

Individual Project-310

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Introduction:

The chat-bot is a user-friendly bot which acts as a virtual companion for the user. In our days in the pandemic, we have become distant from our friends and family and usually when we are not able to see them in-person there is that feeling of isolation that surrounds us. Being relied on devices all the time makes us feel connected a chat bot would be a meaningful platform to make users feel connected.

Keeping that in mind the chatbot here allows the user to discuss hobbies, recommend books, music etc. just like any friend would. The chatbot allows the user to be comfortable as there is no in app-purchases involved and can be used limitlessly.

Objective:

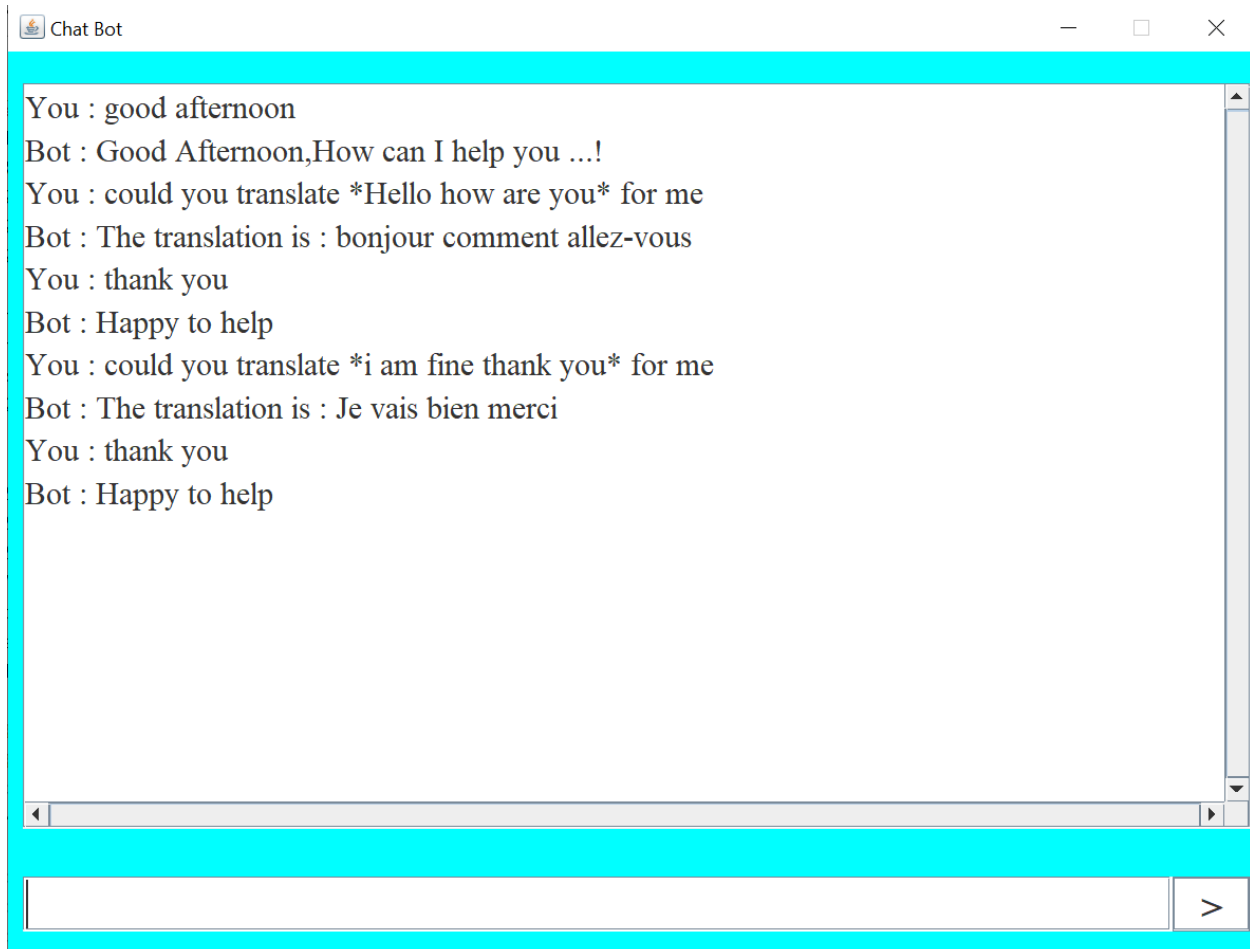
The main goal here is to create a chat bot using the given guidelines in the project assignments using APIs and other techniques to make the conversation flow better, to make the conversation more "human" like. Which would help the user to express themselves more freely and talk about hobbies and interests with ease.

