Covid-19 Chat Bot

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GITHub Link :
https://github.com/venki-11/TRINIT_The-Matrixs_ML01.git

INTRODUCTION :
During Pandemic many queries regarding covid and several other questions are exhorted by the public.Since, doctors and other health care workers have been working on the frontline,these queries couldn't be answered by them.And another major issue is that people were afraid of the fake news spread over social media and not much about the disease actually. Here we have come up with a ***"HelpBot"*** which could answer your queries and sort out the authentified data as per your requirement.

HelpBot contains two sections namely a chatbot and a fake news predictor . We can select one and the page will be redirected to the next page as users wish. The streamlit framework is used for chat bot and is designed as such the user

can ask the query in their native language. The SVM model is used for building fake news detection.

MODELS :

SVM model is used for building ChatBot and *USE model* for fake news detection

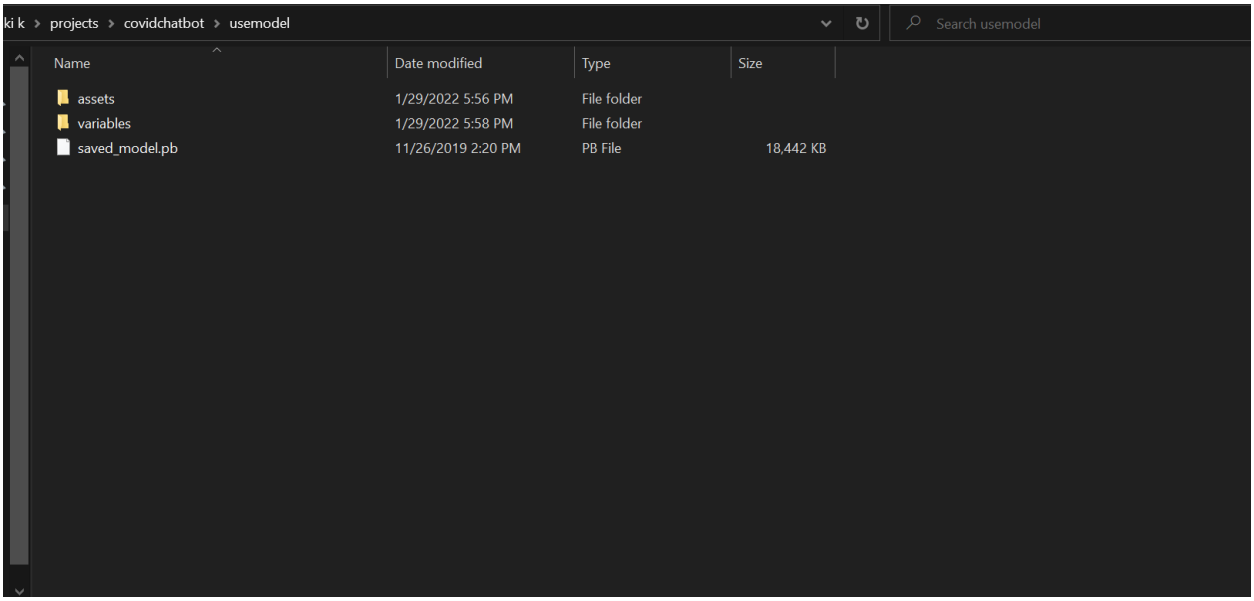
DATASET :

ChatBot : Frequently asked questions from WHO,NDTV, Times Now India

Fake News Prediction : We have used articles from Social media

IMPLEMENTATION :

1. Primarily we have to download the USE model from the link "https://tfhub.dev/google/universal-sentence-encoder-multilingual-qa/3"
2. Then we have to extract the files in USE model folder .
3. After extracting it should look like the below image



Here we are using a *streamlit* web application framework .

