

Smart College Assistant with Speech Recognition and Computer Interface

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Abstract: A college chatbot is a system which is used to make conversation between human and machine in textual method. The user only has to ask any query to chatbot which is present on webpage/ website, the chatbot has its own database (in which all information is stored already) with the help of that it identifies the users query and make decision itself and give answer to given question. Student can ask any questions related to college in any language which our bot will understand it i.e. English or Kannada in text format or voice query. The chatbot is built with some algorithms like sentence similarity etc. from which when student will ask any query chatbot will first match the user query in database using sentence similarity method. The college chatbot also answers the queries through voice using the python libraries like flask, GTTS (get text to speech) and SpeechRecognition. If question is found invalid or not matched in dataset then an "Invalid question" response will be showed on screen. And if any answer found invalid then it can be deleted or modified by authorized person that is the admin.

Keywords: Speech Recognition, Natural language processing, Text based bot, sentence similarity, Artificial intelligence, Database, Webpage.

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