

Chatbot based on clinical literature for decision support

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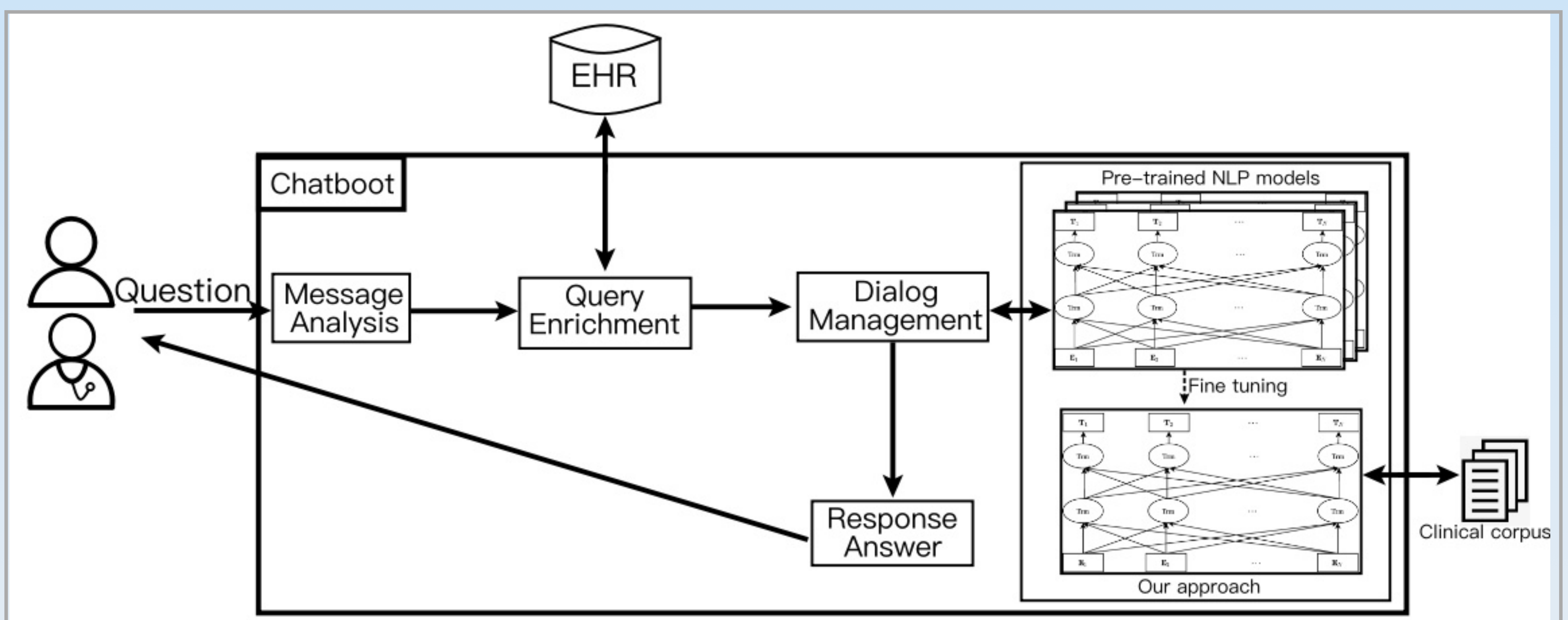
Motivation

- There is a **large collection of clinical literature** with the latest treatments and diagnostics, but keeping up to date of the latest techniques can be a difficult task due to their **constant evolution**.
- **Large Language Models (LLM)** on clinical practice guidelines (CPG) can be **useful tools** in the process of **extraction** relevant **information**, **assessing** scientific and **clinical relevance** of biomedical articles.
- In the healthcare field, the use of **systems for decision support** allows **better diagnose** patients according to their symptoms, and reduces the communication gap between patients and clinicians.

Our proposal

- Gather different LLMs to **train** them with CPG and high-quality biomedical literature, to **analyze** and **compare** their performance.
- **Define metrics** to analyze response time, resource consumption and feasibility to be integrated in actual healthcare systems of the LLM used.
- Use of LLMs to **assess the evidence level** for any new biomedical article according to scientific criteria.
- Provide **personalized medicine** and the latest clinical methods through real-time queries of the electronic health record (EHR) and the clinical corpus.
- Develop a **chatbot** that will be tested by both healthcare professionals and patients, to provide a real-time conversational system and provides the most appropriate medical answers.

Overview



Main challenges

- **Complex text**
- **Unstructure data**
- **Spanish data**

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