

## Bank Chat Bot Using Python

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**Abstract:** Chat bots are the system or you can say a software that act as a normal person to solve your problems or deal with the situations that you are facing off. So, we are making a project on the bank chat bot. Which will help the users of the bank for doing any tramp. It helps like a real person such as we go to a bank for any help and we contact a person for this. But this bank chat bot will help us instead of a person to solve our worry .So, by remaining in our homes only we can get benefitted. It is a very handy software in nowadays online systems. Due to the COVID-19 people cannot get out so, people can use this initiative to solve their problems that they are facing with their banks. Our chat bot system can do every type of work that a bank can do such withdraw , deposit, knowing about the bank and each item . So it is a most beneficiary thing in our lifestyle.

**Keywords:** Chatbot, Bank , Python

### 1. Introduction

Banks plays an crucial role in each country's profitable evolution. In mudane, each person requires banks. Even nearly-all the person, mostly the novice, grapple for different policy & writ need for getting their toil done towards the bank and profit unlike consequence & assistance. Forthwith banks have their self websites, mobile apps and assistance like online banking, cyber banking but everytime, these sources can't be a bit overwhelming for every users who are again ailing conversant escorted machinery & in myriad instance emplacement data is overly disperse to forage for doubtlessly. There exists remarkable epitome of policy arranged beside unlike banks nonetheless person are facing problems retrieve this one (unlike GUIs, very much seamanship). Howbeit consumer supervision focus exists accessible, there are enough patient tempo & deflect, in anonymous occurrence, pulled of the shopper with none of the alternatives, instead of occurrence significant detain acquiring a uninvolved data quizzing determined. Person, possess quizzing regarding different bank, strategies, debenture, firm sublimate. Aforementioned outcome in ,superfluous throng, inside banks for question. Banks too finds difficulty resolving replicable interrogation of consumers. Aforementioned is tempo, devour & money dealing crutch getting thwart. Personnel & amount obtain misspent being discrete jetton counter.

#### A. Basics of Chatbot

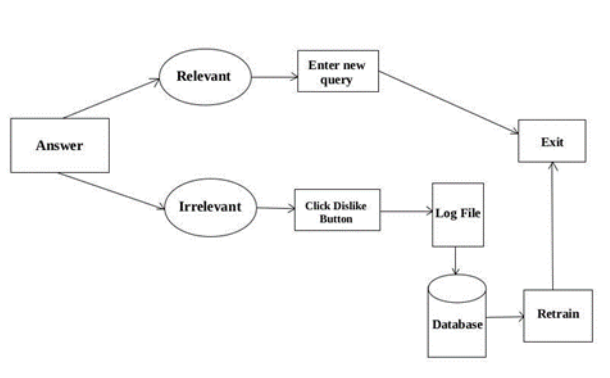
A chatbot acts as medium or you can say like an agent between the person and the bank.

Basically a chat bot acts or starts into and out of asking a question by the user. We can say a chat bot as an medium through which users can talk. They are very intelligent and drudgery as real humans. Chat bots acts through an artificial intelligence and give significant reply to every people about their query.

#### B. Chatbot for Banks

By growing a chatbot we get every type of solutions we want, it furnishes the correct data when and where have need of, by this it can improves the performances of a bank & can also expand the consumers. It detaches the personage element in corporation & could gave 24/7 hours of favour to expand the, abundance of the bank. Want to dispense a chatbot alliance for consumers what credible be accessible anywhere & everywhere required by the customers. Our chat bots can be so come into being that any user could ask any query in their native vernacular and chat bot can easily give their response. Suggested system will be so effective that any people can work on it and it will be very user friendly. The time of the user's will also be saved because the chat bots can give very rapid and fast response. The suggested system would be a auspices inaugurate clever interrogation grasp the scheme which conceivable in above stages seldom equitable replication yet autodidactic to ameliorate oneself hence it increases seldom only the standard of the customers amenity instead again lessen the personage freight, gaining in the abundance & of bristly gaining aggregate the pleased consumers. So from this customers will be pleased with the bank, and a bank can grow its customers.

