**TantraByte Intern Final Report Submission**

I am Arihant Barjatya an undergrad from IIT Guwahati and this is my report for the final project of my internship at TantraByte.

I was assigned to build a chatbot which can help general public about information for Corona.

Initially I started to build a Generative chatbot but after multiple trials the chatbot gave a very low accuracy, of about (20-25%), The main reason behind this was very less availability of data and for Generative Chatbot to generalize well, it requires huge amount of data.

So, I went through a Rule-Based approach, for which I hand curated the dataset\*.

I used a deep learning network (RNN) to train the chatbot, through which I was able to achieve a decent accuracy on my training dataset, Though the training was a supervised task, I didn’t had a proper test dataset to validate my model,

So, I started to validate it through various questions from my side and it gave decent results on the queries which were similar to that in the train dataset and sometime gave completely random answers on some random question.

To make it more useful, I incorporated it with a Corona detector (The results are completely experimental), which can classify based on a person’s symptoms, chances of them being infected by COVID-19 virus. This functionality has a RandomTreeClassifier running in its back end.

For the GUI of the chatbot I used python’s library tkinter and my code is was implemented using **TensorFlow 2.0.**

**Future Scope:**

1.Incorporate TTS (Text to Speech) in the chatbot.

2.Build a more robust chatbot and symptom checker with availability of more data.

3.Add APIs which can help to search on internet and give back results to queries.

**Acknowledgements:**

\*1.github/pygaggle.com (Reference for dataset)

At last I would like to thank Ashish Nayak sir, who was very helpful during the whole internship period.

**Thank You**