* Laboratory Practice II (Artificial Intelligence) - Group B - Experiment No. - 5

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Title :-
  Customer Interaction Application - Chatbot

Aim :-
 Develop an elementary chatbot for any suitable customer interaction application.

Objective :-
  To develop a working chatbot.

Theory :-
  A chatbot is a tool frequently supplemented with the machine learning and AI capabilites, designed to process and simular written or spoken human language. By learning on large datasets, chatbots become capable of understanding context and meaning and holding entire conversations that feel like an interaction with a human.

Chatbots function by processing user input with various techniques and using this information to give the best possible responses. Although the general purpose is similar for all chatbots apps, the methods used categorize them into declarative (rule based) and predictive (data-drive) solutions.

Knowledge Base source of consent.

NLP Player

Data Storage Interaction on history and Analytics.
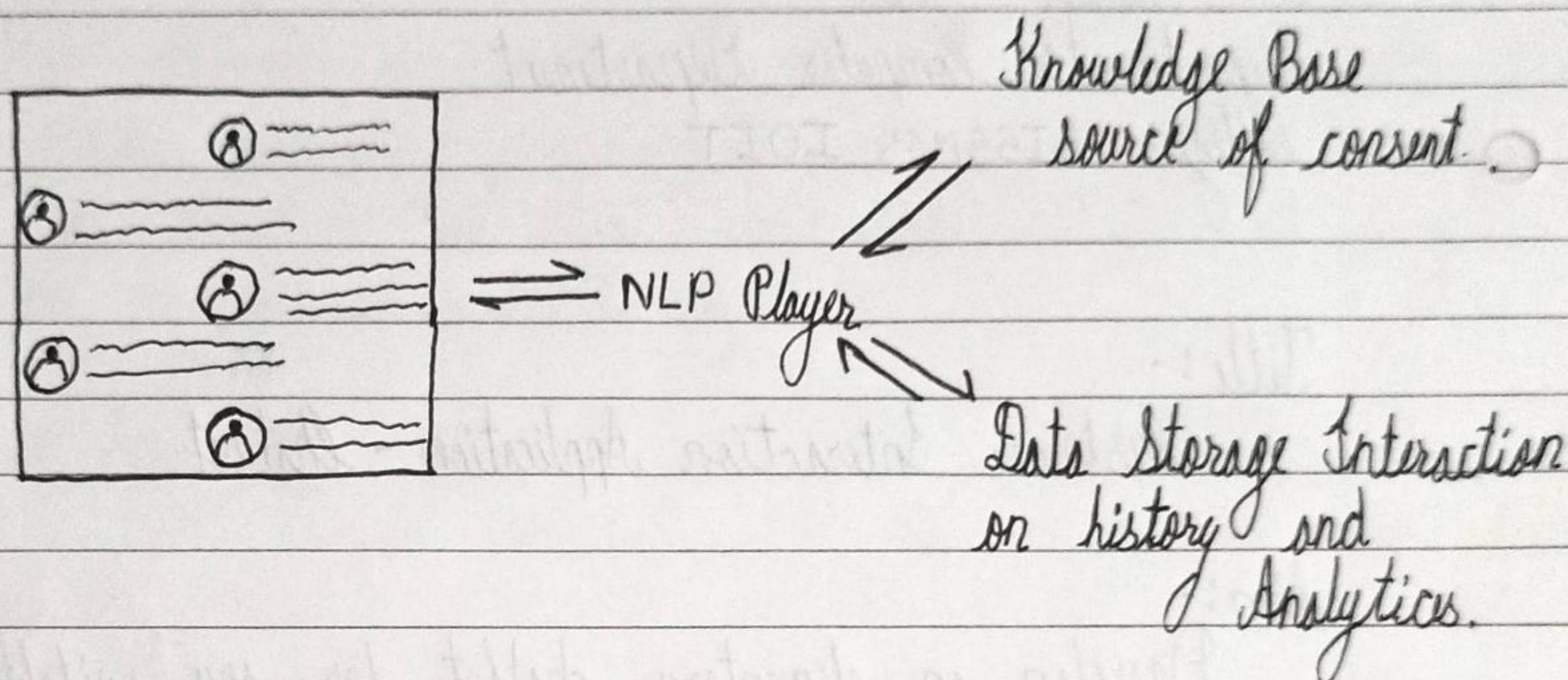
Declarative Chatbots:-

This kind of software uses rule-based approaches to data processing. It means that a declarative chatbot has a pre-programmed set of rules that dictate now the solution will behave. Although these apps uses NLP, its applied to enable a machine to understand users queries without generating original responses.

Such chatbots for bussiness are useful for trouble shooting task, faster question processing and handling common, frequent and simple questions.

Predictive Chatbots:-

AI chatbots that use ML and advanced language processing technologies to create original, not programmed responses still constitute minority of all chatbots solutions that businesses use.

Predictive chatbots are active helpers, and sales agents rather than robotic FAQs, providing personalized guidance to each customer. They can maintain or start conversations, all without being explicitly programmed what to say.

Customer Service:-

Personal assistants like Alexa and siri have been growing in popularity since the beginning of the pandemic and users interest in chatbots for customer service, as well as conversational AI technology in general is not about to extinguish any time soon.

Google Asistant, for instance scores about a billion users and helps schedule appointments, conduct easy searches, shop online and optimize daily and professional activities.

The development process for a chatbot app is rather straight forward, the key to success is a thoughtful and comprehensive integration of this technolgy.

Conclusion:-

Thus, we have successfully developed an elementary chatbot which is suitable for any customer interaction application.