National Institute Of Technology, Delhi

SOFTWARE DEVELOPMENT PROJECT

"ONLINE CHATBOT"

COMPUTER SCIENCE ENGINEERING(CSE)

SUBMITTED BY

AKASH KUMAR

191210007

&

ARUSHI JAISWAL

191210013

SUBMITTED TO

MS. SONIYA SHARMA

DEPARTMENT OF COMPUTER SCIENCE(UG)

NATIONAL INSTITUTE OF TECHNOLOGY, DELHI
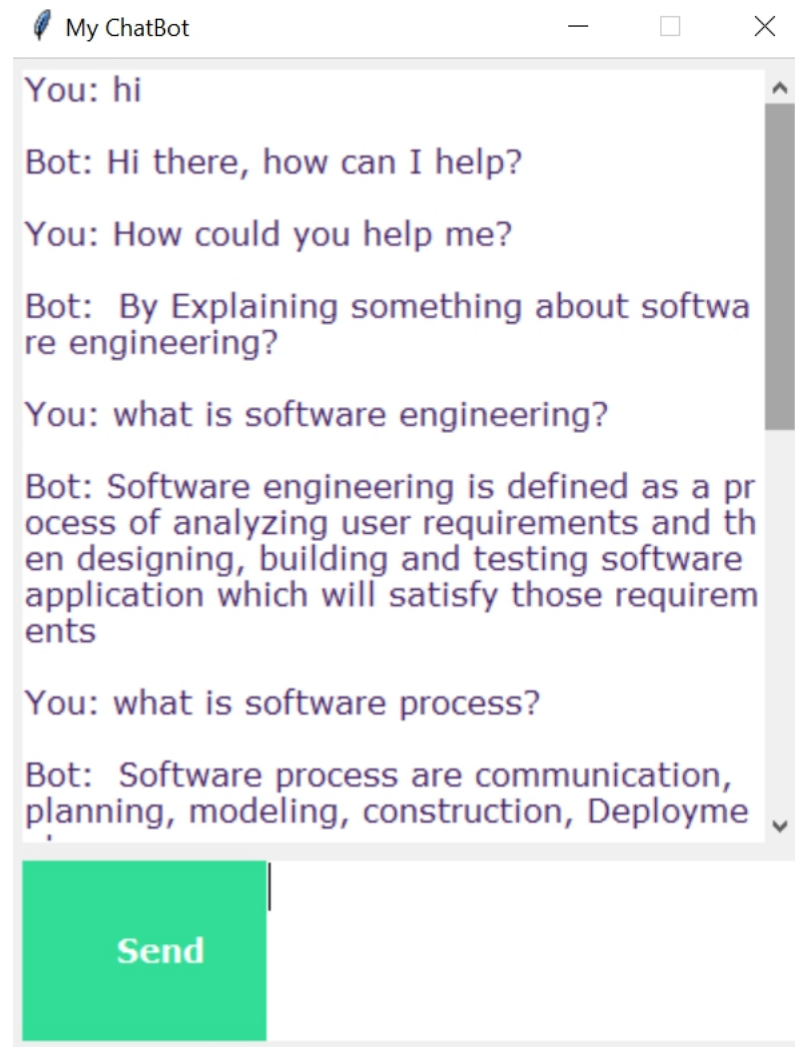
TESTING PROCESS OF CHATBOT

Alpha Testing is a type of acceptance testing; performed to identify all possible issues and bugs before releasing the final product to the end users. Alpha testing is carried out by the testers who are internal employees of the organization. The main goal is to identify the tasks that a typical user might perform and test them.

