

AIR - Assignment - 2

Title:- Elementary chatbot

Problem Statement:- Develop elementary chatbot for suggesting investment as per the customer needs.

Objective:-

- 1) To understand chatbot
- 2) Understand NLP

Outcome:- Student will be able to use NLTK library to develop an elementary chatbot

SW & HW:-

- 1) 64-bit OS
- 2) Python 3

Theory:-

A chatbot is a computer program or an AI agent which conducts conversation via auditory or textual methods. Such programs are often designed to convincingly simulate how a human would behave as a conversational partner, thereby passing the Turing test.

Chatbots are typically used in a dialog system for various practical purposes. including customer service or information acquisition.

Some chatbots use sophisticated natural language processing systems, but many simpler systems scan keywords within the input then pull a reply with most matching keywords, or most similar wording pattern from a database.

Chatbots can be classified into usage categories such as conversational commerce, analytics, communications, customer support, design, developer tools, education, entertainment, finance, food, games, health, life, marketing, news, etc.

Most chatbots work on basic models of

- 1) Entities:- The thing that user is talking about.
- 2) Intents:- The question that user asks the chatbot.
- 3) Responses:- The answer the chatbot provides.

NLP:-

It is a process that allows computer to derive meaning from user text inputs.

In doing so, it attempts to understand the intent of the input, rather than just the info of the intent itself.

With NLP, you are able to "train" your chatbot on the various interactions will go through and help streamline the response it outputs.

Algorithm:-

- 1) Start
- 2) Greet the user
- 3) Accept the user response
- 4) If user response is not 'bye' then
if user response is thank or
thank you → print "Your welcome"
else
if user-response is greetings
from print a greeting response
else
return a response
- 5) Else print "GoodBye"
- 6) Exit

Conclusion:- We have successfully build a chatbot for investment advice.

