**PROJECT DESCRIPTION**

Government websites are considered as trust worthy and thus users make use of these web portals in an efficient way. One such web application is the All India Council for Technical Education Portal (AICTE Portal). Inspite of all the advantages, users also face difficulty in such websites. Thus, we conducted an online survey for a wide range of AICTE users, from which we derived insights of their issues, convenience, expectations and many more. We found majority of the users opting for Chatbot to solve their queries and concluded this would be an efficient solution for reducing the manual work and provide 24/7 service to the user.

Thus, implementing this problem statement of Chatbot with a Machine Learning Framework of RASA that is used for developing AI powered industrial grade chatbots and assistant. Rasa has major two components one among them is Rasa NLU, it is an open-source natural language processing tool for intent classification (decides what the user is asking), extraction of the entity from the bot in the form of structured data and helps the chatbot understand what user is saying. The other is Rasa Core which is in control of a dialogue solution that determines which actions to be done based on the training data. We trained all kinds of queries about AICTE by using the FAQs from the official sources of AICTE.

From the insights of the survey, we inquired that, users are opting for various kinds of input options such as text, audio and pre buttons. Thus we have taken into consideration of all the three and therefore our chatbot will be able to reply for the trained text as well as understand the user voice via microphone. The buttons are also directly given based on most FAQs by the users. Similar to that of the inputs, we have also brought responses in the form of simple text, in the form of audio for people unable to read, self-explanatory images for better user understanding, The response audio as an additional feature of muting and unmuting according to the user need. As some of the users also found difficulty in conversing in English, we also incorporated Hindi into our chatbot (Bilingual) to increase the user experience. The text responses from the chatbot contain the highlighted keywords to save time from reading the entire response. The input texts can also have an option of getting it typed in the built in virtual keyboard of our chatbot which is given as a built-in icon if needed.

Most of the users found it difficult for locating the desired information and thus wanted a system to reduce manual work and directly provide links. Thus we have responses having the direct clickable links that navigate to the respective web pages.

In order to increase user experience and help consumers grasp the information, our chatbot combines self-explanatory images and descriptive videos along with the text.

At the end of each of the query the user is asked to continue or quit, if quit is opted, then there is an additional option of admin query form in case the response of the chatbot is not sufficient and needs admin’s help. The conversation is ended by asking the user feedback. As all these conversations are taking place on the website chatbot, we also have an additional feature of storing the conversations or transcripts which can be accessed by the admin in order to collect client feedback or for future requirement. On the whole, if the user wants to continue the conversation later, or wants to start the conversation again, they can directly use menu options such as clear conversation, restart and close chatbot instead of refreshing the entire page. Thus, with all the above features, we have developed a user friendly chatbot environment which tackles all kind of queries and responses smart.