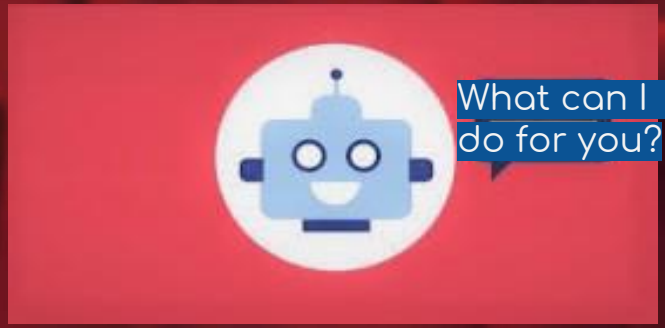
MOVIE RECOMMENDATION THROUGH CHATBOT



PRESENTATION BY:

-> ZIYAD NASEEM (17COB307)
-> ABDUL RAFEY KHAN (17COB176)

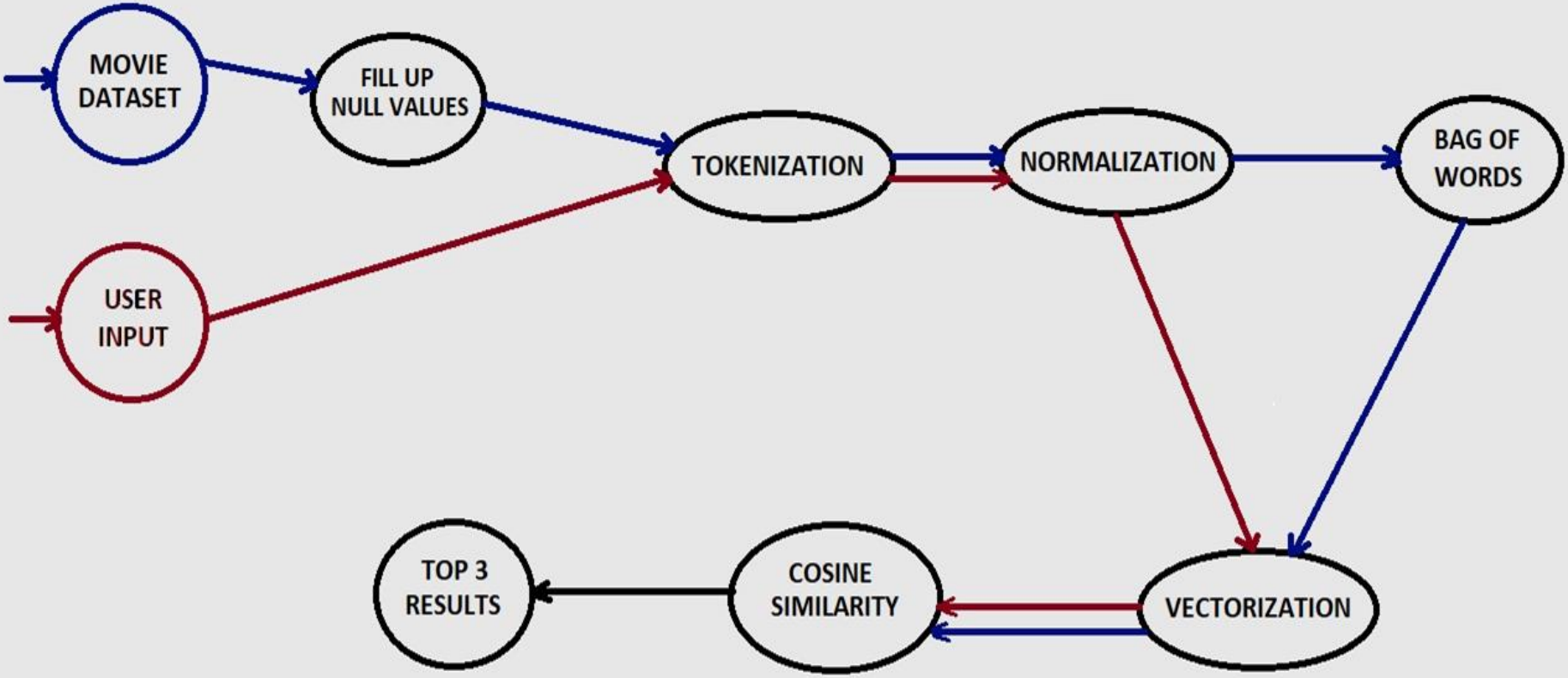
SUPERVISORS:

