

As per the Oxford Dictionary, a chatbot is defined as “A computer program designed to simulate conversation with human users, especially over the internet.”

+ Code

+ Text

```
1 ! pip install chatterbot

Collecting chatterbot
  Downloading https://files.pythonhosted.org/packages/7c/21/85c2b114bd9dfabdd46ba58fc4519acdaed45d8c70898d40079e37a45e67/ChatterBot-1.0.8-py2.py3-none-ar
  |████████████████████████████████████████| 71kB 3.8MB/s
Requirement already satisfied: sqlalchemy<1.4,>=1.3 in /usr/local/lib/python3.6/dist-packages (from chatterbot) (1.3.20)
Requirement already satisfied: python-dateutil<2.9,>=2.8 in /usr/local/lib/python3.6/dist-packages (from chatterbot) (2.8.1)
Collecting mathparse<0.2,>=0.1
  Downloading https://files.pythonhosted.org/packages/c3/e5/4910fb85950cb960fcf3f5aabelc8e55f5c9201788a1c1302b570a7e1f84/mathparse-0.1.2-py3-none-any.whl
Requirement already satisfied: pytz in /usr/local/lib/python3.6/dist-packages (from chatterbot) (2018.9)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.6/dist-packages (from python-dateutil<2.9,>=2.8->chatterbot) (1.15.0)
Installing collected packages: mathparse, chatterbot
Successfully installed chatterbot-1.0.8 mathparse-0.1.2

1 ! pip install chatterbot_corpus

Collecting chatterbot_corpus
  Downloading https://files.pythonhosted.org/packages/ed/19/f8b41daf36fe4b0f43e283a820362ffdb2c1128600ab4ee187e84262fa4d/chatterbot_corpus-1.2.0-py2.py3-
  |████████████████████████████████████████| 122kB 5.5MB/s
Requirement already satisfied: PyYAML<4.0,>=3.12 in /usr/local/lib/python3.6/dist-packages (from chatterbot_corpus) (3.13)
Installing collected packages: chatterbot-corpus
Successfully installed chatterbot-corpus-1.2.0
```

Chatbots are nothing but software applications that have an application layer, a database, and APIs. To simplify the working of the chatbot, we can say it works on pattern matching to classify text and produce a suitable response for the questions/queries addressed by the user. The chatbot responds to the user as per the program that has been fed in it. There are three types of chatbots, and they are as follows:

- Rule-Based Chatbot: This is the basic chatbot made, the user interacts with this kind of bot by using predefined options.
- Independent(Keyword) Chatbots: These are machine learning bots, unlike rule-based chatbots, they analyze what the user wants and respond appropriately.
- NLP (Contextual) Chatbots: These are so far the most advanced chatbots. They are a combination of best from rule-based and keyword chatbots. These chatbots use NLP to understand the context and intent in users' requests and thus act accordingly. These chatbots can handle multiple requests from the same user at ease.

```
1 # Importing chatterbot
2 from chatterbot import ChatBot

1 # Create object of ChatBot class
2 bot = ChatBot('Buddy')

1 # Create object of ChatBot class with Storage Adapter
2 bot = ChatBot(
3     'Buddy',
4     storage_adapter='chatterbot.storage.SQLStorageAdapter',
5     database_uri='sqlite:///database.sqlite3'
6 )

1 # Create object of ChatBot class with Logic Adapter
2 bot = ChatBot(
3     'Buddy',
4     logic_adapters=[
5         'chatterbot.logic.BestMatch',
6         'chatterbot.logic.TimeLogicAdapter'],
7 )

1 # Inport ListTrainer
2 from chatterbot.trainers import ListTrainer
3
4 trainer = ListTrainer(bot)
5
6 trainer.train([
7     'Hi',
8     'Hello',
9     'For further questions, consult our website',
10    'Thank you for placing your order with us!',
11    'We have customer representatives available from 8 AM to 5 PM',
12    'Sorry. We are closed now. Call back tomorrow',
13    'Do you want to expedite your order with UPS or FedEx',
14    'If you need expedited delivery, we will charge $25 extra',
15    'Give me more details about your order',
16    'Please, provide me with your order id',
17    'The order number is not correct. Please retype it',
18    'I have a complaint.',
19    'I have a problem with the order',
20    'Please explain your concern',
21    'Have you talked to one of our representative?',
22    'How long it will take to receive an order ?',
23    'An order takes 3-5 Business days to get delivered.',
24    'Okay Thanks',
25    'No Problem! Have a Good Day!',
26    'We thank you for your order. Come back again!'
27 ])

List Trainer: [#####] 100%

1 # Get a response to the input text 'I would like to book a flight.'
2 response = bot.get_response('I have a problem.')
3 print("Bot Response:", response)
```

Bot Response: Please explain your concern

```
1  name=input("Enter Your Name: ")
2  print("Welcome to the Bot Service! Let me know how can I help you?")
3  while True:
4      request=input(name+':')
5      if request=='Bye' or request == 'bye':
6          print('Bot: Bye')
7          break
8      else:
9          response=bot.get_response(request)
10         print('Bot:',response)
```

```
Enter Your Name: tony
Welcome to the Bot Service! Let me know how can I help you?
tony:hello
Bot: Bonjour
tony:do you speak french?
Bot: We have customer representatives available from 8 AM to 5 PM
tony:can i place my order?
Bot: I have a complaint.
tony:why?
Bot: The current time is 01:10 AM
tony:can i talk to someone?
Bot: Please explain your concern
tony:bye
Bot: Bye
```