

INTELLIGENT BANKBOT SYSTEM

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ABSTRACT

The bank system has many processes which are not easy to understand to the bank user and thus it is time consuming for the user to interact with bank services. It becomes necessary to develop the bot system that will interact with user easily. The existing system currently available in the web sites or application format where customers can find information they want related to bank, but the proper navigation for accessing services is not available and data available is in large amount so the user can't get the correct and consistent data, so it is difficult to user to find the required data with in less time.

In the existing college chat bots system is available where students can find the information they want related to academics but the data available is in large amount, so it is difficult to find the required correct data within less time. There is need of system which allows different kind of interaction and interface so that customer can obtain useful information from bank system within less time.

Keywords: AIML, Artificial intelligence, Chabot.

INTRODUCTION

The Chat bots, which are software agents with an artificial intelligence that allows them to understand the user input and provide a meaningful response according to pre-compiled knowledge. The built in artificial intelligence system realizes users requirements and provides suitable answers to the user.

The Intelligent system is automation of activities associated with human thinking, decision making, and problem solving process. With the improvement of data-mining and machine-learning techniques, better decision-making capabilities. One of the key advantages highlighted was that whilst AI is increasingly automating customer interaction, it is also providing a more personalized experience. The Chat bots for example are being used by banks to handle routine enquiries and represent a more personalized experience than visiting the modern day substitute for branch banking, a website or app, where customers interact with layers of screens and drop-down menus instead of a person.

These chat bots, when integrated with the banks existing digital channel solutions, help provide a means to reach out to their customer better and faster.

II.LITERATURE SURVEY

For literature survey we refer following papers:

2.1 Intelligent chatbot for banking system, Mr. Aniket Dole, Mr. Hrushikesh Sansare, Mr. Ritesh Harekar, Mrs. Sprooha Athlye.

This paper is refer the intelligent chat bot which used to give information or answers to any question asked by user related to bank. Our Intelligent system will first take input from bank customer. This input will be taken as voice or written format. An artificial intelligence is most important and helpful part of our project. Intelligent system is automation of activities associated with human thinking, decision making, and problem solving process. This system will be available on web. Our system will represent the design and development of an intelligent chat bot.

2.2 An Internet Relay Chatbot using AIML, Mr. Om Komawar, Prasad Thakar, Rohit Shetty, Akshay Bartakke, Prof. Manisha Desai

This paper refer a chat bots (also known as a talkbot, chatbot, "Bot", chatterbox, Artificial Conversational Entity or similar) is a computer program which conducts a conversation via auditory or textual methods. Such programs are often designed to engage in small talk with the aim of passing the Turing test by fooling the conversational partner into thinking that the program is a human. However, chat bots are also used in dialog systems for various practical purposes including customer service or information acquisition. Some chat bots use sophisticated natural language processing systems, but many simply scan for keywords within the input and pull a reply with the most matching keywords, or the most similar wording pattern, from a textual database.

2.3 A Chabot system demonstrating Intelligent Behavior using NLP, Ameya Vichare, Ankur Gyani, Yashika Shrikhande, Nilesh Rathod.

This paper discusses the chat bots which is computer programs that interact with users using natural languages. Just as people use language for human communication, chat bots use natural language to communicate with human users. In this paper, we begin by introducing chat bots and emphasize their need in day-to-day activities.

2.4 AI BASED CHATBOT, Prof. Nikita Hatwar, Ashwini Patil, Diksha Gondane.

This paper refers the Chat bots which is software agents that interact with the user in a conversation. The main goal of their creation was to resemble a human being in the way they perform said interaction, trying to make the user think he/she is writing to another human being. This has been implemented with varying degrees of success. One of the most popular languages for the definition of a chatbot knowledge base is artificial Intelligence Markup Language(AIML).This thesis focuses on the implementation of an AIML interpreter written in javascript to allow for a web-based client-side specific usage of AIML chatbots. The interpreter must guarantee the compliance of properly formed AIML documents, perform all the necessary pre-processing duties for the correct usage of the chatbot and ensure the correctness of both pattern matching of user input and chatbot response. The result is a well performing fully functional AIML interpreter tailored around AIML 1.0 specification. A chat bot is software that is used to interact between a computer and a human in natural language. Naturally, it can extend daily life, such as help desk tools, automatic telephone answering systems, to aid in education, business and e-commerce.

