Final Project

COVID-19 Chatbot (CoronaBot)

Team Members :-

Ronak Kumar
Nitin Kumar

Problem Statement

- Artificially intelligent (AI) based conversational agents commonly known as chatbots are the latest inventions utilized to combat the novel coronavirus

- Chatbots enable users to communicate and interact with software applications that can intelligently respond to frequently asked questions using AI based tools by understanding the intent.

- The bot is responsible to output answers for questions related to information, greeting, precautions, use of transportation, thanks etc

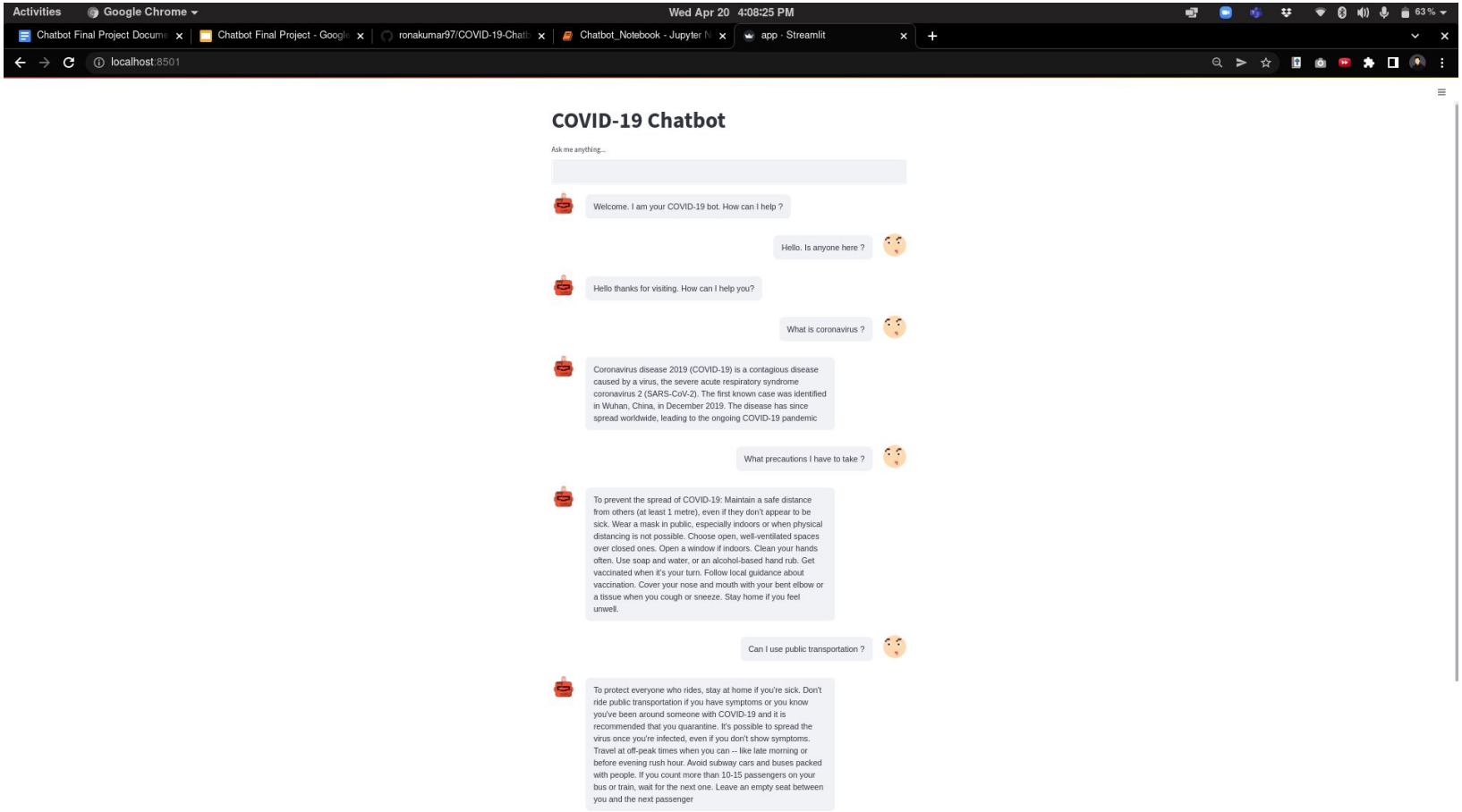
- We chose to build our own chatbot due to the flexibility of intents and responses that we can achieve using that. Our project code includes an intents.json file in which we can customise our own questions and responses instead of depending on the framework to provide. Also, we tried to implement Deep Learning using LSTM in order to learn from the intents file and predict the responses

Analysis of Technologies

We researched on five different frameworks before implementing our project

- **Rasa** - Open-source framework involving two significant components Rasa NLU and Rasa Core
- **Wit AI** - Free chatbot framework and allows developers create all the intents and the entities
- **DialogFlow** - AI chatbot framework that provides machine learning capabilities, and inbuilt NLP features and integrations with other popular platforms used for communication
- **IBM Watson** - Most widely known AI chatbot platforms used by developers. It offers different types of bot-building tools and has built-in machine learning capability
- **Amazon Lex** - Versatile chatbot framework using complicated bot-building tools

Screenshot of the webapp



Implementation

Backend - Python 3 (SpaCy, Tensorflow, Numpy)

Frontend - Streamlit IO, Streamlit Chat

Source Code Program - Jupyter Notebook, Pycharm

Version Control System - GitHub

Cloud Hosting - Tried Heroku, but failed due to size limit issue and Azure didn’t work with Streamlit

Thanks