TEST CASES:
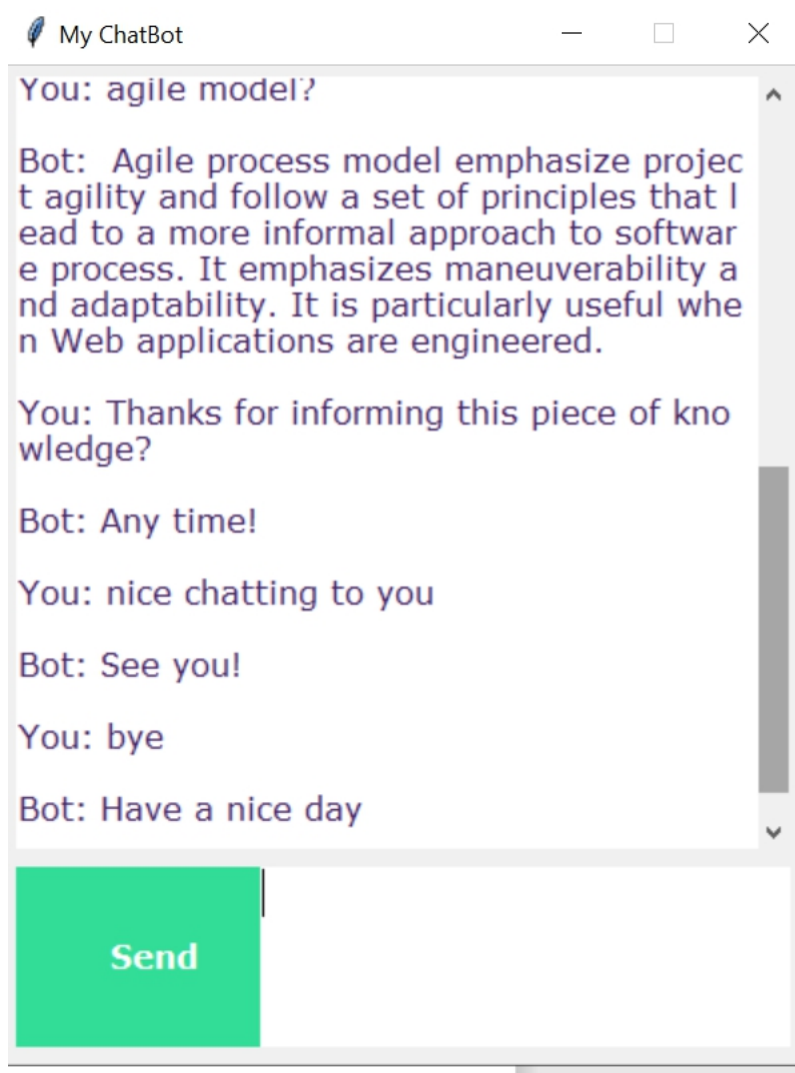
The NLP module which the chatbot uses processes the answer which is provided by the user and gives a relevant reply. Defining these replies to par with the answers provided is the job of the developer. The developer testing here is mostly verification and validation. In simple terms, this is, testing if the bot provides the correct answer to the right question
The following problems arises:

1. Conversational understanding:

Chatbots are based on conversations. Therefore, it is very important to test conversational flow of a chatbot and it should not be interrupted. An appropriate conversation flow is one that talks tactfully and keeps the user engaged with relevant replies.

My ChatBot

You: hi

Bot: Hi there, how can I help?

You: How could you help me?

Bot: By Explaining something about software engineering?

You: what is software engineering?

Bot: Software engineering is defined as a process of analyzing user requirements and then designing, building and testing software application which will satisfy those requirements

You: what is software process?

Bot: Software process are communication, planning, modeling, construction, Deployme

Send

My ChatBot — □ ✕

You: agile model?

Bot: Agile process model emphasize project agility and follow a set of principles that lead to a more informal approach to software process. It emphasizes maneuverability and adaptability. It is particularly useful when Web applications are engineered.

You: Thanks for informing this piece of knowledge?

Bot: Any time!

You: nice chatting to you

Bot: See you!

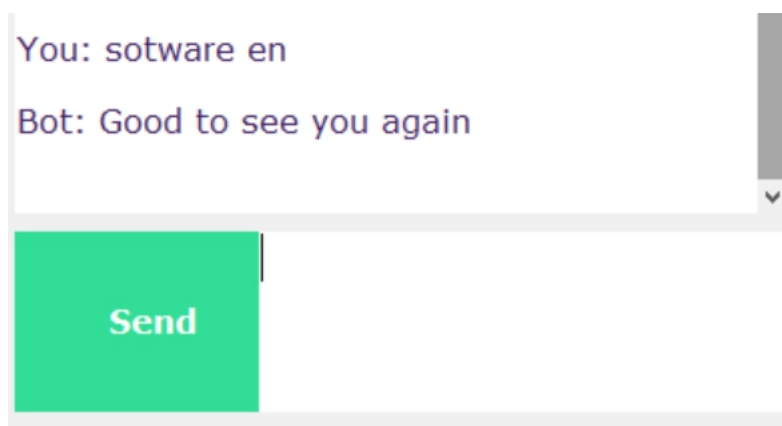You: bye

Bot: Have a nice day

Send

2. Understanding :

 the chatbot can only understand the question if it is asked in a proper interrogative way with a proper tag word in it.
does your chatbot understand any kind of user input — curse words, small talk, idioms, emojis...?

