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# AI-Based Chatbot

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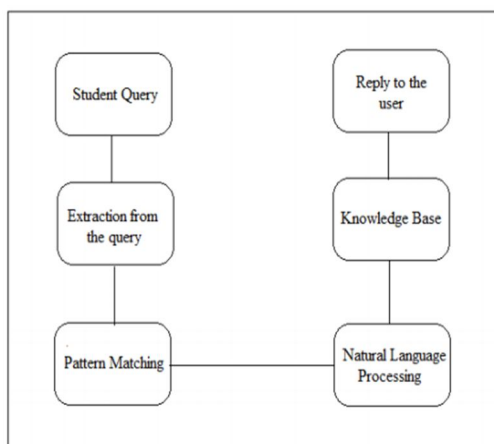
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**Abstract:** A chatbot is software used to develop interaction between a user/human and a computer/system in natural language, similar to human chats. Chatbots converse with the customer in a discussion following input from a human and a response to the customer. It makes the user believe that he is chatting with a human while chatting with the computer. The chatbot application helps the student to get information about the college admission process and get quick answers from anywhere with an internet connection. This chatbot system reduces the workload of the admissions department by providing students or parents with the information they need and also reduces the workload of the department, which has to constantly answer all the students' questions.

**Keywords:** chatbot, artificial intelligence, request, answer, query.

## I. INTRODUCTION

A chatbot is a computer software that helps to have a natural conversation with the user. The continuous development of information technology and communication has made artificial intelligence more complex. Artificial intelligence systems make use of human activities such as making decisions at a given time, completing everyday tasks, responding quickly to users, and answering queries in the same way as humans. There are numerous electronic organizations like e-business, entertainment, virtual assistance and some more. In this generation, everything is connected to the internet. It is extremely efficient to utilize one approach to manage and utilize everything at your doorstep. Chatbots are enough to fool users into thinking they are talking to a human, they have a very limited knowledge base at runtime, and have no way to keep track of all conversations. Chatbots use machine learning to achieve AI that helps them understand the user's questions/concerns and provide an appropriate response to the user. They are developed using Artificial Intelligence Markup Language to communicate or interact with the user. Chatbots are often referred to as answering machines. This application works in a very simple way as the knowledge is already programmed in advance. Some of the methods used in the application are pattern matching, natural language processing, and data mining. The chatbot matches the user's input sentence with the existing pattern in the knowledge base. Each pattern is compared with the knowledge of the chatbot taken from different sources.

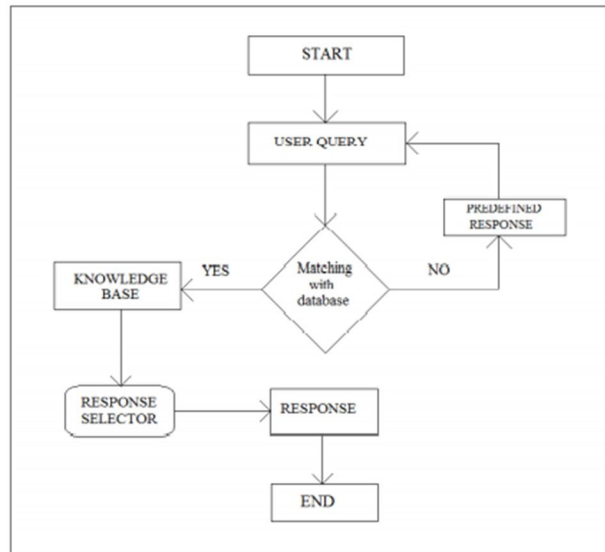


## II. LITERATURE REVIEW

Many applications consolidate a human appearance and try to reproduce human exchanges, but in most cases, the information used for conversation in a bot is entered into the database created by a human specialist. Through the use of AI, we can create different types of chatbots to be developed. In this paper, we have developed a chatbot for college queries. It has a variety of fields such as inquiry process, fee structure, course details, description of admission criteria and admission 3.

### III. METHODOLOGY

A chatbot is developed using a chatterbot algorithm. This is a Python library that can be used to easily generate automatic responses to user input. This makes it easy for developers to create chatbots and automated conversations with users. Some of the chatbot's tasks include presenting information and taking input. The proposed system simply takes the request from the user, who may be a student or a parent. The chatbot matches the query of the student or parent with the knowledge base and gives the appropriate answer.



### IV. CONCLUSION

The main objective of this chatbot was to develop an algorithm that recognizes the user's questions or queries and answers them accordingly. To develop a database where all the related data is stored and matched with the questions when the question is asked.



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