

PRICE NEGOTIATOR E-COMMERCE CHATBOT SYSTEM



Neha Thakur
MSc.Computer Science
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Abstract :

- ❖ This proposes the development of a price negotiating chatbot on e-commerce websites using Natural Language Processing (NLP) technology
- ❖ In recent years online shopping has gained a huge boom,with this increase,most of the features of online shopping are developed but some features like negotiation with shopkeepers are not available which is sometimes possible in offline purchasing
- ❖ So,we have implemented a chatbot for negotiation on the products
- ❖ The chatbot interacts with customers and assists them to get a satisfactory price on product

Existing System :

- ❖ In existing system svm techniques are used
- ❖ It out comes with the no proper accuracy score

Drawbacks :

- ❖ Time consumption is more for loading the data
- ❖ Accuracy level is also not upto the satisfied level

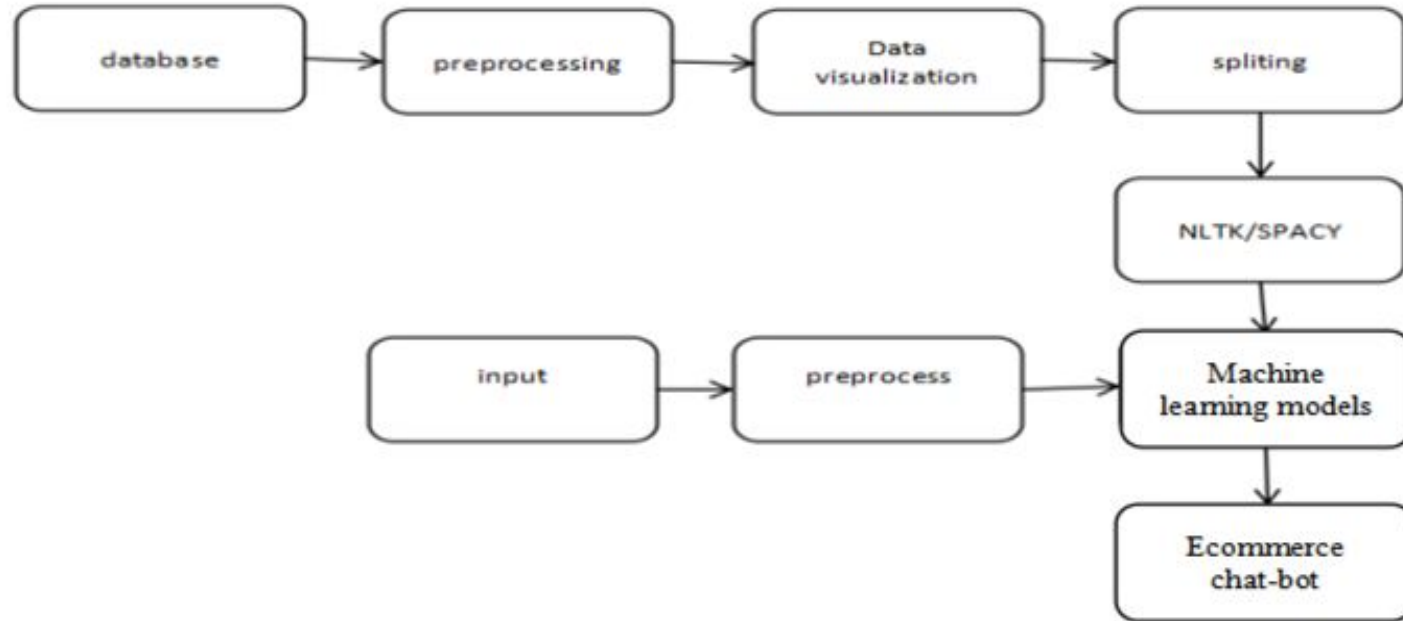
Proposed System :

- ❖ The development of the deep natural language processing and dataset with machine learning algorithms.the development of a database of items currently stocked by the shopping mall
- ❖ The website for demonstrating the working is made upon HTML,as frontend while the backend uses python
- ❖ In this customers judge the products on e-commerce website by various factors such as rating,price,review,etc.but for some customers ,price plays a crucial role in the decision for purchasing a product

Advantages :

- ❖ Accuracy level is improvised and the results are compared to know the best accurate results
- ❖ Time consumption is less

Block Diagram :



Modules and Algorithms :

- ❖ Price prediction module
- ❖ NLP module
- ❖ Negotiation module
- ❖ NLP

Software & Hardware Requirements :

- ❖ Python
- ❖ Anaconda navigator
- ❖ HTML,CSS
- ❖ **OPerating System** : window only
- ❖ **Processor** : i5 and above
- ❖ **Ram** : 4gb and above

Literature Survey :

