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| **MIracle Software Systems,Inc** |
| CHAT BOT |
| Using Rasa,Mitie integrating with Slack |
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| **BOT TEAM** |
| **8/16/2017** |

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| **Describing the chat bot conversation with a sample data using rasa and mitie integrating with slack.** |

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6. **Overview**

The overview of this document is how does a chat bot is created and implemented by using Rasa, Mitie integrating with Slack.

1. **Goals and Scope**

**2.1 : Goals**

The main Goal of this project is to reduce the human power in an organization, Saving the time and efforts to get the information and more details of the system.

**2.2 : Scope**

The developed project will give the information with in fractions of minutes and gives the exact plan for upgrading and scheduling the meetings in between the concerned team in shorter time than the usual.

1. **Components**

The main components of this system are Rasa, Mitie, Slack, Instance to work, Database, Slack, Botkit API,python.

**Rasa :** It is an open source software that powers conversational artificial intelligence.it has intents and entities. NLU is a subfield of NLP. With RASA when we talk about NLU, we talk about the Intent/Entities model. Intent/Entities is not meant to handle **conversations:** it allows you to build transactions from natural language (user's input is the request and the entities are the related parameters) which is great to build natural language interface for a service. It looks quite simple, yet it is tricky enough to make it work with great precision. It uses lower level NLP tools like PoS, words embedding... to build features for intents and entities classifier.

**Mitie:** The functionality of rasa is done by Mitie.

**Instance:** Where the data is trained.

**Database:** To store the questions and the state of the question.

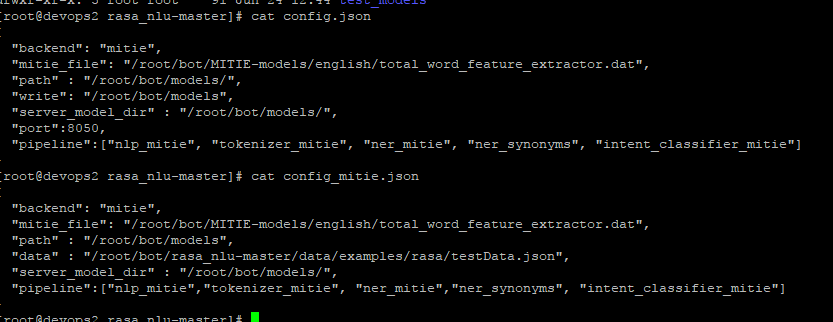
**Botkit API:** API to Connect the communication channel and the data.

**Slack:** The communication channel.

1. **Installation Steps**
   1. Install python (pip install python).
   2. Install rasa-nlu(pip install rasa-nlu).

Ref: <https://rasa-nlu.readthedocs.io/en/latest/installation.html>

From theabove reference clone the “rasa\_nlu master”, download “mitie models”, and give the paths for config.json and config-mitie.json for training data.



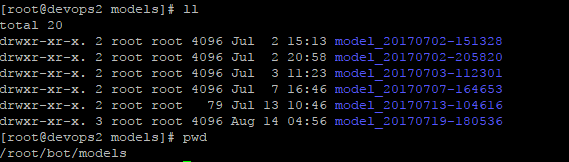
Pwd:/root/bot/rasa\_nlu-master

* 1. Prepare the training data. Get the intents and entities using Rasa.

Ref : <https://rasahq.github.io/rasa-nlu-trainer/>

* 1. sftp the data from local to instance.
  2. Install the database(mongo db) in local.
  3. enroot to the path for training data and train the data using following commands. python -m rasa\_nlu.train -c config\_mitie.json .

A default model will be created



1. **Workflow**
   1. Before starting the communication, make sure to start the database and training data.
   2. Connect to the server using putty.
   3. To start the database

Cmd -> mongod

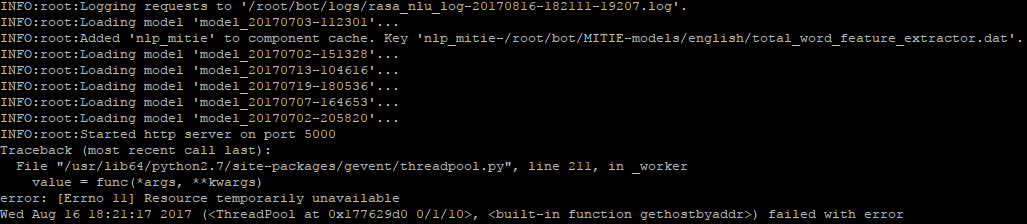
Cmd -> mongo

* 1. To run the training data use the following command.

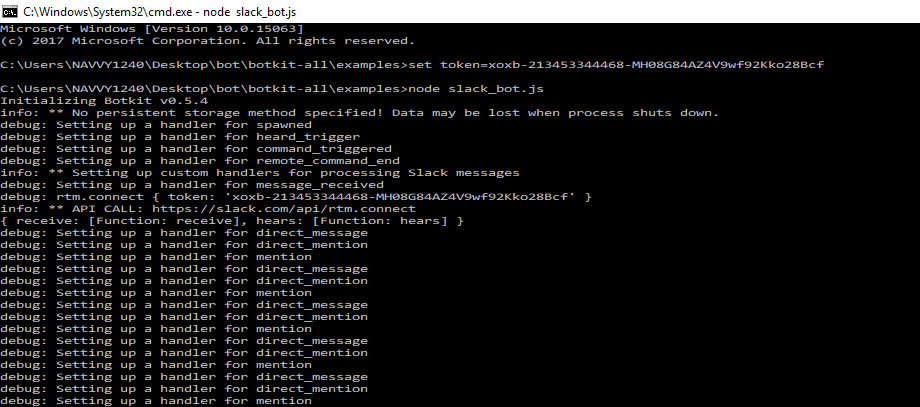
python -m rasa\_nlu.server &



Once the data is started it should show the port



* 1. Open the command prompt where the script is located set the token for the communication channel
  2. Run the script.



* 1. Start the communication in the slack.

