

LP1 - AIR2

\* Title: Elementary Chatbot

\* Problem Statement:

Develop an elementary chatbot for suggesting investment as per the customer needs.

\* Objective:

To develop a basic chatbot.

\* S/w and H/w requirements:

- i) 64 bit processor
- ii) RAM
- iii) Linux OS
- iv) Python3

\* Theory:

- i) A chatbot is a software application used to conduct an online chat conversation via text or text-to-speech in lieu of providing direct contact with a live human agent.
- ii) They are designed to convincingly simulate the way a human would behave as a conversational partner.
- iii) In order to successfully achieve the above, the prerequisites are -
  - a) Understand target audience.
  - b) ' ' ' the natural language in which communication occurs.
  - c) Understand intent of user.
  - d) Come up with a response that answers the user.



NLTK (Natural Language Toolkit) is a platform for building python programs to work with human language data.

It has a module, nltk-chat, which simplifies building conversational engines, by providing a generic framework.

The libraries are imported from nltk-chat and include the chat and reflection classes.

The chat class processes conversations between the user and chatbot.

When the chat class constructor is passed, the custom defined pairs of variables alongside the pre-defined reflections dictionary, on calling the converse method of the chat class, the chatbot is automated.

#### \* Conclusion:

From this assignment, I was able to understand the basics of developing a chatbot and hence implement an elementary chatbot.