## Feedback System



To exist are some circumstances whether a chatbot impotent permit an accurate response to the question, because all the data cannot be stored in the data set. For so very situations have given a reaction segment in my chatbot system. So, that we can further toil on it. If, the user is not pleased with the response given by the chat bot the user can give any feedback. After that the developer had to toil for the difficulty that the user is cladding. Then the developer will work on the question and add that in the database with the accepted or exact answer. So after that any user is veneer the same problem he/she cannot get the incorrect answer from the chat bot.

## 2. Tools for Implementations:-

Preconditions are susceptible to matter of equivocation, rawness, & incompatible. Approach kind-of careful survey looked to help hand-out with these matters. Equivocation, rawness, & incompatible that could be end in the obligation part mostly costly orders of immensity lessen to accurate then when these self same problems are establish in behind stages of result evolution. Demand inspection moil to address these problems. We will use Python for evolve our chat bot.

Pre-processing : Here we have used the NLTK library for Natural Language Processing of language. So that the, chatbot can recognize any natural language. The user input will be in the, English statement so to let the chatbot recognize this language we use the Natural Language Processing tool. To lessen later processing and to remove the ambivalence the bot had to execute very well.

## 3. Literature Reviews:-

Bank chatbot uses as a project is found on applicable mechanics. The chief sight of the project is to enhance software for bank chatbot system. This project is to enlarge software for bank chatbot system. This project has been enlarge to, carry out the things easily and quickly, which is not very feasible with the chatbot systems, which are controlled by this software. This project will be done using Python language and. Hence it provides the proper answer for the current management system.

## 4. Problem formulation:-

The main difficulty that make an apperance during the project emergence will be carry on the users of the bank. If a user gives up then all it's data should also be detached so that we can direct the data dimensions also. And at the time of adding a new user the same type of enterprise should be lay hold of. The bank chatbot system is an project for keep on going a person's account in a bank. The project supply the ingress to the consumer to open an account, deposit/withdraw the amount from his account, also to see the details of every accounts currently available. The presented, presentation come up with the identification for arrangement.

## 5. Merits Of the System:-

Simplicity of Use of the System:-

It is very simple to use this software of the chatbot. Even a small kid can easily chat with the bot.

Reduction in the Cost of Operation:-

It helps to lessen the personnel that a software requires at each bough to complete its operations freely.

