

PROJECT DOCUMENTATION

1. PROJECT TITLE: FAQ CHATBOT

2. PROJECT DESCRIPTION:

Chatbot that use RASA Open Source Framework and to be deployed on Slack with several objective;

- Provide assistance that is reachable anytime
- Solution that will give a reliable response in a timely manner
- A chatbot that is good in handling user and provide user's satisfaction

3. STATUS OF PROJECT: On-going

4. STEPS TO INSTALL:

a. Install RASA/ RASA X in Windows

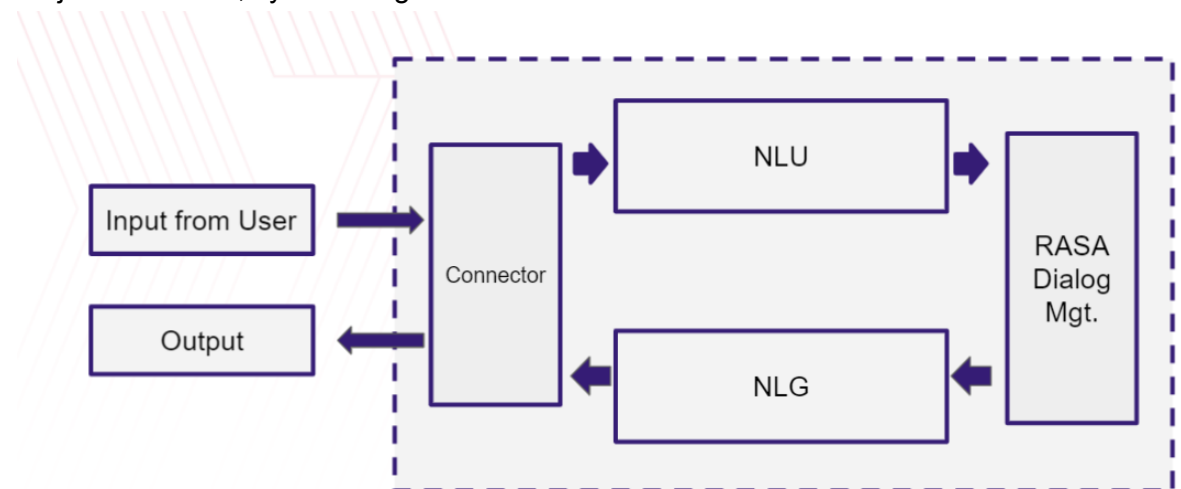
<https://medium.com/co-learning-lounge/step-by-step-guide-to-install-rasa-x-in-windows-without-docker-85da8502bce>

