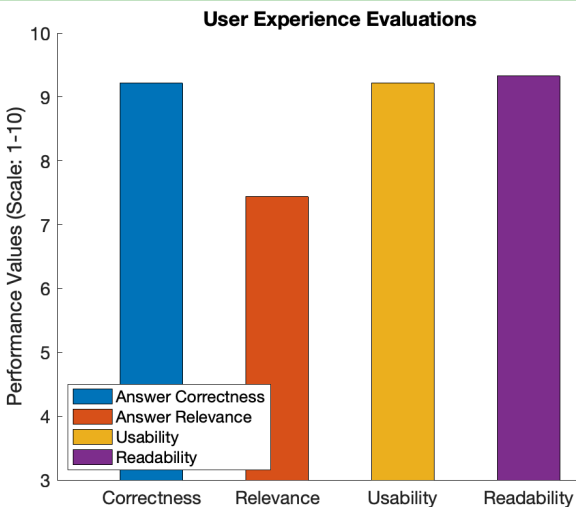
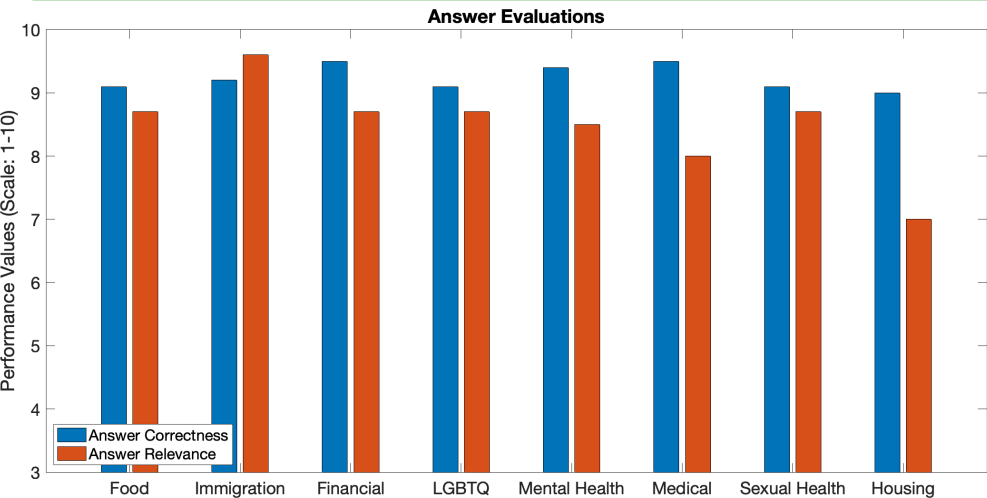
Functional:

- Web-based LLM hosted on ISU servers
- Quick (<15s) responses
- Provide accurate answers
- No storage of user data
- Users can enter textual queries
- Chat history used as context for LLM

Nonfunctional:

- Accessible design choices
- Intent-aware responses
- Easy-to-use interface
- HIPAA compliant

Results



References

- [1] Bassel Almarie, Paulo E.P. Teixeira, K. Pacheco-Barrios, Carlos Augusto Rossetti, and F. Fregni, "From Referee to Reviewer: The Evolution and Impact of Peer Review in Scientific Publications," *Principles and practice of clinical research*, vol. 9, no. 1, Jul. 2023, doi: <https://doi.org/10.21801/ppcrj.2023.91.1>. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10485814/>
- [2] A. Balaguer *et al.*, "RAG VS FINE-TUNING: PIPELINES, TRADEOFFS, AND A CASE STUDY ON AGRICULTURE," Jan. 2024. Available: <https://arxiv.org/pdf/2401.08406>
- [3] "Answer Correctness | Ragas," *Ragas.io*, 2023. Available: https://docs.ragas.io/en/v0.1.21/concepts/metrics/answer_correctness.html. [Accessed: Dec. 10, 2024]