III.PROPOSED SYSTEM

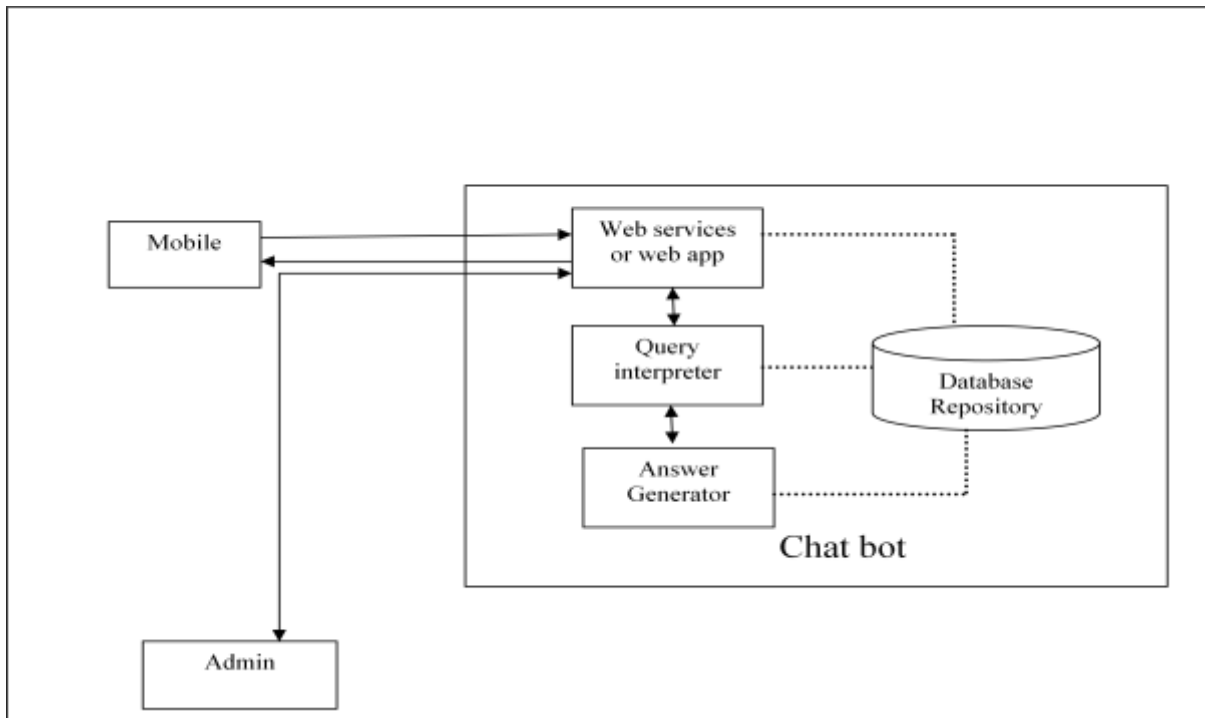


Fig. Architecture of banking chatbot

This is the architecture of our system. In this, user gives the input in the form of voice or text. If the input is in the form of voice, then it will be converted in the form of text by using voice to text converter. The input is then passed to the query interpreter of chat bot. The query interpreter will interpret the input using Intelligence System and send request to the web server; server will collect data from respective repositories which are maintained by the admin. The output from query interpreter matches with repositories and generate the answer as per pattern matching. At last, web server will send the result back to the chat bot. The result can be in the form of text. Finally, the user can get the required result.

IV.MODULES

4.1 Create user information repository

In this module we use banking system to collect basic information about account holders like account holder name, account number, address, etc. and some of the transactions details like credit and debit. In this module use first register the detail information into the system then admin will verify the information and then it authorize the user id then user will successfully log into the system.

4.2 User Input Module

In user input module we develop the android application and in android application account holders will have to login by entering their account number and password details, after the successful login user will enter the question in form of text & voice.

4.3 Question Processing Module

If the user uses voice input formats then this module convert the voice to text format and then it will pass to query interpreter. The query interpreters will interpret the input query using NLP(Natural Language Processing) and NLP will convert the query into specific format, removing of stop words and so on.

4.4 Answer Generation Module

The meaningful word of question we take from question processing module and it will be send to server then server will match the appropriate patterns from repositories and after the matching the answer will be send to the user into proper format.

After receiving question from users system will process by AIML (artificial intelligence markup language) that question and will provide answer to user. Here system will use data provided by banking system and data provided by administrator.

V.RESULT

5.1 Customer login



This is android app login screen for customer. Customer login with their valid account number and password. For enquiry purpose new customer enter in the system without login.

5.2 Chat with Bankbot



This chat activity screen use for chat with bank bots system. Customer enter query what he want related bank. And then he click on the send button, if the answer is present in the database then he will get the answer.

VI.CONCLUSION

The banking chat bot system is very useful for bank user and bank to interact with each other within less time and user will get an appropriate response to their query. This system will be helpful to reduce the workload of employees and increase the productivity of bank service and due to an AIML files accurate and quick answers will be given to user. The non educated persons also easily interact with the bank system using voice input facility.

REFERENCES

Books:

- [1.] Voice application development for android by Michael F. Mctar, Zoraidacallejas
- [2.] Learning PHP, MySQL & JavaScript by Robin Nixon
- [3.] The Unified Modeling Language reference manual, second edition by James
- [4.] Rumbaugh, Ivar Jacobson and GraddyBooch

Paper

- [1.] Mr. Aniket Dole, Mr. Hrushikesh Sansare, Mr. Ritesh Harekar, Mrs. Sprooha Athalye, "Intelligent Chat Bot for Banking System", IJETTCS ,Volume 4, Issue 5(2).
- [2.] Mr.Om Komawar, Prasad Thakar, Rohit Shetty, Akshay Bartakke, Prof. Manisha Desai, "An Internet Relay Chat Bot using AIML",IJSR ,Index Copernicus Value (2013): 6.14
- [3.] Ameya Vichare, Ankur Gyani, Yashika Shrikhande, Nilesh Rathod, "A Chabot system demonstrating Intelligent Behavior using NLP", IJARCET, Volume 4 Issue 10.
- [4.] Prof.Nikita Hatwar, Ashwini Patil, Diksha Gondane, "AI BASED CHATBOT", IJEEBS, Volume3