You: what is day today

Bot: Hello, thanks for asking

You: do you have emotions?

Bot: My pleasure

You: weather today@!

Bot: Good to see you again

You: @3333**0000%

Bot: Good to see you again

Send
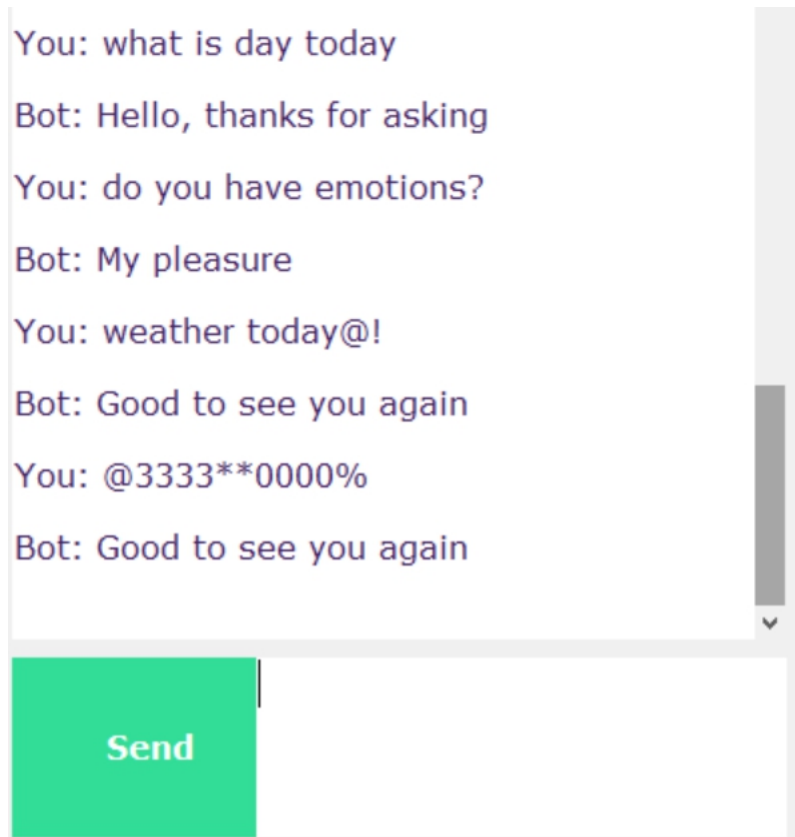
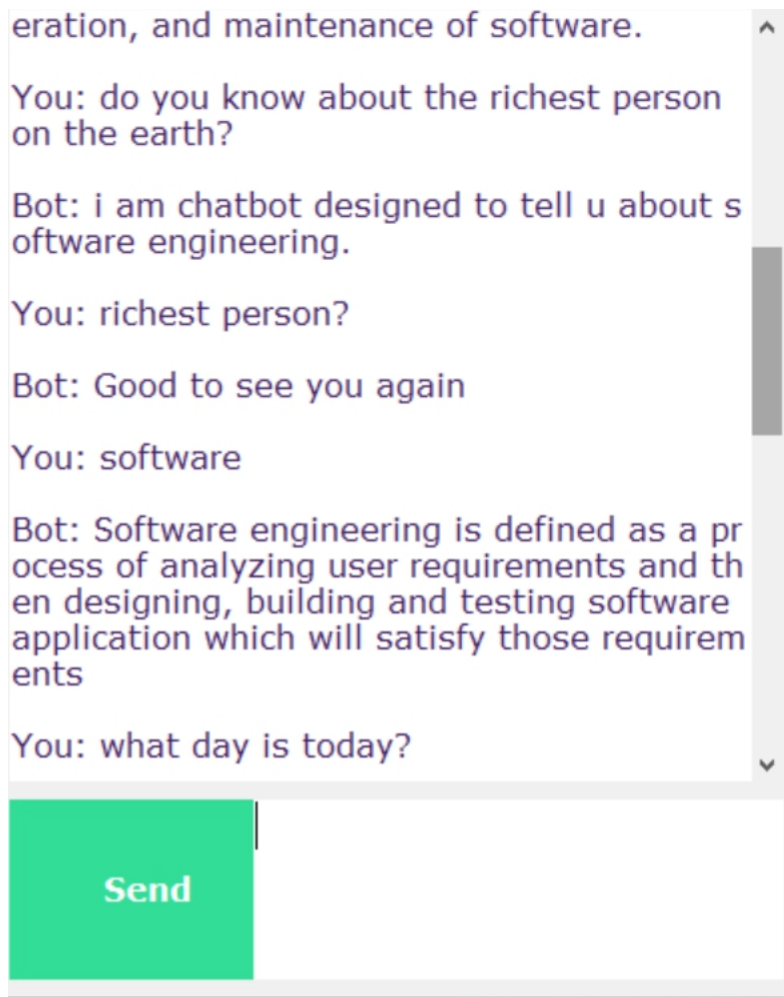## 3. Bot- accuracy:

