

# E-Commerce Chat Bot Using Python

Goutham T

*Department of Computer Application Jain University Bangalore, India*

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**ABSTRACT** - This paper introduces a chatbot for selling physical and digital goods and also services. This chatbot is applicable to direct and indirect marketing. The proposed design of the chatbot can be used for selling goods and services through flyer's social network, direct emails, web catalogs and similar channels. Groups are collections of users that have access to group feed. The user who creates a group is set as the initial group owners. Posts are grouped by thread in a group containing the most recent activity at the top. The chatbot API will allow developers to create new chatbot, powered by rules or artificial intelligence, that can interact like a human with users in a group's feed pages. Example chatbot that can be developed with this API is weather chatbot or book flight chatbot. Over the past few years, messaging applications have become more popular than social networking sites. People are using messaging applications these days such as Facebook Messenger, Skype, Viber, Telegram, Slack etc. This is making other businesses available on messaging platforms leads to proactive interaction with many users, the businesses can write a computer program that can converse like human which is called a chatbot. The main goal of this proposed design is to make conversion faster. The customer's purchases and information can be used to generate specific target audiences to send deals and promotions. It can be integrated into any e-commerce platform with minimum configuration.

## I. INTRODUCTION:

Online shopping doesn't follow a single path. Just like there are many channels you can list your products on, there's an abundance of ways to make an online purchase apps, emails, social media. These multiple options can be disorienting to customers if there isn't one clear route for reaching businesses.

Enter "conversational commerce," or businesses and buyers connecting through messaging apps. Companies today can use chatbot to instantly communicate with customer and resolve their issues on multiple platforms, such as Facebook or their online store. These round-the-clock bots use AI to infer customer's preferences and create a valuable, individualized shopping experience.

Learning how to set up your business for conversational commerce isn't always clear since bot technology is still developing to help sellers out, we've created this guide to cover everything from defining exactly what a chatbot does to measuring your bot ROI.

Apply this knowledge to your online business, and you will be set to launch your first bot. With this new technology, your business can immediately meet customer wants to create a personal and helpful shopping experience.

ChatBot for e-commerce companies are typically designed to:

Complete buyer's purchase Offer buyers product recommendations

Provide customer support

## II. BACKGROUND AND LITERATURE:

### A. Literature Review

| Author   | Year | Year of publication | Area   | Area   |
|--|------|---------------------|--|--|
| Goldberg, J. (2017)                                      | 2017 | 2017                | Importance of Chatbot                                    | Machine Learning                             |
| Journal of Computational Linguistics and Language Theory | 2017 | 2017                | Results of natural language processing in an NLP chatbot | Technical and domain problems in NLP         |
| Journal of Computational Linguistics and Language Theory | 2019 | 2019                | Use of technology to enhance customer experience         | Customer satisfaction, Profits in enterprise |
| Journal of Computational Linguistics and Language Theory | 2016 | 2016                | Detailed description about Python and NLP                | Only for chatbot based on NLP                |
| Journal of Computational Linguistics and Language Theory | 2017 | 2017                | Efficiency of chatbot                                    | Time based chatbot                           |

### B. Natural Language Processing: Natural Language

Processing(NLP) is the study of letting computer understand human language. Without NLP human language sentence are just a series of meaningless symbols to computer. Computer don't recognize the words and don't understand the grammar. NLP can be regarded as a "translator", who will translate human language to computer understandable information.

### C. Machine Learning:

Machine Learning(ML) is an area of computer science that "gives computer the ability to learn without being explicitly programmed". The parameter of the formulas is calculated from the data, rather than defined by programmer. Two most common usage of ML is classification and Regression.

## III. PROBLEM IDENTIFICATION:

Changing of requirement as an industrial project to build a product, we must follow the requirement form the user. However because the project, goal is to be used by the business team, but it is responsible by the technical team the requirement

changed a lot in the middle after a meeting with business team. The business team want simple not that can give recommendation immediately. We had to archive what we had done before and build a new one.

## IV. REQUIREMENT:

Software Requirement:

Operating System: Windows or Linux

Technology: Python, Pycharm

Hardware Requirement:

Processor: Pentium

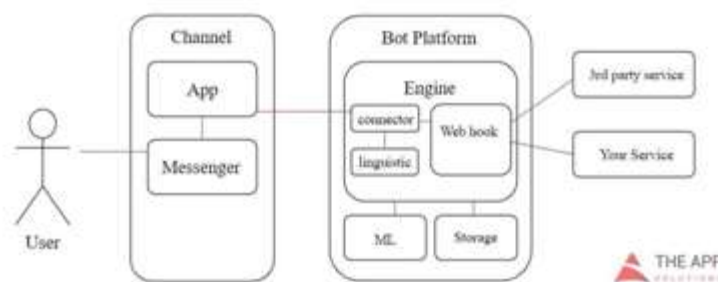
IV(minimum)

Hard Disk: 40GB RAM: 256MB(minimum)

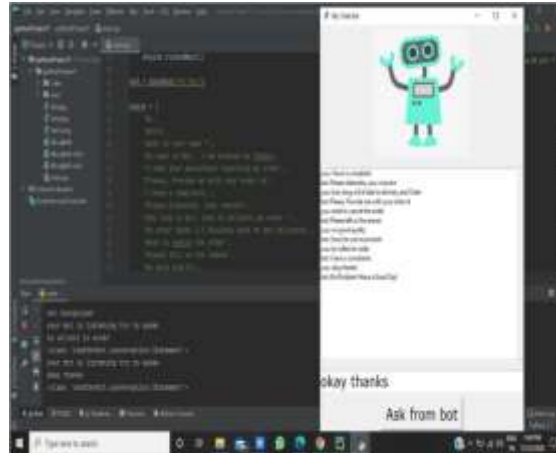
## V. ARCHITECTURE:

AI based chatbot are more advanced than the previous one. By using AI and NLP, bots can understand user input and answer with relevant non-pre defined answers. You can even empower your bot with ML algorithm, so the bot can learn from each interaction with a user and remember one preference. Still AI chatbot require per-launch training, thus you need to hire chatbot developer,

### How do platform-based AI chatbots work



## VI. RESULT:



## VII. CONCLUSION:

Chatbot are the new Apps! As we have discussed in the above deliverable, the power of chatbot to Yioop and enriches its usability. Chatbot in Yioop can give a human like touch to some aspects and make it an enjoying conversation and they are focused entirely on providing information and completing tasks for humans they interact with the above mentioned functionality in all the deliverable is implemented and pushed into Yioop code.

By implementing the above mentioned deliverable was able to add a basic chatbot functionality in to the Yioop I.e., configuring and creating accounts for bot users with bot settings which is mentioned in deliverable, Activating a bot whenever a user asks for it via post in a thread which is discussed in deliverable, as discussed in deliverable, I have implemented a simple recognize to chatbot that will recognize my language when I run the chatbot.

## REFERENCE:

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