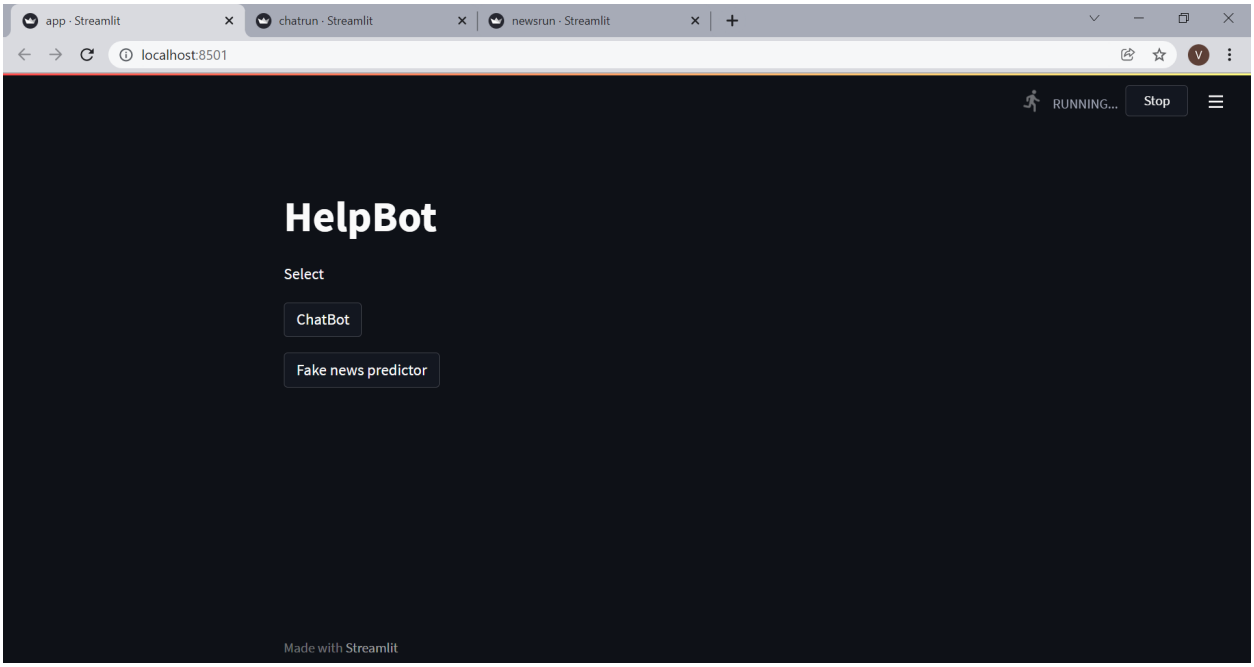
CODE DESCRIPTION :

Run app.py file : It is the main webpage that will navigate us to fake news predictor or chatBot according to the User Requirement

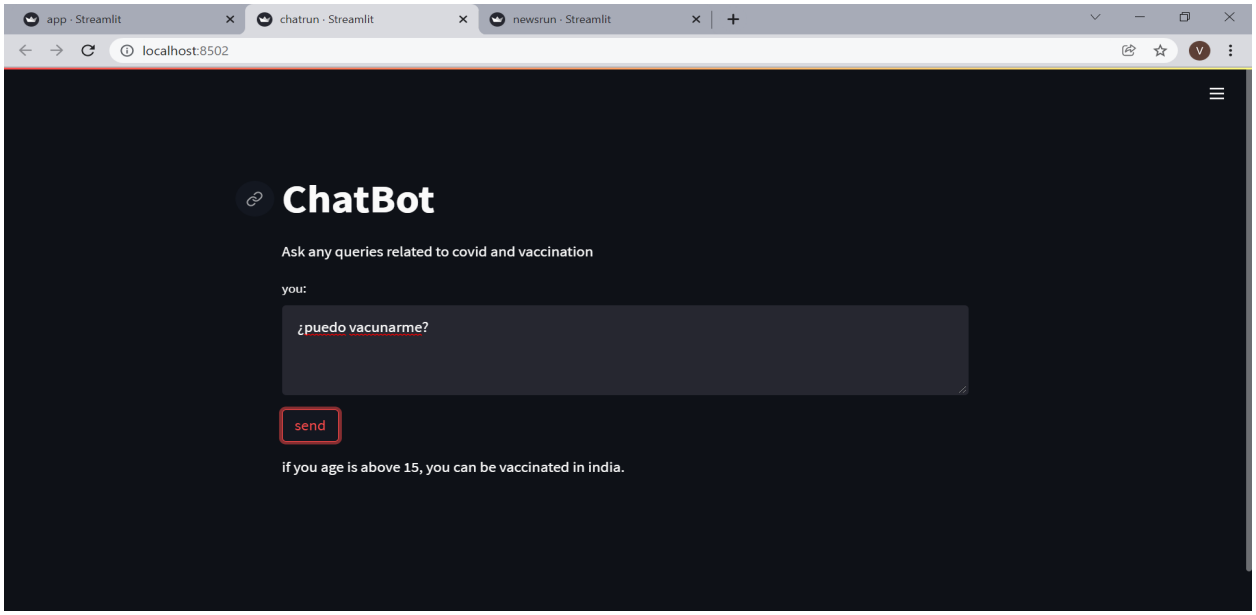
Run chatrun.py file : It gets queries from the user. Here we are loading the USE model and creating response encodings. The USE model also offers the opportunity to provide all possible answers . For the given input question encoding is done. Based on this encoding, the algorithm searches for corresponding response encoding.

Run newsrun.py file : From the training data, we are getting the labels and the contents and transforming them and fitting them in the SVM model . It gets input from the user. By using TF IDF Vectorizer , we are transforming the input to a matrix of TF IDF features. We are predicting the output using the SVM model.

