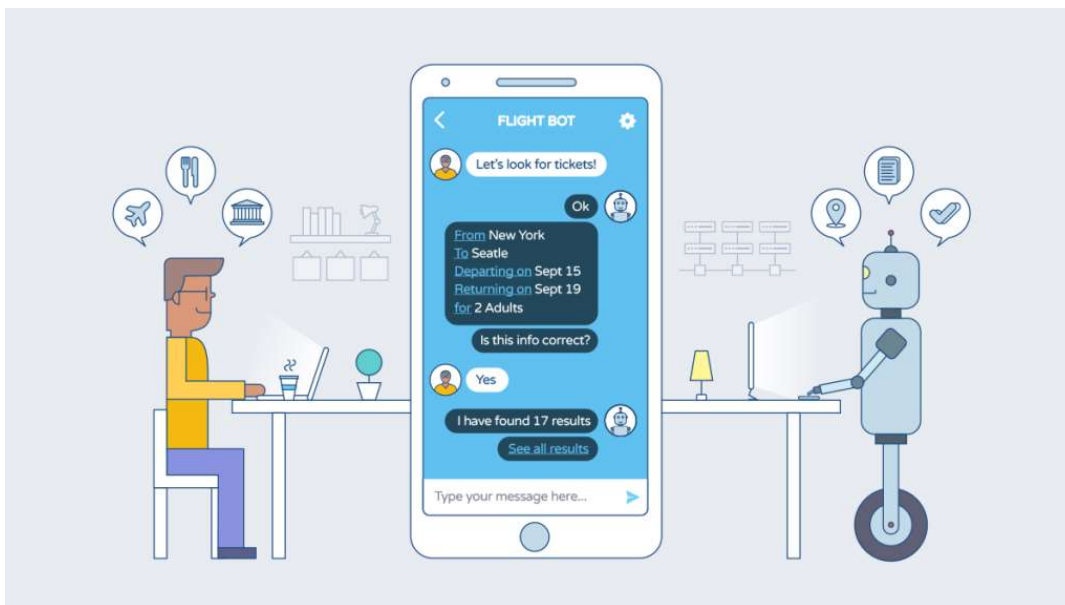


## **Experiment 13: Mini Project**

**Learning Objective:** Student should be able to design and implement a mini project.

**Tools:** Google Colab.

**Theory:**



### **What is a chatbot ?**

A chatbot is a software program for simulating intelligent conversations with human using rules or artificial intelligence. Users interact with the chatbot via conversational interface through written or spoken text. Chatbots can live in messaging platforms like Slack, Facebook Messenger and Telegram and serve many purposes – ordering products, knowing about weather and managing your finance among other things.

### **The rise of chatbot?**

In everyday life, while we converse, communicate with our friends, families and peers, we become aware of the context of the subject discussed. For instance, when someone says he is reading a book, you would ask him who the author is or if he likes the book; you would not ask him if he had read another book. You respond in the best possible way for the moment. Contextual communication is emerging as the standard of interaction, and chatbots are making their mark by conversing contextually.

The dynamic intelligence of chatbots will allow them to converse with users as in a way we converse and communicate in real-life situations. Conversational communication skill of the chatbot will not only make it a trendy and promising technology but also empower them to deliver what we are looking for – response in human terms.

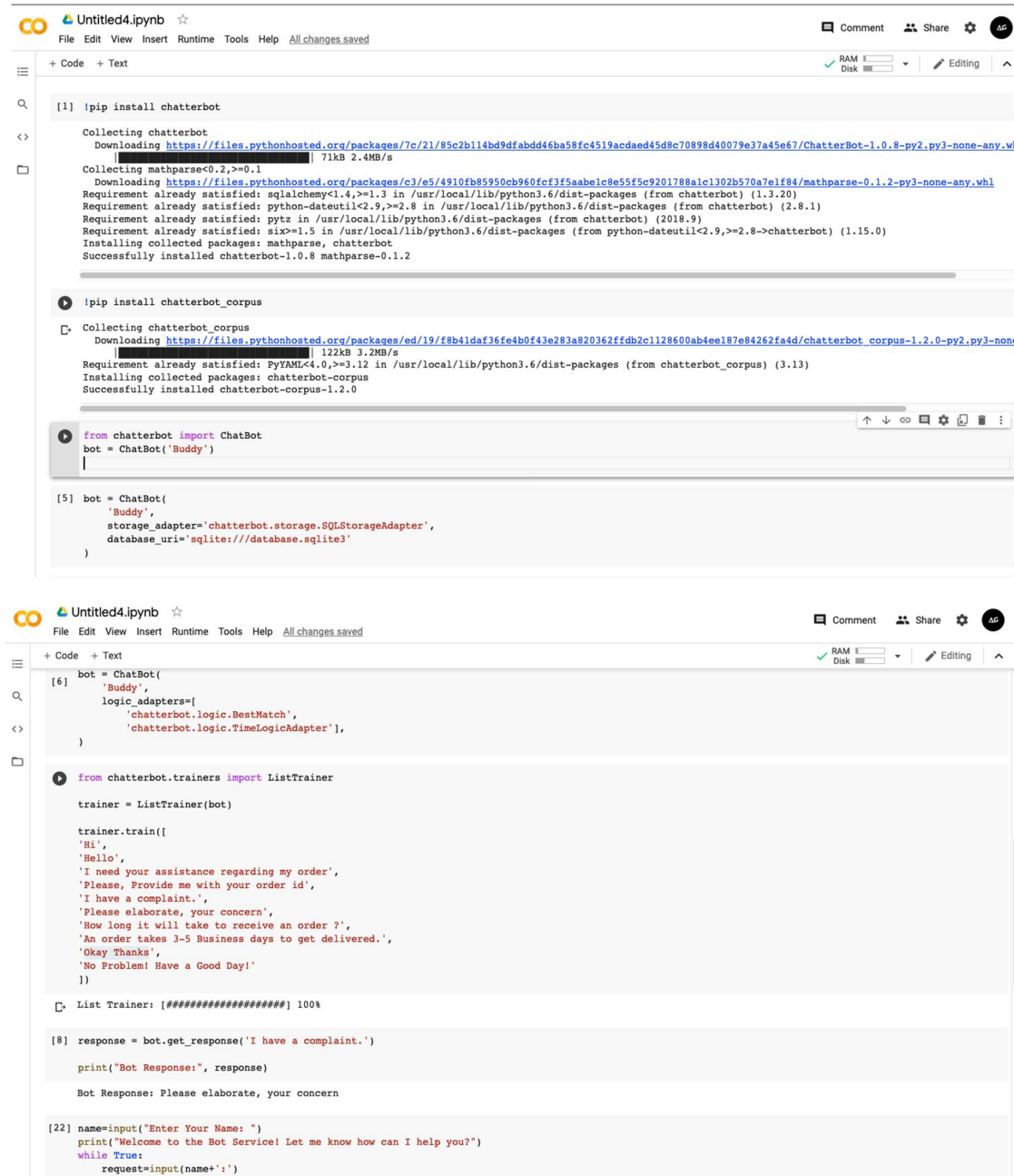
Though we find chatbots conversing contextually with users, they are yet to communicate contextually on anything and everything that the user **Chatbot user experience?**