Ai Based Shopping System for Price Negotiation Using Chatbot System and Computer

Science This paper contain the unreal intelligence based online shopping system. Around 80% of world consumers try online shopping, this is often the best opportunity for e- commerce companies is to make an extended lasting and profitable relationship with this already existing audience

Towards Automated Negotiation Agents that use Chat Interface The main goal of this research was to push the envelope of automated negotiators research by moving from menu- driven interfaces to talk based environments. As this work transitions from the fruitful work of previously developed agents, we intentionally chose to base ourselves on these agents and also the complex environments they'd studied

Packages :

❖ Flask :

flask is a popular python web framework that is widely used to design sophisticated web applications, API's ,microservices

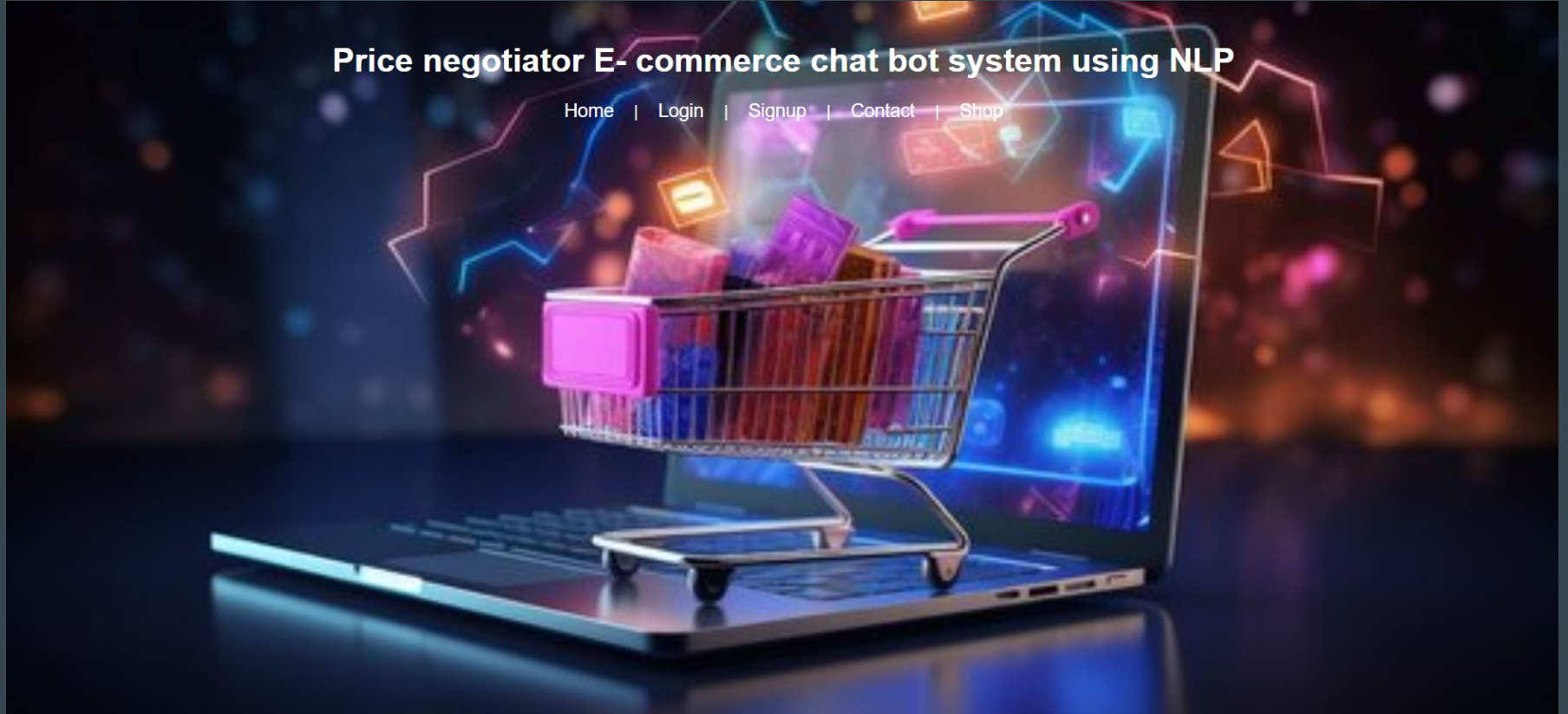
❖ Nltk :

It is a powerful and flexible library for performing sentiment analysis , tokenization and other natural language processing tasks in python

Output :

Price negotiator E- commerce chat bot system using NLP

[Home](#) | [Login](#) | [Signup](#) | [Contact](#) | [Shop](#)



Signup

Username:

nehathakur10

Password:

Email:

nehaathakur92@gmail.com

Phone Number:

8940374226

Gender:

