Proposal of a chatbot in Portuguese for the legal domain using the Rasa framework

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Since the COVID-19 pandemic quarantine, the State Court of Ceará (henceforth TJCE, from the abbreviation in Portuguese) has been improving to enable remote access to judiciary, such as WhatsApp Business and Virtual Counters. The Virtual Counters, regulated by Resolutions n° 372/21 (CNJ) and n° 12/2021 (TJCE), allow direct communication by videoconference with no need to schedule. Despite the extensive list of solutions provided by these service channels, there are limitations due to the assistance being done entirely by the civil servers. Therefore, this project aims to build an attendance chatbot in PT-BR, using Rasa, that will be integrated into WhatsApp Business to automatize the answers to FAQs. In this way, we expect to contribute to the effectiveness of the principle of *jus postulandi*. Unlike other platforms that use decision trees, Rasa is an open source machine learning framework [1]. This architecture provides a huge naturalness and customization to automated text and voice-based conversations. It also allows additional dependencies such as spaCy, MITIE, Python packages and built-in connectors to channels like Telegram, WhatsApp and Facebook. Initially, we intend to take the 17th unit of the TJCE Small Claim Court as a pilot project to develop a Proof of Concept. We will start compiling a legal domain corpus from the WhatsApp Business conversations. Currently, we are dealing with TJCE to get permissions and full access to WhatsApp Business conversations. The next step is to create a *persona* for the chatbot and a conversational flow, complying with UX writing criteria and accessible language.

Bibliography

[1] "Introduction to Rasa Open Source". Accessed October 12, 2022. https://rasa.com/docs/rasa/.