# **CHATBOT Libraries & APIs**

## Python Libraries

* **Pytorch** – This is main library used to train the chatbot for new dialogues
* **NLTK** – This is a natural language toolkit which is used to perform various functions on sentences. For examples- To break sentences into set of words or to perform stemming etc.
* **FastAPI** – This is used to create APIs
* **Requests** – This library is used to integrate third party APIs
* **Numpy** – To perform various calculations to train the model.

## Third Party API

1. **Weather API** – This API tells the weather in Celsius and Fahrenheit of a given location.
   1. **API URL** - <http://api.openweathermap.org/data/2.5/weather>
2. **Time Zone API –** This API tells the time zone, date, and current time of the given location.
3. **API URL -** <https://timezoneapi.io/api/timezone/>
4. **Python Packages** :-
   * **Geopy –** This package helps to find the latitude and longitude of a given location
   * **Timezonefinde –** This package finds the time zone of the location using it’s latitude and longitude.
5. **Translation API -**  This API translates the text into desired output language
   1. **Python Packages :-**
      * **Translate -**  This a python third party module which is used to translate text into desired language
6. **PDF API -**  This API returns the pdf as an attachment.
   1. **Python Packages :-**
      * **OS –**  This is python in-build module which helps in locate the path into the system and can locate any files or directory at a particular path.

## Third Party Applications Integration

1. **Telegram** – Integration of telegram with a chatbot.
   1. **Python Packages** :-
      * **Python-telegram-bot –** This is the package which handles sending and receiving of messages to telegram.
      * **Requests –** To connect chatbot API with telegram.
2. **Whatsapp** **& SMS**– Integration of whatsapp and sms with a chatbot.
   1. **Twilio** - Twilio Messaging is an API to send and receive SMS, MMS, OTT messages globally. It uses intelligent sending features to ensure messages reliably reach end users wherever they are.
   2. **Python Packages** :-
      * **Twilio** – This package help to connect the chatbot with twilio and to handle request/response with twilio application.