Custom message/phrase detection for reminders

Task: Given a query related reminders, detect the custom message/phrase that user wants to set the reminder for (if present).

Eg.

Query: Please remind me to go to gym.

Reminder phrase: "go to gym"

Attached (training_data.tsv) is a file containing ample of real life examples of such queries and predicted phrases (not hand annotated).

This data can be used for training your own model.

Come up with an approach to solve this problem.

We expect an approach which involves **NLP** techniques and Machine Learning.

You are free to use any open source libraries.

You are free to use external data if required.

A separate (eval_data.txt) is provided, which contains several untagged queries.

Note: All the queries need not contain a phrase. So one of the subtask is to identify if the query is related to reminder and contains a phrase. In the training data, if phrase is not present, it is tagged by "Not Found". (Eg. Q: Remind me tomorrow at 5:30 am; phrase: Not Found)

SUBMISSION

You have to submit the following things:

- 1) Result on eval_data.txt, which will be used to evaluate the performance of your approach
- 2) Well commented code
- 3) Models (save the trained models)
- 4) A Readme to run the codes
- 5) **A document explaining the approach**. Please try and include all the approaches you thought of and the reasons behind following/not following the approaches.
- 6) Result analysis

Note: The results need not be great. We care more about the **thought process** and the **analysis**.