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Qutuhah'21 Coding Challenge

Grade 6-8

Age 11-14

24th October'21 - 30th October'21

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Ever imagined ...how a machine can talk like human...

- Do you want to create a small project in which a machine can talk with you like a human?
 - Anybody Can Code!!!
 - Problem Solving
 - How should it be done
 - Expression/ Coding
 - How can I make it happen through coding

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So how can machines talk like humans

Through programs..

Have you heard about chatbots...?

A chatbot is merely a computer program that fundamentally simulates human conversations. It allows a form of interaction between a human and a machine the communication, which happens via messages or voice command

What is bot?

A bot is a software application that is programmed to do certain tasks without human intervention.

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Have you ever seen a chatbot...?

Here is one for you...let me show you one

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Chatbot Video



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Would you like to make a
Chatbot..?

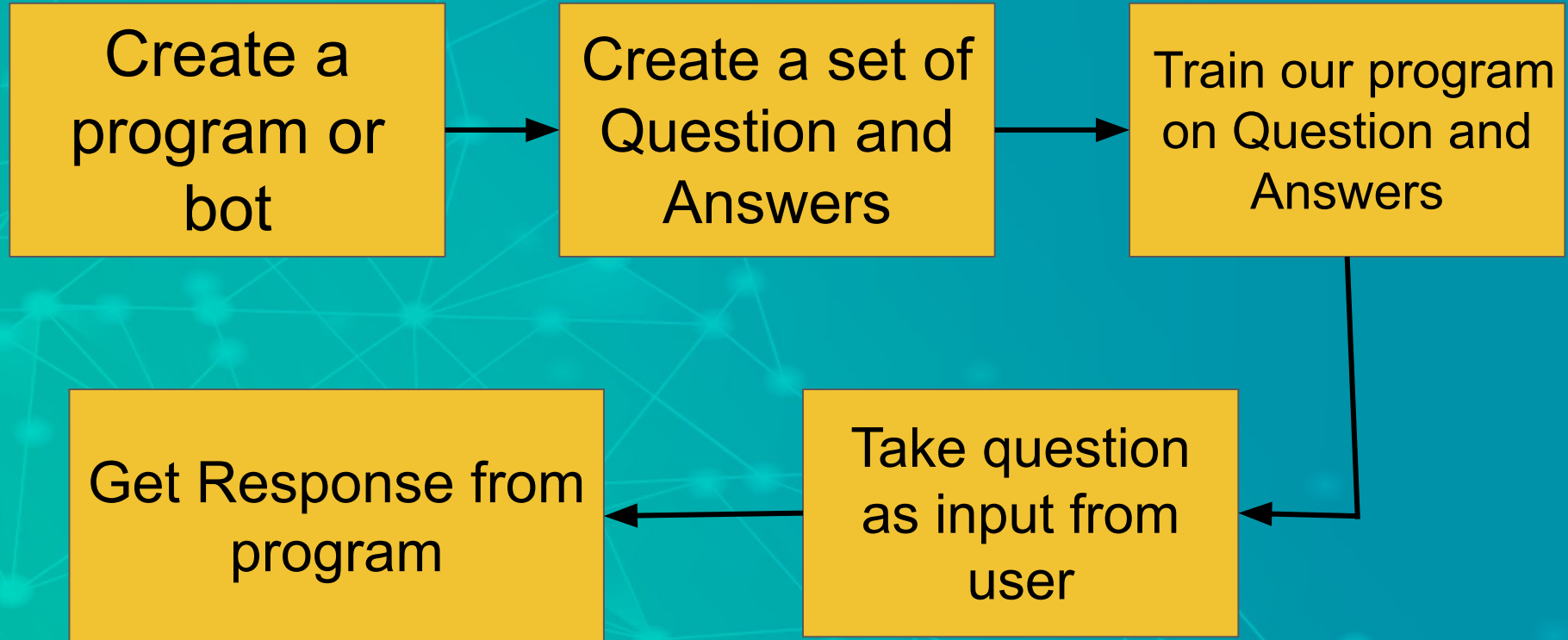
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Ever imagined ...how a machine can talk like human...

- Do you want to create a small project/Chatbot in which a machine can talk with you like a human?
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Chatbot Algorithm



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Step 1

Create a
program or
bot

-Environment- IDE (Google Colab) and the Libraries...General Purpose Programming Language

Libraries:-

- pip install chatterbot
- pip install chatterbot-corpus

Let's do it by coding:-

Create your chatbot using chatterbot:-

Import "chatbot" from chatterbot package.

```
from chatterbot import ChatBot
```

```
# Give a name to the chatbot "My Bot"  
bot = ChatBot("My Bot")
```

Note:-

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.

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Step 2

Create a set of
Question and
Answers

```
#Create a list of question and answer pair
corpus = [
    'hello',
    'hi there !',
    'what is your name ?',
    'My name is Bot , i am created by Shivani',
    'how are you ?',
    'I am doing great these days',
    'thank you',
    'In which city you live ?',
    'I live in lucknow',
    'In which language you talk?',
    ' I mostly talk in english'
]
```

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Step 3

Train our program
on Question and
Answers

Inorder to train our bot, we have to import a
trainer package "ListTrainer"

```
from chatterbot.trainers import ListTrainer
```

```
trainer = ListTrainer(bot)
```

now training the bot with the help of trainer

```
trainer.train(corpus)
```

```
answer = bot.get_response("what is your  
name?")  
print(answer)
```

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Step 4

Take question
as input from
user

#Take input question as input from user and store in variable called query

To execute whole chatbot code multiple number of times we use while loop

```
print("Talk to bot ")  
while True:  
    query = input()
```

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Step 5

Get response
from program

#Getting a response from your chatbot for
multiple iterations until user does not type exit in
command

```
print("Talk to bot ")  
while True:  
    query = input()  
    if query == 'exit':  
        break  
    answer = bot.get_response(query)  
    print("bot : ", answer)
```

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Output

```
List Trainer: [#####] 100%
My name is Bot , i am created by Durgesh
Talk to bot
Hii
bot :  what is your name?
Shivani
bot :  In which city you live ?
Varanasi
bot :  thank you
What is AI?
bot :  My name is Bot , i am created by Durgesh
what is computer
bot :  My name is Bot , i am created by Durgesh
what do you eat
bot :  My name is Bot , i am created by Durgesh
how are you
bot :  I am doing great these days
      'In which city you live ?',
bot :  I live in lucknow
I mostly talk in english
bot :  thank you
exit
```

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It's your turn now...

- Problem Statement:- Make a project chatbot using chatterbot and chatterbot-corpus library in python that must be trained on this github english corpus that contains set of question and answer pair in yml file

Link of github Chatterbot Corpus in English Language:-

https://github.com/gunthercox/chatterbot-corpus/tree/master/chatterbot_corpus/data/english

Tutorial link for making chatbot:-

<https://www.geeksforgeeks.org/chat-bot-in-python-with-chatterbot-module/>

- **Submit a 2 minute running video of your project in execution at the email address giis_clevered@clevered.com**

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Reach Us..

- For any Questions/Concerns/Doubts/Suggestions, please feel free to reach us at:
- Telegram-<https://t.me/joinchat/QnE8aYlwvqA1MTkx>
- WhatsApp-<https://chat.whatsapp.com/Fq8dz0PZdTgFxVH7zJxz4d>

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Happy Coding!!!!

