DOCUMENTATION

Team Pegasus

Introduction

The problem statement requires a chatbot that can answer COVID-19 questions effectively. We have chosen this problem because of its importance in today's pandemic-stricken world.

Proposed Method

To build a chatbot using Python that takes a question, searches the WHO database of FAQs and returns an apt answer. To also predict the probability of having COVID-19 through basic symptoms like cold and fever.

Work Done

We have made a CLI chatbot using Python that takes a question, searches the WHO database of FAQs and returns an apt answer using a pretrained model called Universal Sentence Encoder. Independently, a ML model (Decision Tree Regressor) is also developed to predict whether a person has COVID-19 using features like cold, cough, loss of smell, age and country. The dataset used for training the model is the Coswara dataset.

This can be run in Google Colab. The last cell contains the chat bot and the queries can be typed in the command line there.

Results

The chatbot works successfully. Independently, the ML model developed to diagnose COVID based on certain features has a mean absolute error of 0.13645790506991726.

Conclusion

This chatbot can be further developed such that diagnosis can also be done through the chat bot (right now, the components are not connected). This chat bot has a lot of scope that can make it more useful. The chat bot in its present state can be integrated with other applications.