New Additions:

1. **Google Translate API:** This API as the name suggests allows for the text in the applications to be translated into a particular language using real-time google neural machine.

Incorporating API into the chat bot:

- a. Firstly, going on google translate API a script was created to convert the code to a particular language in this chat bot French is the language to be translated. A scrip is already in place to incorporate API into java.
- b. We create a new java file where we write the code to translate passed strings into the language we want; in this chat bot we use French as the translated language.
- c. After importing URL libraries and successfully making a connection we make the translate method in which we pass the string which is to be translated from the chatbot.
- d. Below is a screen shot showing how the bot uses the translate method:



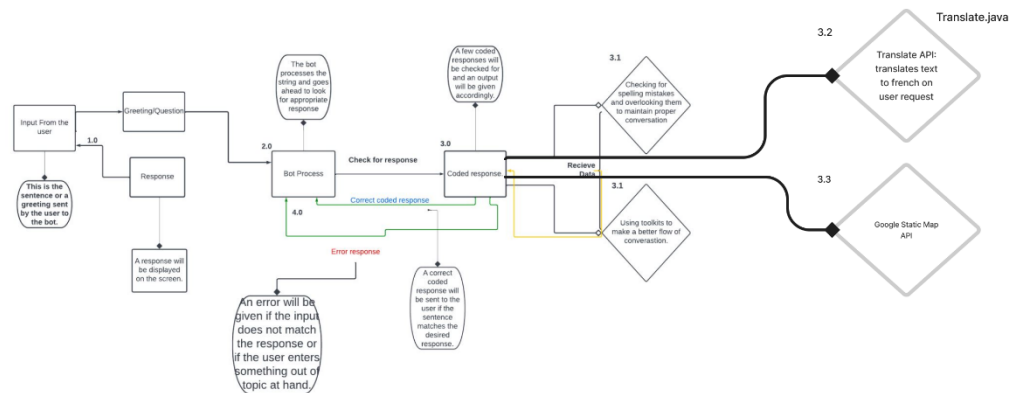
- e. The screen shot shows the output of the translations, the bot usually got confused with if the message "Hello how are you" was for it to answer. To tackle that I introduced Asterix (*) between which the user must type the text to be translated so that it is easier for the bot to carry out the task.
- f. The API works efficiently with the bot without any major issues.

2. **Static Map API:** This API lets the developer set a Google Maps image on the applications without and web application connection or other complex coding.

- a) The static map api can be arranged from the **developers.google.com** with using an API key we can create our own static map which can be embedded into the chat bot application.
- b) The map allows us to zoom in and out of places, allows us to choose between types of maps i.e satellite, hybrid etc.
- c) We first create a project on google developers and then create an API key to work on our maps.

Updated Data Flow Diagram:

Previously the data flow diagram depicted that the chatbot used, spell-checking and other toolkits to make smooth conversational flow. Now two more APIs have been added to make the chat bot more interactive and interesting while conversating with the user.



New Added Files:

- a) **Translate.java** : The file is basically made to help the user translate the text to French which is the language used in this chat bot. The user enters the text within ** to make it easy for the compiler to understand the operation and execute the command accordingly.

Readme file Updated on GitHub with this information : <https://github.com/Sunvat/Individual-Project--310>