-> MR. MOHD. SHOAIB
-> MR. MOHD. QADEER

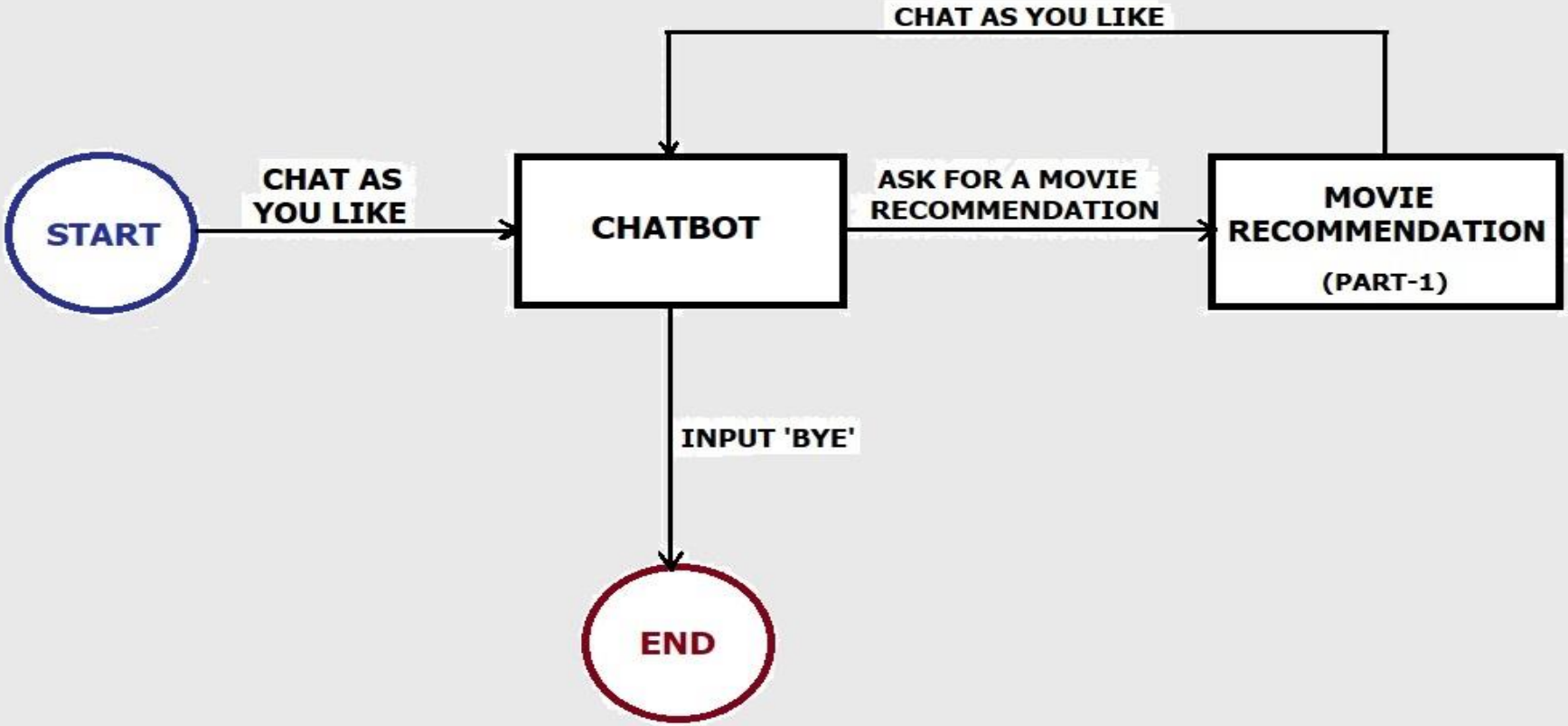
OVERVIEW

Our project focuses on recommending movies based on a random query of the user by using the cosine similarity algorithm. The whole process is carried through an offline chatbot.

