FAQ chatbot creation by using RASA

RASA introduction

- Rasa is an open-source framework for building conversational AI, including chatbots and voice assistants. It enables developers to create complex, intelligent, and context-aware chatbots that can interact with users in a natural language. Rasa provides tools for intent recognition, entity extraction, dialogue management, and connecting to external APIs, making it a comprehensive solution for developing conversational agents.

- Rasa is a framework build over and above on tensorflow.

- Rasa has two components NLU and core.

Chatbot types:-

-There are two ways to create a chatbot. The first method is to use a framework, which simplifies the process and provides various built-in functionalities. The second method is to code the chatbot from scratch. In fact, within just 15-20 lines of code, you can create a basic chatbot if you have the right knowledge and tools.

Steps to build FAQ Chatbot :-

Step 1 :- Install ‘anaconda’ from google ,after installing search on your search bar for ‘Anaconda prompt ’ it will be also automatically installed during installing anaconda

Step 2 :- After opening ‘Anaconda prompt’ do all this steps which i have written.

1. create a folder 🡪 Mkdir chatbot
2. Go to the folder 🡪 cd chatbot
3. Creating an environment 🡪 conda create -n chatbot python==3.8.10
4. Activate the environment 🡪 conda activate chatbot
5. Clear cache 🡪 python -m pip cache purge

(why you must clear cache 🡪 imagine that you already have two environments: one with TensorFlow 2.10 and the other with TensorFlow 2.11. Rasa will then install a version of TensorFlow according to its own requirements. The old version of TensorFlow leaves behind cache files, which can cause conflicts and prevent the installation from succeeding. Therefore, it is essential to clear the cache to avoid these issues.)

1. Upgrade pip 🡪 python -m pip install -u pip
2. Installing rasa 🡪 pip install rasa==3.0.2
3. Pip install websockets==10.0
4. Pip install protobuf==3.20
5. Start with a new project 🡪 rasa init
6. It will ask a question “? Please enter a path where the project will be created [default: current directory]” 🡪 so here you just type “.” And press enter ,that you want to create the project on this current directory
7. Train the model 🡪 rasa train

Train with fixed name 🡪 rasa train –fixed-model-name model.tar.gz

1. Use the chatbot 🡪rasa shell
2. Evaluate the model predictions 🡪 rasa shell nlu (If you want to see how it works, how it give the answer then only code this step , otherwise after “rasa shell” it shows the chatbot )

For FAQ chatbot changes needs to be done only in 3 files

1. NLU
2. Domain
3. Stories

With config.yml file you can make changes in the NLP pipeline

Showen how to do it on cmd :-

















