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LISA (a web-based chat-bot for college website)

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ABSTRACT

A chatbot is a piece of software that conducts a conversation via auditory or textual methods. Such programs are often designed to convincingly simulate how a human would behave as a conversational partner. A chatbot for a website is a chatbot that lives on your website LISA(LICET Interaction Service Assistant) is a web chatbot that helps the viewers or the users of the official website easily be able to access the information from the website that is difficult to reach. LISA is an emotionally intelligent chatbot that identifies the user's vague request and scores with positive and negative intents.

Keywords: Chatbot, Artificial Intelligence, Dialogflow, Kommunicate, Sentiment Analysis.

1. INTRODUCTION

A chatterbot or chatbot is a computer program designed to simulate an intelligent conversation with one or more human users via auditory or textual methods. A chatbot for a website is a chatbot that lives on your website, as opposed to a third-party platform such as Facebook Messenger, WeChat, or Telegram. It interacts with your website's visitors, most commonly via a text interface. The purpose of a chatbot on your website can vary. You could deploy a chatbot that helps your visitors find information about your product, helps your visitors by answering their questions, offers upsell options, and more. This chat-bot is used for the purpose of finding information that the website carries and helps the users answer questions. The responses are pre-programmed, but it also uses Artificial intelligence and is able to detect the dynamics of the user's questions and provide the relevant information the user needs.

2. RELATED WORK

A chatbot is a software application used to conduct an online chat conversation via text or text-to-speech, in lieu of providing direct contact with a live human agent. A chatbot is a type of software that can automate conversations and interact with people through messaging platforms. It uses Natural Language Processing (NLP) and sentiment analysis to communicate in human language by text or oral speech with humans or other chatbots. Artificial

conversation entities, interactive agents, smart bots, and digital assistants are also known as chatbots.

ELIZA was one of the first chatbots and the brain behind it was Joseph Weizenbaum. ELIZA's key method of operation involves the recognition of cue words or phrases in the input and the output of corresponding pre-prepared or pre-programmed responses that can move the conversation forward in an apparently meaningful way.

More recent notable programs include A.L.I.C.E., Jab-berwacky, and D.U.D.E. While ELIZA and PARRY were used exclusively to simulate typed conversation, many chatterbots now include functional features such as games and web searching abilities.

Chatbots are increasingly present in businesses and often are used to automate tasks that do not require skill-based talents. With customer service taking place via messaging apps as well as phone calls, there are growing numbers of use-cases where chatbot deployment gives organizations a clear return on investment. Call center workers may be particularly at risk from AI-driven chatbots.

3. CONCEPT DESCRIPTION

There are not many chatbots out there on a college website that provides information about the college and clears the queries the user has. Nowadays even when the websites provide a lot of information needed for the users, many are not that willing to search or dig around for the information that is available on the website.

But web chatbots make it, even more, simpler for the user to access information that the website offers. This project includes a web chatbot for the college website which enables the user to access information from the website easily by asking the chatbot questions. It includes features like speech to text, sentiment analysis, human handoff.

4. SOFTWARE REQUIREMENTS

A. Dialogflow: Dialogflow is a natural language understanding platform used to design and integrate a conversational user

interface into mobile apps, web applications, devices, bots, interactive voice response systems, and related uses.

- B. **Kommunicate:** Kommunicate is a modern customer communication software for real-time, proactive, and personalized support for growing businesses. Kommunicate is a one-stop solution for all your customer support problems.

5. INTERACTION WITH THE USER

From the user's point of view, the website has a chatbot with a user interface containing the message box, an attachment, and a speech-to-text button. An option to start a new conversation is available on the user interface. The visitor of the website can simply ask questions and the chatbot will answer them. If it is not able to answer then a human official from the college can take over the conversation from the bot and answer the questions of the user.

6. MODULES

- A. **Speech-To-Text:** Voice Module is a software powered by artificial intelligence (AI) that allows a caller to navigate an interactive voice response (IVR) system with their voice, generally using natural language.
- B. **Emotionally Intelligent:** Emotionally intelligent chatbot will recognize the emotion in the chat and answers accordingly. The bot which is created by Dialogflow is emotionally intelligent. The bot identifies the emotion and indicates it using positive and negative remarks.
- C. **AI:** A chatbot is a computer program that simulates human conversation through voice commands or text chats or both. Chatbot, short for chatterbot, is an Artificial Intelligence (AI) feature that can be embedded and used through any major messaging applications.
- D. **Human Handoff:** Chatbots are incredible automation tools that can streamline a variety of business workflows saving you both time and resources. Still, regardless of how much they can do, there are situations when human intervention is necessary. This is when a well-managed chatbot-human hand off comes into play. A human takeover is one of the key aspects of bot implementation because there are some complicated processes like the admission of students in the college. Hence, it's to manage the transfer as smoothly as possible.

7. WORKING OF THE CHATBOT

The chatbot was created using the template Dialogflow with pre-programmed responses. Using Dialogflow the chatbot is trained to detect the dynamics of the user's questions and find the respective answers from the responses. Sentiment analysis is also performed through Dialogflow, where the result of the user query's sentiment will be shown in either positive or negative scores.

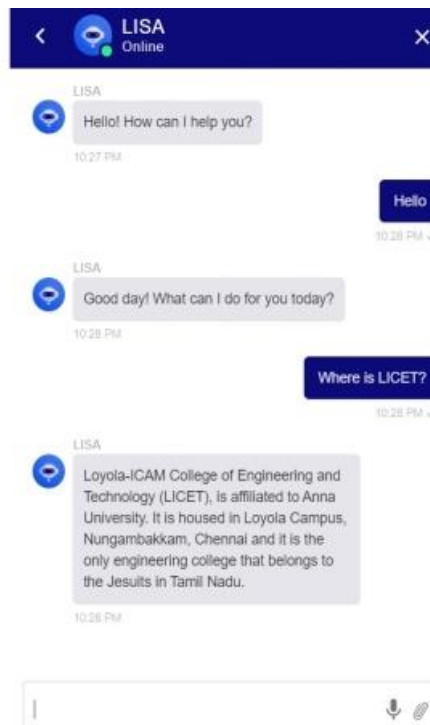


Fig. 1: Conversation with the bot.

6. CONCLUSION

Thus we have implemented a bot that improves and enhances the experience of the visitors to the website through its rich features with the help of Dialogflow and Kommunicate software. For future enhancements, the human hand off will contain a lot of members, and the calling feature will be added.

7. REFERENCES

- [1] <https://en.wikipedia.org/wiki/Chatbot>
- [2] <https://en.wikipedia.org/wiki/Dialogflow>
- [3] <https://github.com/Kommunicate-io>
- [4] Chatbots: History, technology, and applications Eleni Adamopoulou Lefteris Moussiades
- [5] An E-Commerce Website based Chatbot Siddharth Gupta, Deep Borkar, Chevelyn De Mello, Saurabh Patil.
- [6] A system for educational and vocational guidance in Morocco: Chatbot E-Orientation Omar Zahour*, El Habib Benlahmar, Ahmed Eddaoui, Hafsa Ouchra, Oumaima Hourrane
- [7] Chatbot for College Website Kumar Shivam, Khan Saud, Manav Sharma, Saurav Vashishth, Sheetal Patil