## Assignment for Conversational AI Developer:

## **Problem Statement:**

Build a Restaurant Chatbot using Zomato API<sup>I</sup> from scratch using native NLP and Python libraries where the bot can help to find the restaurant using location<sup>2</sup> and cuisine preference shared by the user.

Feel free to improvise on the user experience if you have the reason behind it and can explain it to the stakeholder. We know that you will be searching for everything that is possible on Google to complete the assignment to impress us. But we want to help you enough so that you focus on building rather than figuring out things.

## You can,

- 1. Create training data consisting of relevant intents and tagged entities.
- 2. Train the intent classifier and entity extraction model using relevant NLP techniques.
- 3. Can use Redis to persist chatbot variables.
- 4. Once the intent is classified and the entity is extracted then use that information to execute a custom logic where Zomato API is being called and response is constructed and given back to the user.
- 5. Now the bot is ready and functional but it is not ready to serve the users. That's where you need to create a Flask application that can run on a port.

Dockerize the whole package, push it to GitHub and deploy it to the cloud platform of your choice. That's not it! Add a CI/CD on Github action where changes are deployed on the go. If a curious version of you is still not satisfied then you can think of integrating with the Front end<sup>3</sup> of the chatbot and give no reason for us to reject you.

Well, one thing is still missing! Finally, you would need to frame apt documentation so that all stakeholders can appreciate what you have done.

- You will be evaluated on the approach you take to solve the problem. Although finishing the complete assignment is awesome, it is not the end of the world if you can't. So, do submit your work. We would be happy to see how you have approached this.

- We don't want you to think just as a developer but think of it as a startup idea that you need to sell, get users, and investors onboard. Also, we would like this project to be well documented, think of it as an amalgamation of a pitch deck and usual developer documentation.

You will be evaluated on every step as mentioned above. Be assured! As long as you are submitting your assignment you will hear feedback from us.

## References:

- 1. Primary aim of the bot is to search a restaurant.
- 2. Bot should work for all the locations where restaurants on Zomato are listed.
- 3. https://github.com/LucasBassetti/react-simple-chatbot
- 4. Zomato API Docs: <a href="https://app.swaggerhub.com/apis-docs/Vivek-Raj/zomato-api/1.0.0">https://app.swaggerhub.com/apis-docs/Vivek-Raj/zomato-api/1.0.0</a>
- 5. Zomato API key: "a60df80ddb6a197f5e37a95238aa3432"

For any doubts and confusion please email <u>sameer.sinha@saarthi.ai</u> cc'ing <u>careers@saarthi.ai</u>, and we will get back to you as early as possible.