CREATE CHATBOT IN

PYTHON

<u>BATCH MEMBER</u>

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<u>INTRODUCTION:</u>

Creating a chatbot in Python is an exciting and valuable project that can help automate communication, provide assistance, and enhance user experiences in various applications. Whether you're building a chatbot for customer support, a virtual assistant, or just for fun, this endeavor can be both educational and rewarding.

In this introduction, we'll briefly outline the key components and steps involved in creating a chatbot in Python.

<u>ABSTRACT</u>:

- The days <u>o</u>f solely engaging with a service through a keyboard are over. Users interact with systems more and more through voice assistants and chatbots. A chatbot is a computer program that can converse with humans using Artificial Intelligence in messaging platforms. Every time the chatbot gets input from the user, it saves input and response which helps chatbot with little initial

knowledge to evolve using gathered responses. With increased responses, precision of the chatbot also gets increases.   The ultimate goal of this project is to add a chatbot feature and API for Matrusri Engineering College. This project will investigate how advancements in Artificial Intelligence and Machine Learning technology are being used to improve many services

- Specifically it will look at development of chatbots as a channel for information distribution. The program selects the closest matching response from closest matching statement that matches input utilizing WordNet, it then chooses response from known selection of statements for that response. This project aimed to implement online chatbot system to assist users who access college website, using tools that expose Artificial Intelligence methods such as Natural Language Processing, allowing users to communicate with college chatbot using natural language input and to train chatbot using appropriate Machi

MODULE :

- Nobody likes to be alone always, but sometimes loneliness could be a better medicine to hunch the thirst for a peaceful environment. Even during such lonely quarantines, we may ignore humans but not humanoids. Yes, if you have guessed this article for a chatbot, then you have cracked it right. We won't require 6000 lines of code to create a chatbot but just a six-letter word "Python" is enough.

- Let us have a quick glance at Python's **ChatterBot** to create our bot. ChatterBot is a Python library built based on machine learning with an inbuilt conversational dialog flow and training engine. The bot created using this library will get trained automatically with the response it gets from the user.

Why Chatbots are important for a Business or a Website

- Quick resolution for a complaint or a problem.
- Improve business branding thereby achieving great customer satisfaction.
- Answering questions and answers for customers.
- Making a reservation at hotel or at restaurant.
- Save human effort 24×7.
- Enhance business revenue by providing ideas and inspirations.
- Finding details about business such as hours of operation, phone number and address.
- Automate sales and lead generation process.
- Reduce customer agents waiting time answering phone calls.

Benefits of using Chatbots

- 24×7 availability.
- Instant answers to queries.
- Support multi-language to enhance businesses.
- Simple and Easy to Use UI to engage more customers.

- Cost effective and user interactive.
- Avoid communication with call agents thereby reducing the time consuming tasks.
- Understand the Customer behavior
- Increase sales of business by offering promo codes or gifts.

Types of Chatbots

Chatbots deliver instantly by understanding the user requests with pre-defined rules and AI based chatbots. There are two types of chatbots.

- **Rule Based Chatbots:** This type of chatbots answer the customer queries using the pre-defined rules. These bots answer common queries such as hours of operation of business, addresses, phone numbers and tracking status.
- **Conversational AI Chatbots:** This type of chatbots using Natural language Processing(NLP) to understand the context and intent of a user input before providing the response. These Bots train themselves as per the user inputs and more they learn, more they become user interactive.

Installation

Install chatterbot using Python Package Index(PyPi) with this command

```
pip install chatterbot
```

Below is the implementation:

- Python3

```python
# Import "chatbot" from
# chatterbot package.
from chatterbot import ChatBot


from chatterbot.trainers import ChatterBotCorpusTrainer
chatbot=ChatBot('corona bot')
trainer = ChatterBotCorpusTrainer(chatbot)
trainer.train("chatterbot.corpus.english.greetings",
              "chatterbot.corpus.english.conversations" )

response = chatbot.get_response('What is your Number')
print(response)

response = chatbot.get_response('Who are you?')
print(response)
```

Output:

```
Training greetings.yml: [####################] 100%
Training conversations.yml: [######          ] 33%

[nltk_data] Downloading package stopwords to /home/nikhil/nltk_data...
[nltk_data]   Package stopwords is already up-to-date!
[nltk_data] Downloading package averaged_perceptron_tagger to
[nltk_data]     /home/nikhil/nltk_data...
[nltk_data]   Package averaged_perceptron_tagger is already up-to-
[nltk_data]       date!

Training conversations.yml: [####################] 100%
I don't have any number
I am just an artificial intelligence.
```