Chatbots we build are meant to reply utilizing the predefined utterances. Out of the predicted utterances, the number of utterances which the bot gets correct is said to be the accuracy of the bot. While developing and testing the bot, it is very important to maintain a high accuracy for the chatbot.

You: sotware en

Bot: Good to see you again

Send

4. IRRELEVANT ANSWERS:

eration, and maintenance of software.

You: do you know about the richest person on the earth?

Bot: i am chatbot designed to tell u about software engineering.

You: richest person?

Bot: Good to see you again

You: software

Bot: Software engineering is defined as a process of analyzing user requirements and then designing, building and testing software application which will satisfy those requirements

You: what day is today?

Send

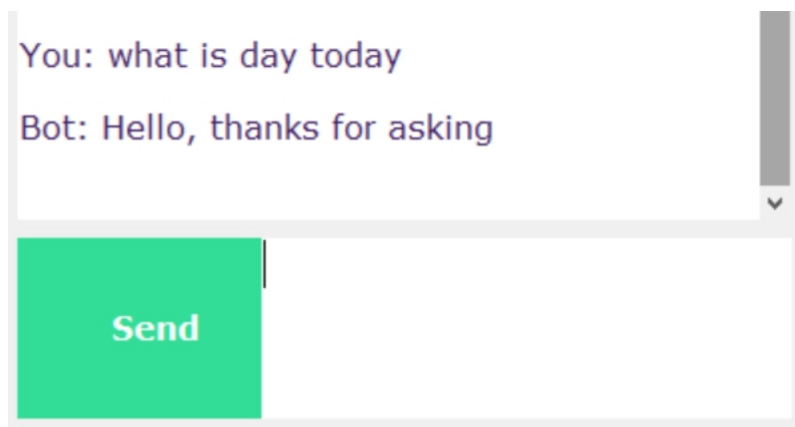## 5. A bot can answer a question thrown at him, in different ways,
1. No response at all
2. An invalid response
3. An invalid response for a valid question
4. A valid response for a valid question

You: what is day today

Bot: Hello, thanks for asking

Send

6. BOT SPEED:

.Another major concern of the users is the speed at which the bot replies to the messages.

7. ERROR MANAGEMENT:

This is one of the most important features of a chatbot, which needs a lot of testing on. And this is where many chatbots go wrong. chatbots should be readied at whatever point the error occurs with various procedures to repair the circumstance. The reply should make sense with regard to the situation and should be able to process any other message which is typed in by the user.

BETA TESTING:

Real-life feedback, provided by its users, is the real test.

Beta Testing is performed by "real users" of the software application in "real environment" and it can be considered as a form of external User Acceptance Testing. It is the final test before shipping a product to the customers. Direct feedback from customers is a major advantage of Beta Testing. This testing helps to test products in customer's environment.

My ChatBot

You: how can you help me?

Bot: By Explaining something about software engineering?

You: define software engineering?

Bot: software engineering as the application of a systematic, disciplined, which is a computable approach for the development, operation, and maintenance of software.

You: what is agile model?

Bot: Agile process model emphasize project agility and follow a set of principles that lead to a more informal approach to software process. It emphasizes maneuverability and adaptability. It is particularly useful when Web applications are engineered.

Send

My ChatBot

You: hii

Bot: Good to see you again

You: how can you help me?

Bot: By Explaining something about software engineering?

You: define software engineering?

Bot: software engineering as the application of a systematic, disciplined, which is a computable approach for the development, operation, and maintenance of software.

Send