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Chatbot for College Website

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Abstract : A chatbot is a software that is used to interact between a computer and a human in natural language like humans chat. Chatbots chat with the user in a conversation in place of a human and reply to the user. The goal of this report on chatbot was to resemble a human being in the way they interact, trying to make the user think he is chatting with another human being. The chat bot application helps the students to access the university related information from anywhere with internet connection. This system reduces work of college administration providing information to students and also reduces the workload on the staff to answer all the queries of the students.

Keywords *: Chatbot, Artificial Intelligence, Enquiry, AIML, Response , Query.*

1. Introduction

Chat Bot is a computer program that can talk to humans in natural language, the way we interact with each other. It can replace a human for many tasks of answering queries. A chatbot is an agent that interacts with users using natural language. It was built as an attempt to fool humans. Several applications of chatbots such as Customer Service, call centers etc. uses Artificial Intelligence Markup Language to chat with user.

One of the prime goals of chatbots is to resemble an intelligent human and make it difficult for the receiver of the conversation to understand the real working along with various architecture and capabilities for their usage has widely broadened.

These chatbots can prove sufficient to fool the user into believing they are "talking" to a human being, but are very limited in improving their knowledge base at runtime, and have usually little to no means of keeping track of all the conversation data .

Chatbots makes use of machine learning to reach artificial intelligence helping them to understand the user query and provide an appropriate response. The chatbots are developed using the Artificial Intelligence Markup Language for communicating or interacting with the user. This consist a software which will be made up using Artificial Intelligence and will help user to chat with machine.
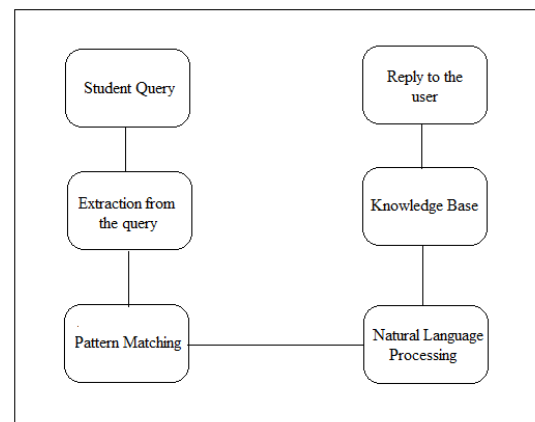

Fig.1 : Data Flow Diagram

2. Literature Review

There are numerous applications that are consolidating a human appearance and proposing to reproduce human exchange, yet in the majority of the cases the information of the conversational bot is put away in a database made by a human specialists. Be that as it may, not very many inquires about have explored making a talk bot with a fake character and identity beginning from website pages or plain content about someone in particular. This paper portrays a way to deal with recognizing the most critical realities in writings depicting the life of an authentic figure for building a conversational operator that could be utilized as a part of center school CSCL situations

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This paper portrays an adaptable technique for educating initial counterfeit consciousness (AI) utilizing a novel, Python-executed, basic operator system grew particularly for the reasons for this course. Albeit various operator systems have been proposed in the huge collection of writing, none of these accessible structures ended up being sufficiently basic to be utilized by fourth-year understudies of software engineering. structure that would be reasonable for the points of the course, for the level of registering aptitudes of the planned gathering of understudies, and for the span of this gathering of understudies. The substance of the initial AI course being referred to is an arrangement of assignments that requires the understudies to utilize keen specialists and other AI systems to screen, channel, and recover important data from the World Wide Web. It speaks to, in this way, an amalgamation of the customary objectivist approach and a certifiable situated, constructivist way to deal with instructing programming to amateurs. The fundamental point of executing such an instructional method was to connect with the understudies in figuring out how which they by and by relate while achieving scholarly meticulousness. Classroom encounter shows that understudies take in more viably when the conventional objectivist approach is joined with a constructivist approach than when this standard way to deal with instructing programming to amateurs is utilized alone.

Manmade brainpower machines are made to carry on in wondrous ways, frequently adequate to stun even the most experienced onlooker. Be that as it may, once a specific program is unmasked, once its inward workings are clarified ... its enchantment disintegrates away; it stands uncovered as a simple accumulation of systems ... The eyewitness says to himself "I could have composed that". With that idea he moves the program being referred to from the rack stamped "savvy", to that held for doodads ... The protest of this paper is to cause simply such a re-assessment of the program going to be "clarified". Hardly any system at any point required it more.

3. Proposed System

This System is a web application which gives reply to the question of the user. This system simply need to question through the bot which is utilized for talking. The System utilizes worked in counterfeit consciousness to answer the inquiry. The appropriate responses are suitable what the client questions. In the event that the appropriate response found to invalid, client simply need to choose the invalid answer catch which will tell the administrator about the inaccurate answer. Administrator can see invalid answer through entrance by means of login System permits administrator to erase the invalid answer or to include a particular answer of that comparable inquiry. The User can inquiry any college related exercises through the framework. The client does not need to go to the college for enquiry always. The System examines the inquiry and after that responses to the client. The framework answers to the inquiry as though it is replied by the individual. With the assistance of computerized reasoning, the framework answers the question asked by the understudies. The framework answers utilizing a compelling Graphical UI which infers that as though a genuine individual is conversing with the client. The client can question about the school related exercises through online with the assistance of this web application. This framework causes the understudy to be refreshed about the school exercises.

