**PROJECT: CHATBOT IN PYTHON**

**Loading and Processing the Dataset**

* **json**: It is possible to utilize it to work with JSON data.
* string: Provides access to several potentially valuable constants.
  + JSON is a built-in module in Python, so we don’t need to install it with pip.
  + You can simply import it in your code with **import json**
* **nltk**: It is a popular open-source library that provides a wide range of tools for natural language processing tasks, such as tokenization, part-of-speech tagging, parsing, sentiment analysis, and more.
  + To download the NLTK (Natural Language Toolkit) library in Python, you can use the pip install command in your command prompt or terminal.
  + **pip install nltk**
  + **import nltk**
* **numpy**: It is a library that supports multidimensional arrays and matrices, along with a large collection of high-level mathematical functions to operate on these arrays.
  + **pip install numpy**
  + **import numpy as np**
* **tensorflow**: It is an open-source platform for machine learning that provides various APIs and tools for building, training, and deploying deep learning models
  + **pip install tensorflow**

**Implement Basic User Interactions**

Using pre-trained model like GPT-2 helps to build the chatbot

* pip install transformers tensorflow nltk
* from transformers import GPT2LMHeadModel, GPT2Tokenizer
* import nltk
* tokenize the dataset
* train the given dataset using GPT-2
* create the the path for the given dataset
* the GPT-2 is a pretrained model this help to include the dataset which is provided