

NEGOTIATION CHATBOT

- The frameworks used here are Flask Framework, OpenAI API, VaderSentiment and ngrok
- Here the flask framework was incorporated so that the in order to handle the HTTP requests
- The OpenAI was involved as per the prerequisite but here only API key is used of the Open AI. Other than that it has no other involvement right now in the present code.
- The VaderSentiment is basically used to understand the tone of the user or the individual. It interprets it as either negative or a positive tone and then acts accordingly.
- Lastly, here the ngrok is used because as it is a local application and inorder to enable outside/external individuals to send requests, this application is used.
- This is basically performed on google colab
- Here the basic two types of inputs are used initiated using “message” or “offer”
- Later on the sentiment analysis is performed, so here the value set is 0.7, so if the calculated value is greater than 0.7 then it is positive sentiment and would want to go ahead with the offer or else it will be termed as a negative sentiment.
- The bot's effective price is calculated by subtracting any sentiment discount from its initial price (price_of_bot).
- The negotiation logic:
 - Offer Accepted: If the user's offer is greater than or equal to the bot's effective price, the bot responds with an acceptance message.
 - Offer Too Low: If the user's offer is below the minimum acceptable price (MIN_PRICE), the bot informs the user that their offer is too low.
 - Counteroffer: If the user's offer is below the bot's effective price but above the minimum, the bot makes a counteroffer by suggesting a price that is the average of the user's offer and the bot's effective price.
 - Offer Below Threshold: If the user's offer is above the bot's price but still below the effective bot price, the bot provides a counteroffer based on its adjusted price.
- The bot has a second endpoint (/counteroffer) for users to make a counteroffer.