

DEVELOPMENT OF A CHAT BOT FOR TRANSLATION FROM A FOREIGN LANGUAGE

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Modern information technologies are increasingly used in the field of natural language processing, in particular for automatic translation tasks. One of the most promising areas is the development of chatbots capable of real-time translation. These chatbots combine natural language processing (NLP), artificial intelligence, and integration with translation service APIs.

This paper reviews existing approaches to implementing chatbots for translation, especially through APIs such as OpenAI GPT and DeepL. OpenAI [1] provides context-aware translation capabilities using its language models, while DeepL [2] offers highly accurate translation in many languages thanks to its advanced neural networks.

The scenario for using a chat bot to process translation requests from foreign languages on the Telegram platform is shown in figure 1. The scenario describes the logic of the chat bot and the order of sending messages. The server component of the chat bot is implemented using Python and includes the following libraries: python-telegram-bot, openai and deepl.

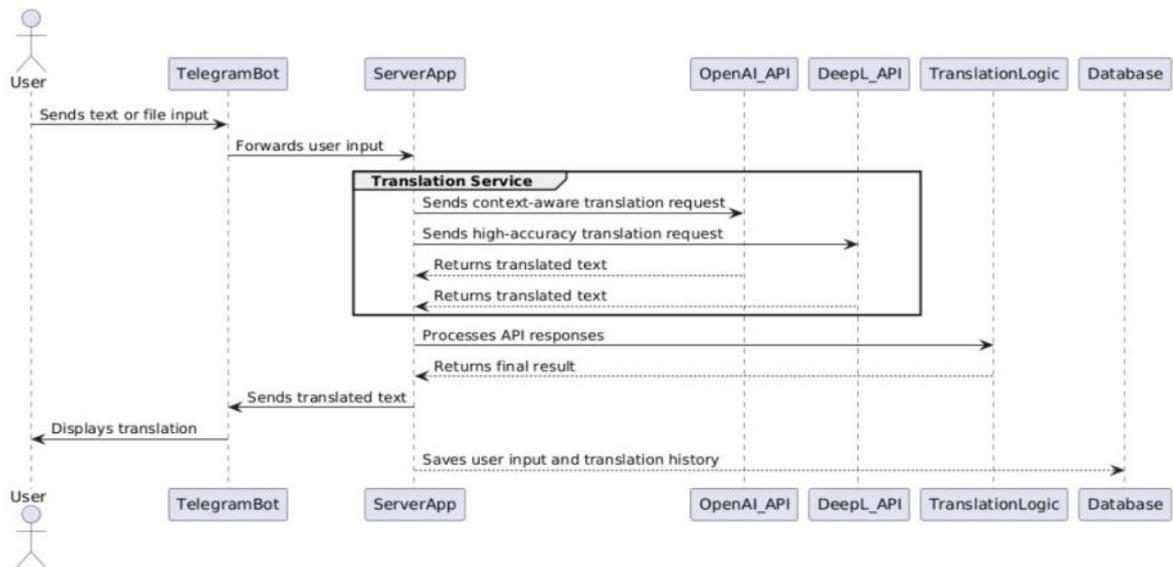


Fig. 1. – Chatbot user interface script for translation into a foreign language

The interaction scheme between the chatbot and the user is that the chatbot receives input data from the user, sends requests to the corresponding translation APIs and returns the translated result to the user.

References:

1. OpenAI API. URL: <https://openai.com/index/openai-api/> (дата звернення: 07, 11, 2020).
2. DeepL API. URL: <https://developers.deepl.com/docs> (дата звернення: 08.02.2022).