b. How to run RASA project

<https://rasa.com/docs/rasa/command-line-interface/>

5. METHODOLOGY:

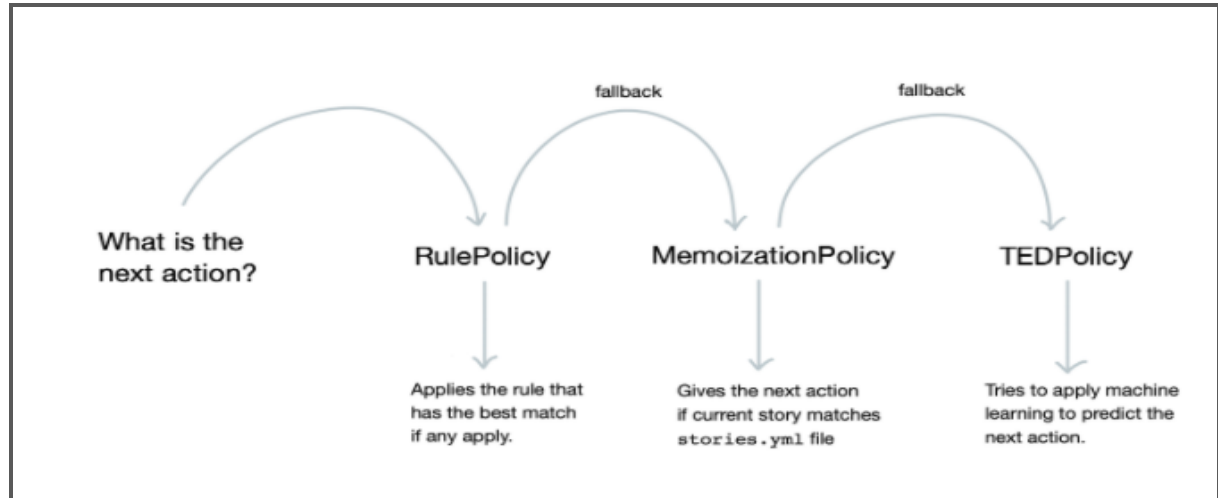
a. Project flow chart, system diagram



b. Data used for training

https://docs.google.com/document/d/12KeyG0JSpiqsEPbH3mRSex9y4bMGEG3o54L_bwYcyBM/edit?ts=6050220a

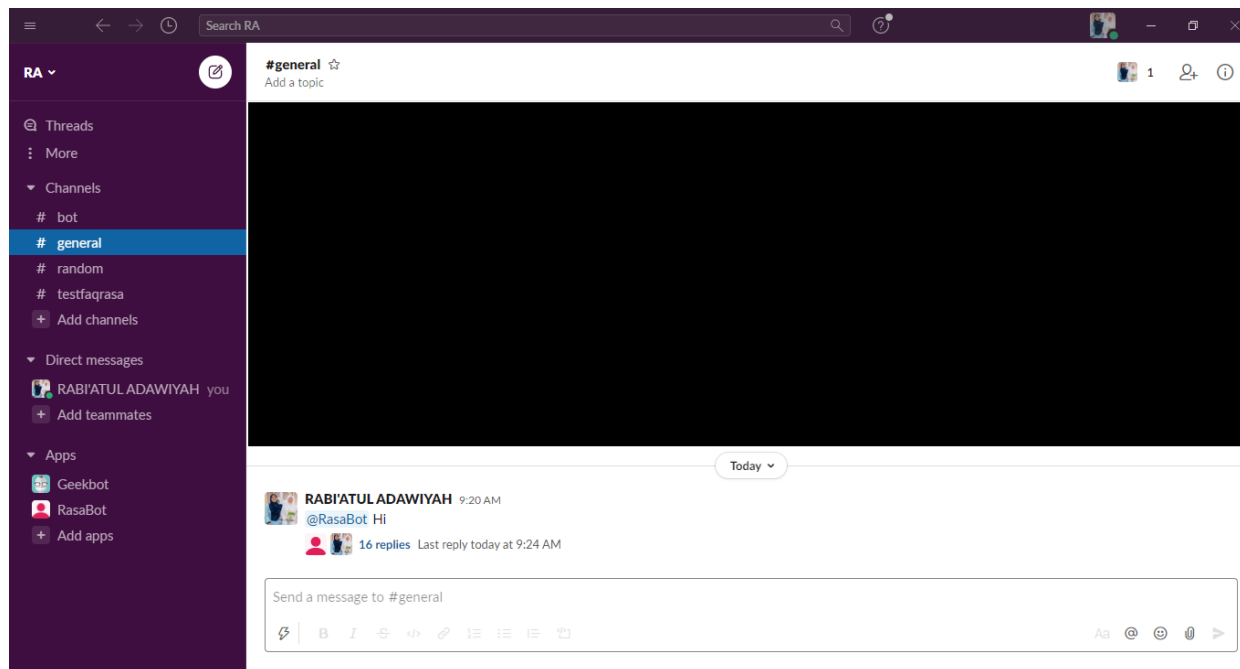
c. Framework features: **Dialog Management**



- Have 3 policy that works in hierarchy
 - 1- The Rule policy
 - 2- The Memoization policy
 - 3- Ted Policy

In brief, it is based on transformer architecture where the self-attention mechanism operates over the sequence of dialog turns. It is an improvement from the previous algorithm used, hierarchical recurrent neural network to encode multiple utterances in a dialog.

6. RESULTS:



Thread

#general



RABI'ATUL ADAWIYAH Today at 9:20 AM

@RasaBot Hi

16 replies



RasaBot APP 18 minutes ago

Hey! How are you?



RABI'ATUL ADAWIYAH 15 minutes ago

What are the example of goods and services ?



RasaBot APP 15 minutes ago

Example of services:- - Hiring freelance content writer - Engaging caterer for event - Banner printing



RasaBot APP 15 minutes ago

Did that help you?