The proposed system will simply take the query of the user which can be a student or a parent, and will give response according to the query. The system will match the user query with knowledge base and see for the appropriate response. The system can also reply to the general queries of the student. The algorithm of the complete system can be understood by the following flow chart.
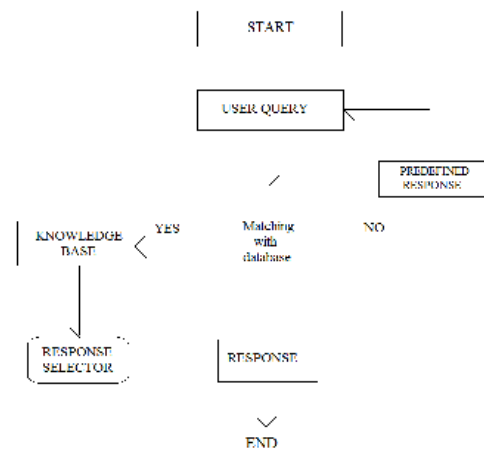

Fig 2 : Flow Chart of Proposed Model

4. Discussion of Current Scenario

- Chat bot system is unknown to people who are not updated with the technology.

- Even if there exist a chat bot system, it is not much accurate in proving the answer or solutions.
- Students need to manually visit to the college to get their queries answered by the college help desk.
- This process consumes lot of time as well as money as the customer needed to visit college if its miles away from home.
- Also, this process may lead to communication gap between student and college.
- No LIVE update platform yet for all student and parent queries
- No alternative available for student and parents beyond visiting college administration.

4.1 Objectives of this system:

- Reduce management effort.
- Provide necessary details to student and parent online.
- Provide information about college activities and schedule of current academic year.
- To get rid of manual efforts.
- To reach college administration easily.
- Reducing visit to college administration for every enquiry.
- 24x7 availability for all student and parent queries.
- Creating a situation of delight for parents and student with extra technical support.
- Students will get their queries resolved without any hassle to reach out the college administration.
- This application enables the students to be updated with college cultural activities.
- This application saves time for the student as well as teaching and non-teaching staffs.

5. Data and Results

We have created an application with the help of Facebook messenger API which is open source and uses artificial intelligence to interact with user and provide the desired information. This Facebook API is integrated with Python backend, webhook is used to deliver the query of the user to the server. We have used WIT.AI as a pre-trained artificial intelligence module so that we could use it's pre-trained neural networks to answer the user's query with efficiency and accuracy. We also made some custom modules/entities such as calendar, time-table etc. in the

wit.ai module to make it ample to answer college related queries. This application would be available on the college website, for this purpose we have created a static web page to mimic the college website. This webpage is built using html with bootstrapping and design part is done with help of html css.
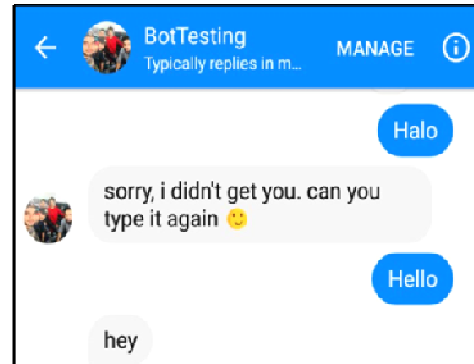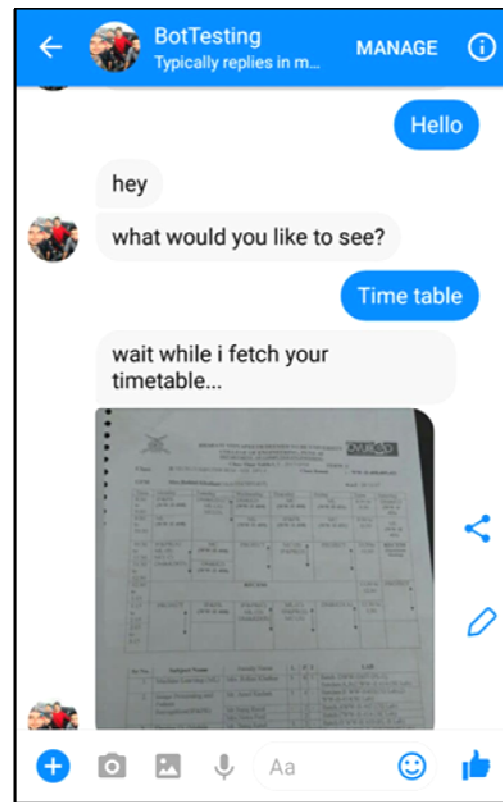
5.1 Test Cases:

Fig 3: Test Case 1

Fig 4: Test Case 2

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6. Conclusion

The main objectives was to develop an algorithm that will be used to identify answers related to user submitted questions. To develop a database were all the related data will be stored and to develop a web interface. The web interface developed had two parts, one for simple users and one for the administrator. A background research took place, which included an overview of the conversation procedure and any relevant chat bots available. We created a database , which stores all the information about questions, answers, keywords, logs and feedback messages. A usable system was designed, developed and deployed to the web server.

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