FLOWCHART-I


MOVIE DATASET
FILL UP NULL VALUES
TOKENIZATION
NORMALIZATION
BAG OF WORDS
USER INPUT
TOP 3 RESULTS
COSINE SIMILARITY
VECTORIZATION

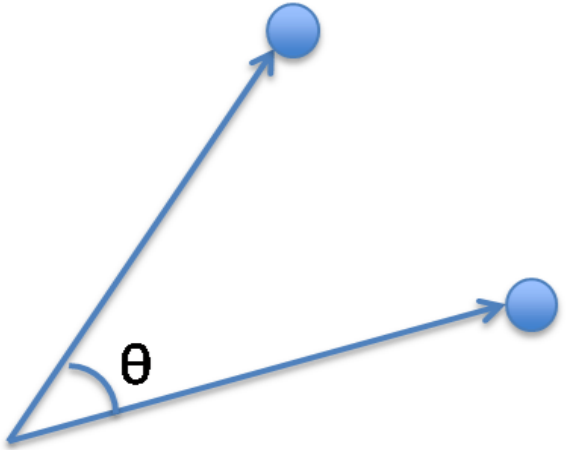
FLOWCHART-II



COSINE SIMILARITY

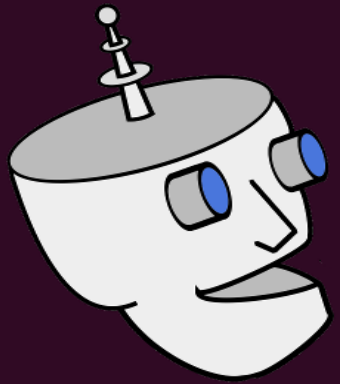
Cosine Similarity measures the similarity between two vectors irrespective of their size. It is measured by the cosine of the angle between two vectors and determines whether two vectors are pointing in roughly same direction.

$$sim(A, B) = \cos(\theta) = \frac{A \cdot B}{\|A\|\|B\|}$$



CHATTERBOT

ChatterBot is a python library that makes it easy to generate automated responses to a user's input.
It uses a selection of machine learning algorithms to produce different types of responses.



ChatterBot

Machine learning, conversational dialog engine.

SCREENSHOTS

```
List Trainer: [####################] 100%

Me: hello
Bot:  - Heyy

Me: what's your name
Bot:  - Whatever you name me. I call myself a MovieBot.

Me: what can you do
Bot:  - I recommend movies to a user.

Me: help me to search
Bot:  - Tell me what movie would you like to watch

Me: i want akshay kumar movie
Bot:        original_title cosine_sim
2378  Action Replayy   0.278543
7263          Khakee   0.258199
557         Brothers   0.235702

Me: bye
Bot: Bye. See you again.

In [2]:
```

IPython console | History log

Permissions: RW | End-of-lines: CRLF | Encoding: UTF-8 | Line: 139 | Column: 14 | Memory: 71 %

WHAT'S NEXT?

As of now, we've completed the movie recommendation part which is the core of our project. And also, we have carried out the whole process through a chatbot to let a user have a little chit-chat while choosing a movie.

The future work could be:

- Improving the dataset of the chatbot to get more accurate responses.
- Prepare a graphical user interface for the chatbot to make it look pleasing.

REFERENCES

→ https://www.udemy.com/course/machinelearning/

→ https://www.kaggle.com/rounakbanik/the-movies-dataset

→ https://medium.com/@paritosh_30025/natural-language-processing-text-data-vectorization-af2520529cf7

→ https://en.wikipedia.org/wiki/Cosine_similarity

→ https://data-flair.training/blogs/python-chatbot-project/