RABI'ATUL ADAWIYAH 15 minutes ago

Yes



RasaBot APP 15 minutes ago

Great, carry on!



RABI'ATUL ADAWIYAH 15 minutes ago

where can employees submit the medical certificate ?



RasaBot APP 15 minutes ago

All documents must be submitted to HR upon returning to work.



RasaBot APP 15 minutes ago

Did that help you?




RABI'ATUL ADAWIYAH 15 minutes ago

yes

Thread

#general




RasaBot

APP

16 minutes ago

All documents must be submitted to HR upon returning to work.




RasaBot

APP

16 minutes ago


Did that help you?



RABI'ATUL ADAWIYAH

16 minutes ago

yes




RasaBot

APP

16 minutes ago


Great, carry on!



RABI'ATUL ADAWIYAH

16 minutes ago

Will there be a temporary replacement provided if the damaged company's asset is being sent for repair?




RasaBot

APP

16 minutes ago

Yes, there will be a replacement provided while the company's asset is being sent for repair.




RasaBot

APP

16 minutes ago


Did that help you?



RABI'ATUL ADAWIYAH

15 minutes ago

No













RasaBot

APP




15 minutes ago

If you need further assistance, kindly email us at hr@skymind.global

Reply...

Aa

7. PROJECT RESOURCES

ACTIVITY / WEEK		1	2	3	4	5	6	7
Chatbot Design	Initializes entities, intents, responses and parameters							
	Construct rules, stories & configurations							
	Training chatbot phrases and responses in intents							
Chatbot Deployment	Deploy chatbot to Slack							
	Making rich responses to response							
Chatbot Testing and Validation	Consulting an expert to verify chatbot functionality							
	Test cases are used to evaluate users' responses							
Documentation	Preparing a report as a guide to understanding the chatbot							

8. RELEVANT DEADLINES: 25 June 2021

9. LINKS TO GITHUB: <https://github.com/adawiyahjabar/RASA-FAQ-Chatbot>

10. REFERENCES

Tutorial on how to connect RASA Chatbot to Slack

<https://www.youtube.com/watch?v=2Qu4LCvB4bs>

<https://www.youtube.com/watch?v=P3ofYHwRi80>

11. SETUP STEP

Run RASA :

```

Microsoft Windows [Version 10.0.19042.1052]
(c) Microsoft Corporation. All rights reserved.

C:\Users\user>cd C:\Users\user\Desktop\Chatbot\newP\y

C:\Users\user\Desktop\Chatbot\newP\y>activate rasa

(rasa) C:\Users\user\Desktop\Chatbot\newP\y>rasa run
2021-06-10 09:12:09 INFO     root - Starting Rasa server on http://localhost:5005
2021-06-10 09:12:09 INFO     rasa.model - Loading model models\20210427-035544.tar.gz...
c:\Users\user\anaconda3\envs\rasa\lib\site-packages\rasa\utils\train_utils.py:537: UserWarning: model_confidence is set to `softmax`.
It is recommended to try using `model_confidence=linear_norm` to make it easier to tune fallback thresholds.
  category=UserWarning,
2021-06-10 09:12:44 INFO     root - Rasa server is up and running.

```

Run ngrok:

```
C:\PYTHON\Scripts>ngrok http 5005
```

```

ngrok by @inconshreveable

Session Status      online
Account             RABI'ATUL ADAWIYAH AB JABAR (Plan: Free)
Version             2.3.40
Region              United States (us)
Web Interface        http://127.0.0.1:4040
Forwarding           http://9f5add53453d.ngrok.io -> http://localhost:5005
Forwarding           https://9f5add53453d.ngrok.io -> http://localhost:5005

Connections          ttl    opn    rt1    rt5    p50    p90
                   0      0      0.00   0.00   0.00   0.00

```

Reference link: <https://www.youtube.com/watch?v=2Qu4LCvB4bs>

12. OUTSTANDING TASK

- 1) Set reminder for bot to end session if nothing was asked in few mins
- 2) Save unanswered questions for training purposes
- 3) If the user answers 'no' for "am I answering the question ?", the question for training purposes
- 4) Add and train all data based on Nexent FAQ
- 5) Add more training data for each question