

Software Engineering Individual Project

Mashad Chowdhury

Introduction:

My project is a simple and friendly chat-bot with which the user can talk about their hobbies, interests etc. I am using the chat bot as a friend but in most cases these days these bots are used for customer service. Keeping in mind the recent pandemic and how it has changed everyone's social lives. A virtual "friend" can make normal conversations and allows the user to chat to this bot anytime and share their experiences when their friends are busy or for the people who have a hard time socialising. I have used the Java GUI to create an interface for the chat bot and used Java as the programming language that is used to develop this chat bot.

APIs Incorporated into Chatbot:

Wikipedia API: The Wikipedia API extracts knowledge about a celebrity or famous person, whose name the user inputs (in my program, the chatbot reads the portion placed between asterisks), and the Chatbot outputs certain information about them such as name, a summary of their work, and a link to the online URL so the user can learn more about them.

Google Translate API: The Google Translate API reads a portion of the user input (in my program, the portion placed between brackets), and then outputs a real time translation of the inputted word or phrase, into a desired language (in my case, French).

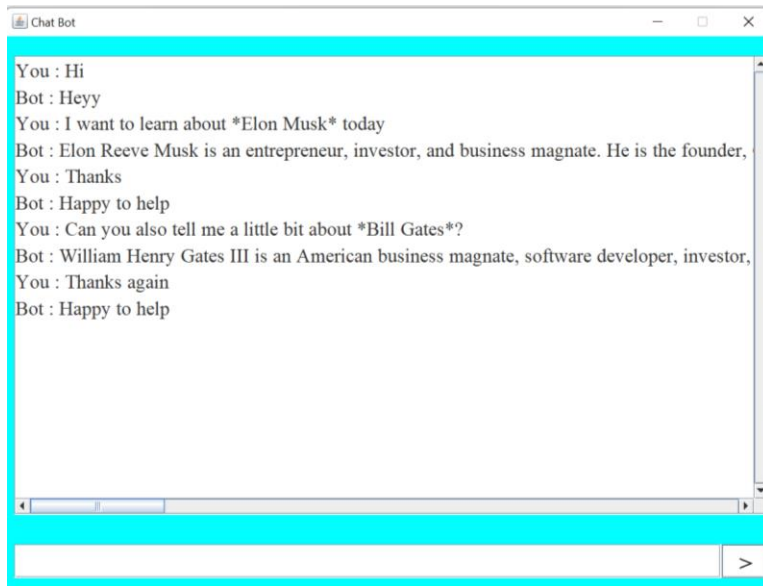
Added files for APIs to work:

JWiki.jar: This is a .jar file that the ChatBot uses to extract data from the Wikipedia URL connection. This file works by reading the user input that is placed between asterisks (as such: * bill gates *), and then locates the Wikipedia page that is titled Bill Gates. The ChatBot then displays in real-time the extracted data from that page, such as the title of the article (by using `.getDisplayTitle()`), summary of their work (by using `.getExtractText()`), URL of an image (by using `.getImageURL()`), etc.

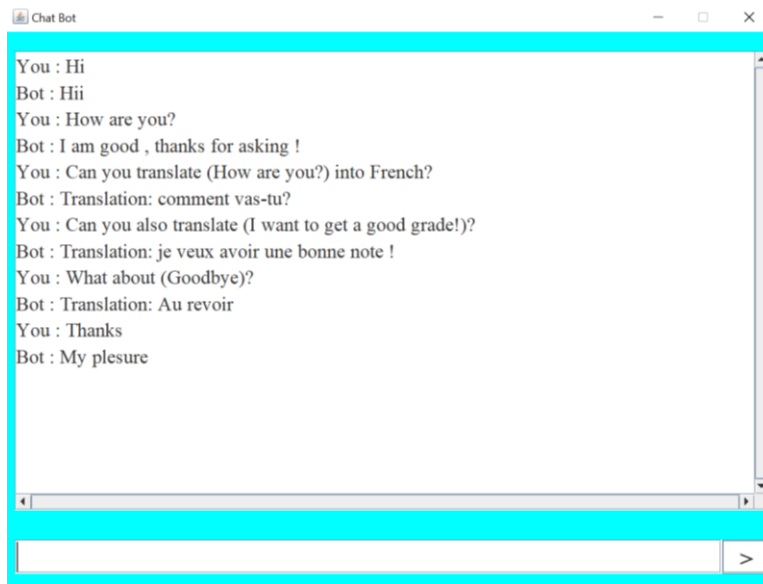
Translate.java: This is a java file that contains the required information to establish a connection with the Google Translate API. This file enables the ChatBot to read the portion of the user's input between brackets (as such: (How are you?)), after which the ChatBot outputs the respective translation of the input into French.

I have attached some screenshots below demonstrating the two APIs used:

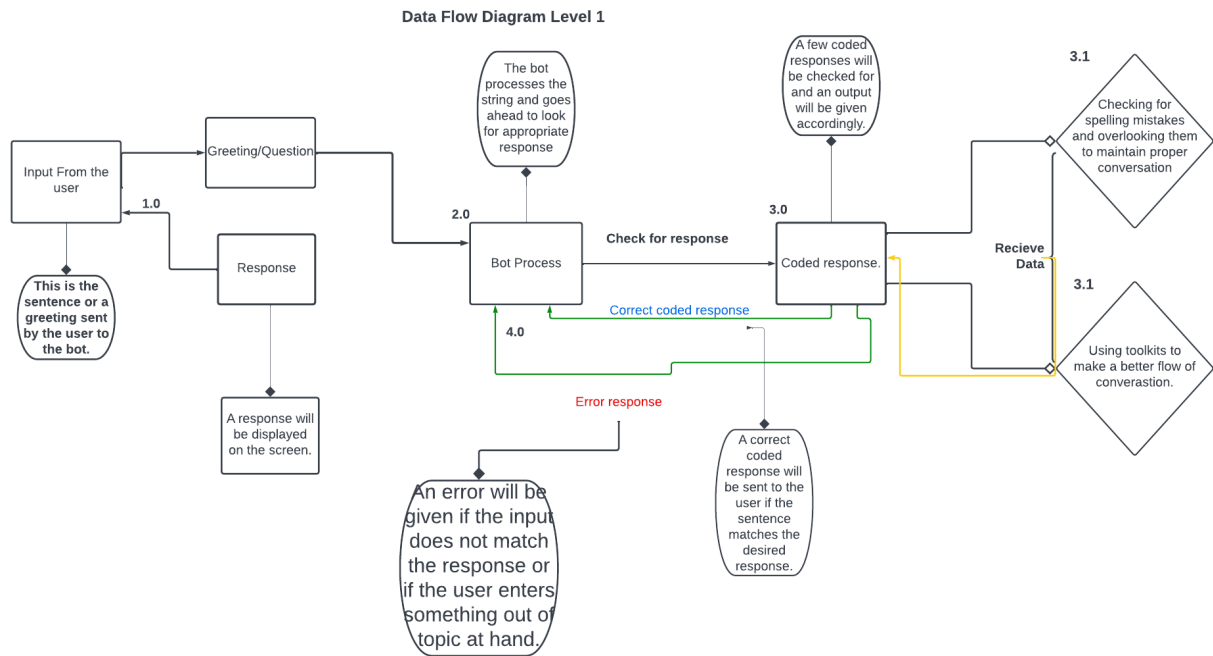
Wikipedia API screenshot:



Google Translate API screenshot:



Data Flow Diagram:



GitHub repo link:

<https://github.com/mashadchowdhury/individual-project-cosc310.git>

Mashad Chowdhury 29993987