

STACKOVERFLOW ASSISTANT CHATBOT

A Project Report

Submitted in fulfilment

In

Natural Language Processing - CSE4022

BY

Naman Jain (16BIT0175)

Under the Guidance of

Prof. Sharmila Banu K

April 2019

ACKNOWLEDGEMENT

I sincerely thank Dr.G.Viswanathan - Chancellor, VIT University, for creating an opportunity to use the facilities available at VIT. I also thank **Prof. Sharmila Banu K**, SITE-VIT University, for giving us the opportunity to do this project. I would also like to thank the Dean and entire department of Information Technology, School of Information Technology and Engineering, for giving us this opportunity.

DECLARATION BY THE CANDIDATE

I hereby declare that the project report entitled "Stackoverflow Assistant Chatbot" submitted by us to VIT, Vellore in partial fulfilment of the requirement for the award of the degree of B.Tech is a record of J component of project work carried out by me under the guidance of **Prof. Sharmila Banu K**. I further declare that the work reported in this project has not submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university.

Place: Vellore

Date:05th April,2019

Naman Jain (16BIT0175)

CERTIFICATE

This is to certify that the project work titled "Stackoverflow Assistant Chatbot" that is being submitted by student for Natural Language Processing (CSE4022) is a record of bonafide work done under my supervision. The contents of this Project work, in full or in parts, have neither been taken from any other source nor have been submitted for any other CAL course.

Place: Vellore

Date: 05/04/2019

Signature of faculty: Prof. Sharmila Banu K

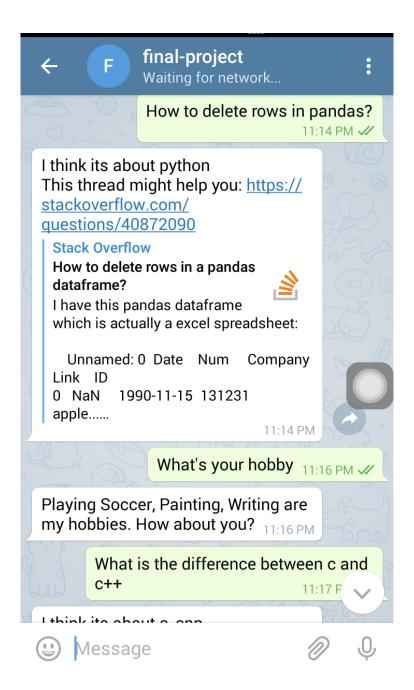
TOOLS

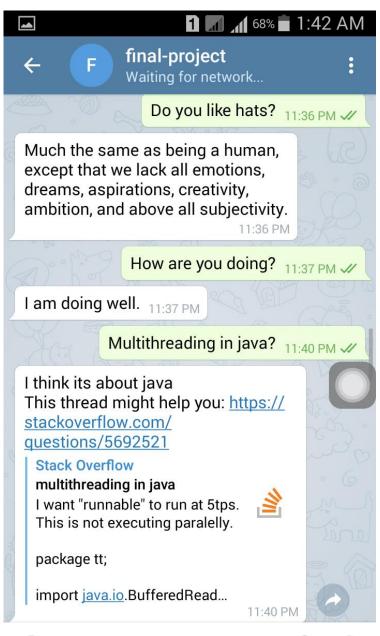
- <u>Python</u> Python is an interpreted high-level programming language for general-purpose programming..
- Google Collab Google Colab is a free cloud service and now it supports free GPU You can: improve your Python programming language coding skills. develop deep learning applications using popular libraries such as Keras, TensorFlow, PyTorch, and OpenCV..
- <u>AWS</u> Amazon Web Services is a subsidiary of Amazon that provides on-demand cloud computing platforms to individuals, companies and governments, on a metered pay-as-you-go basis.
- Jupyter Notebook- Jupyter Notebooks are an open document format based on JSON. They contain a complete record of the user's sessions and include code, narrative text, equations and rich output.

CODE

All codes for the chatbot are on github as mentionedhttps://github.com/namanjain26/stackoverflow-chatbot.

OUTPUT











CONCLUSION

The chatbot was made using the stackoverflow dataset and for dialogue the library chatterbot was used. All training was done online using google collab and the resultant models are downloaded which are then used while running the program. All the programs are then were uploaded on aws instance fro hosting so that we can access the chatbot from anywhere. Then using Telegram Fatherbot, an api was created for our own chatbot to connect the chatbot to programs running on aws instances. Hence we can talk to chatbot using telegram app which will get reply from the programs running on aws.