User experience has always been referred to convenient and easy interactions with a product. When the interface connecting man and machine becomes intelligent and conversational, it becomes easy for the user to converse with the machine and get things done on human terms.

Chatbot has demonstrated the power and convenience of conversational interfaces. As of now, language is emerging as the interface. According to Gartner, 30% of browsing done by users will turn out to be screen less in 2020.

## Results & Discussions:

Code & Output : (Performed and executed on google Colab)



```

[1] !pip install chatterbot

Collecting chatterbot
  Downloading https://files.pythonhosted.org/packages/7c/21/85c2b114bd9dfabdd46ba58fc4519acdaed45d8c70898d40079e37a45e67/ChatterBot-1.0.8-py3-none-any.whl (71kB)
    71kB 2.4MB/s
Collecting mathparse<0.2,>=0.1
  Downloading https://files.pythonhosted.org/packages/c3/e5/4910fb85950cb960cf3f5aabelc8e55f5c9201788a1c1302b570a7e1f84/mathparse-0.1.2-py3-none-any.whl
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)
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

[2] !pip install chatterbot_corpus

Collecting chatterbot_corpus
  Downloading https://files.pythonhosted.org/packages/ed/19/f8b41daf36fe4b0f43e283a820362ffdb2c1128600ab4ee187e84262fa4d/chatterbot_corpus-1.2.0-py2.py3-none-any.whl (122kB)
    122kB 3.2MB/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

[3] from chatterbot import ChatBot
bot = ChatBot('Buddy')

[5] bot = ChatBot(
    'Buddy',
    storage_adapter='chatterbot.storage.SQLStorageAdapter',
    database_uri='sqlite:///database.sqlite3'
)

[6] bot = ChatBot(
    'Buddy',
    logic_adapters=[
        'chatterbot.logic.BestMatch',
        'chatterbot.logic.TimeLogicAdapter',
    ]
)

[7] from chatterbot.trainers import ListTrainer

trainer = ListTrainer(bot)

trainer.train([
    'Hi',
    'Hello',
    'I need your assistance regarding my order',
    'Please, Provide me with your order id',
    'I have a complaint.',
    'Please elaborate, your concern',
    'How long it will take to receive an order?',
    'An order takes 3-5 Business days to get delivered.',
    'Okay Thanks',
    'No Problem! Have a Good Day!'
])

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

[8] response = bot.get_response('I have a complaint.')

print("Bot Response:", response)

Bot Response: Please elaborate, your concern

[22] name=input("Enter Your Name: ")
print("Welcome to the Bot Service! Let me know how can I help you?")
while True:
    request=input(name+':')
    if request.strip() == "":
        continue
    response = bot.get_response(request)
    print(response)
  
```

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+ Code + Text

```

if request=='Bye' or request == 'bye':
    print('Bot: Bye')
    break
else:
    response=bot.get_response(request)
    print('Bot:',response)
  
```

Enter Your Name: Ronit  
 Welcome to the Bot Service! Let me know how can I help you?  
 Ronit:I have a complaint.  
 Bot: Please elaborate, your concern  
 Ronit:How long it will take to receive an order ?  
 Bot: An order takes 3-5 Business days to get delivered.  
 Ronit:Okay, What is the current time?  
 Bot: The current time is 07:01 AM  
 Ronit:Okay Thanks  
 Bot: No Problem! Have a Good Day!  
 Ronit:Bye  
 Bot: Bye

**Conclusion:** Hence, we have created a AI chatbot using python and chatterbot corpus module.

For Faculty Use

Correction Parameters	Formative Assessment [40%]	Timely completion of Practical [ 40%]	Attendance / Learning Attitude [20%]	
Marks Obtained				