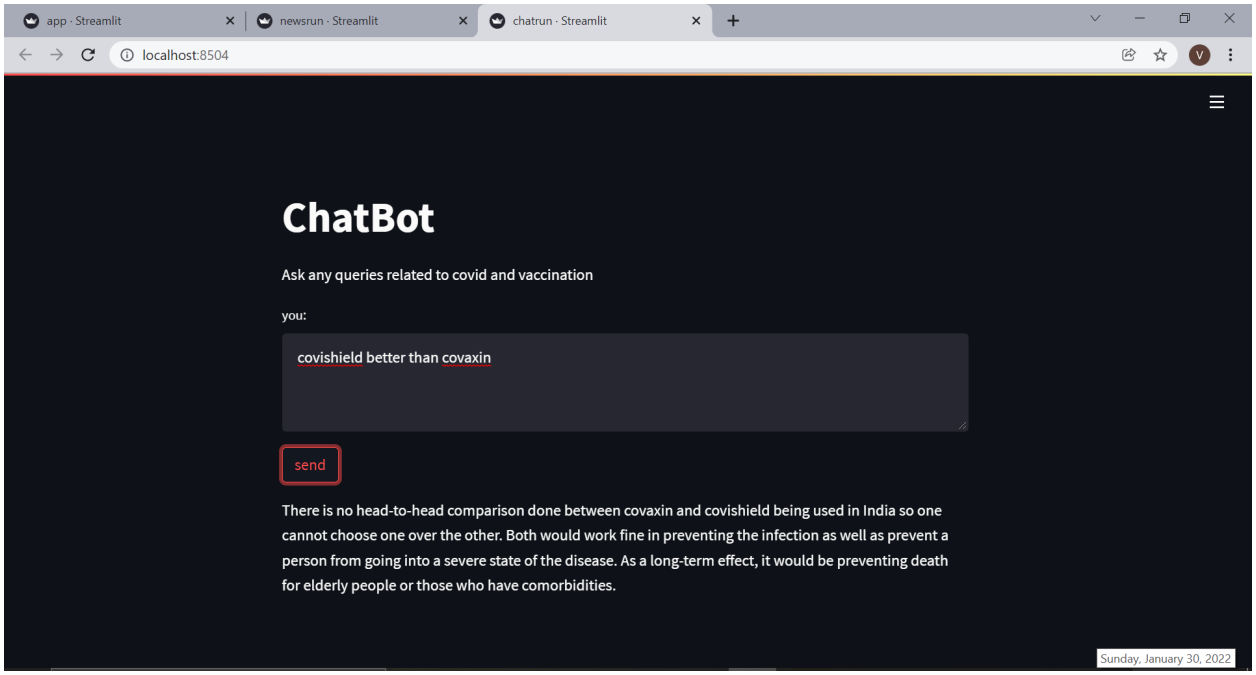
Below is the demonstration of the HelpBot



Now, we'll choose the ChatBot option and we can give the input in multiple languages.

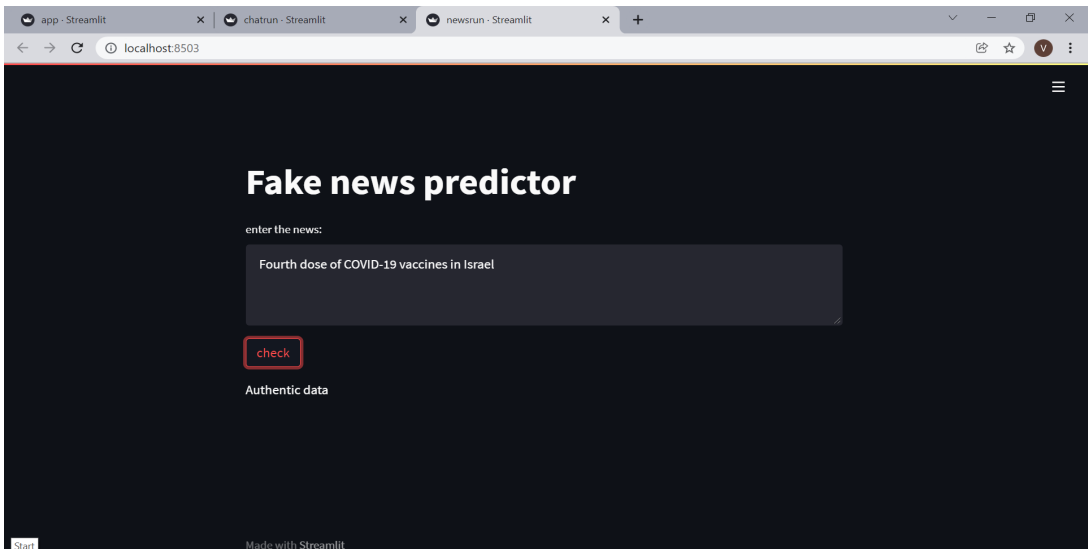


Now, let’s ask some other question to the ChatBot



The Second choice in the HelpBot is the Fake News predictor.
This Option enables us to distinguish between fake news and authentic data. When we give the input information, We’ll receive two responses. Either we’ll receive that the information is authentic or we’ll receive that it's fake news.

Below is an example for Authentic data



Now, we'll check for Fake News