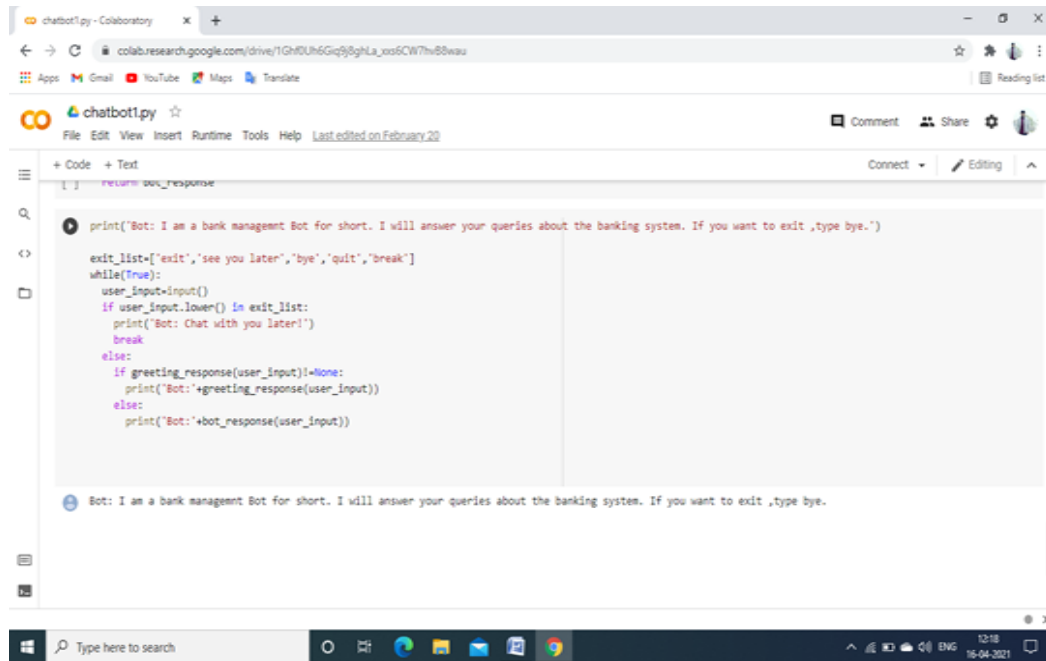
24/7 Availability:-

The superiority of banking chatbot software is that the consumers can construct chats around the globe. They can approach their bot from every part of the globe and can make a transaction at their, mitigate.

## 6. Conclusion

Our chat bot will be made and will be executed successfully. And it can perform or can give all types of questions that user will ask.

It will work according to the user's need and will be very helpful.



```

print("Bot: I am a bank management Bot for short. I will answer your queries about the banking system. If you want to exit ,type bye.")

exit_list=["exit", "see you later", "bye", "quit", "break"]
while(True):
    user_input=input()
    if user_input.lower() in exit_list:
        print("Bot: Chat with you later!")
        break
    else:
        if greeting_response(user_input)!=None:
            print("Bot:"+greeting_response(user_input))
        else:
            print("Bot:"+bot_response(user_input))
  
```

Bot: I am a bank management Bot for short. I will answer your queries about the banking system. If you want to exit ,type bye.

## 7. Future Scope Of The Project

Increasing the size of the database

Giving the answers by using it's machine learning technologies and giving the accurate answers as closer as possible

Chatbot can give the answer as close as possible

Giving the results about all the questions asked by user through url

## References

1. Automatic Extraction of Chatbot Training Data from Natural Dialogue Corpora, Bayan AbuShawar, Eric Atwell
2. Chatbot Evaluation and Database Expansion via Crowdsourcing, Zhou Yu, Ziyu Xu, Alan W Black,
3. Alexander I. Rudnicky
4. AI BASED CHATBOT, Prof.Nikita Hatwar, Ashwini Patil,
5. Diksha Gondane
6. Data Mining: Concepts and Techniques Jiawei Han and Micheline
7. Kamber
8. H. Kopka and P. W. Daly, Data Mining Practical Machine Learning Tools and Techniques Ian H. Witten Eibe Frank Mark A. Hall
9. <https://www.cse.iitb.ac.in/~bibek/WriteUP2016.pdf>
10. <https://cs224d.stanford.edu/>
11. <https://scikit-learn.org>
12. <http://www.nltk.org>
13. <http://www.wikipedia.org>
14. <https://chatbotmagazine.com/the-complete-beginner-s-guide-to-chatbots-8280b7b906ca.i2zgq12op>
15. <https://www.quora.com/What-is-the-best-way-to-learn-and-write-a-AI-Chat-bot>
16. <https://chatbotslife.com/ultimate-guide-to-leveraging-nlp-machine-learning-for-you-chatbot-531ff2dd870c.5mcveo57b>
17. <https://apps.worldwritable.com/tutorials/chatbot/>
18. <http://machinelearningmastery.com/>
19. <http://flask.pocoo.org/>

20. [pandas.pydata.org](https://pandas.pydata.org)
21. <https://www.pandorabots.com/>
22. <http://www.wildml.com/2016/04/deep-learning-for-chatbots-part-1-introduction/>
23. <https://stanfy.com/blog/advanced-natural-language-processing-tools-for-bot-makers/>