Female ▾

Signup

Shop

Home | cart

Fan



Price: ₹2500

Buy

Negotiate

Ac



Price: ₹50000

Buy

Negotiate

washing_machine



Price: ₹60000

Buy

Negotiate

Desktop



Price: ₹30000

Buy

Negotiate

Price: ₹2500

Buy | Negotiate

Buy | Negotiate

Buy | Negotiate

Phone



Price: ₹30000

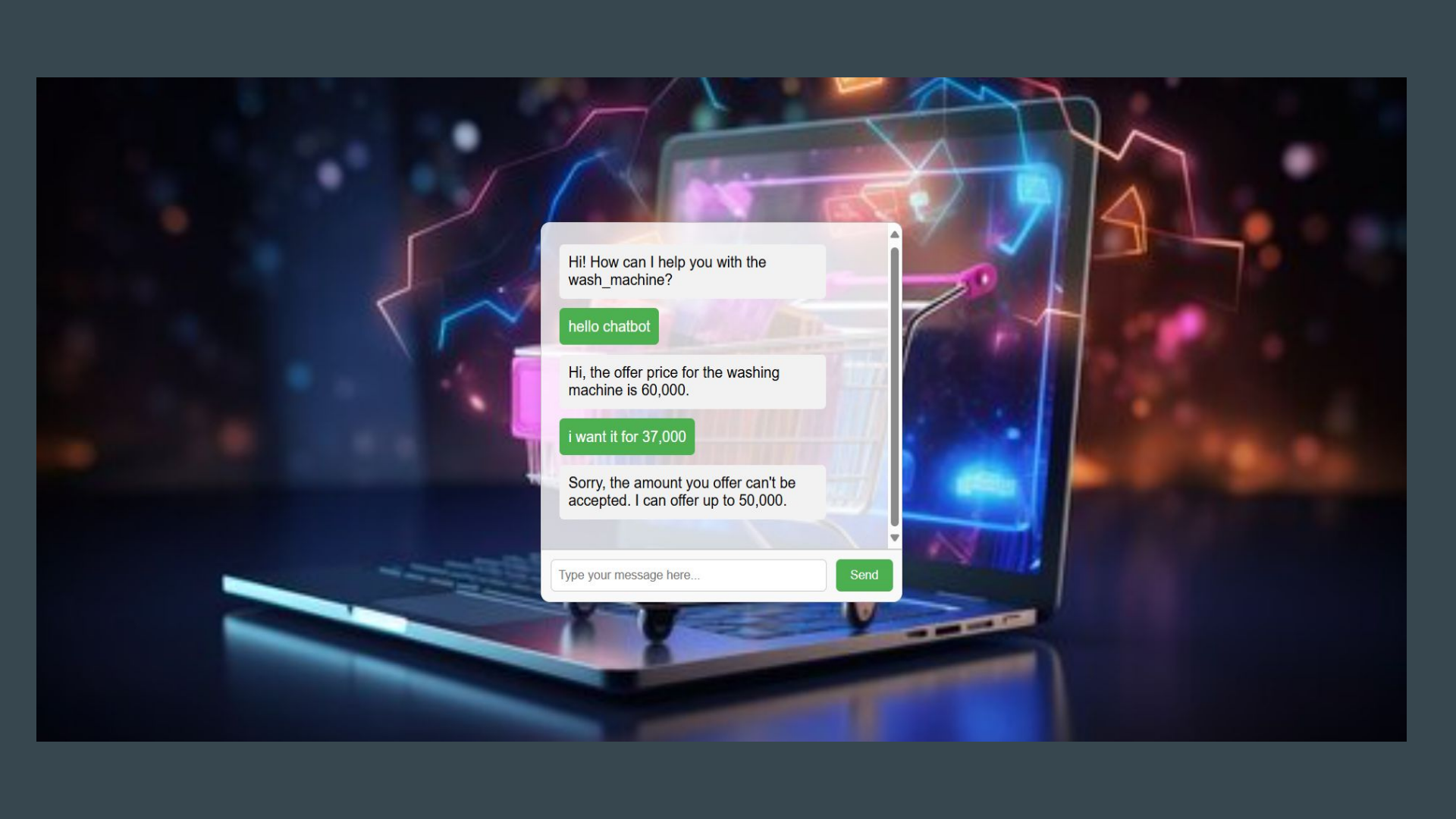
Buy | Negotiate

Laptop



Price: ₹50000

Buy | Negotiate



Hi! How can I help you with the wash_machine?

hello chatbot

Hi, the offer price for the washing machine is 60,000.

i want it for 37,000

Sorry, the amount you offer can't be accepted. I can offer up to 50,000.

Type your message here...

Send

The background features a laptop on a dark surface, with a futuristic, glowing interface overlaid. The interface includes a chat window with a shopping cart icon, a price range slider, and a 'Send' button. The overall aesthetic is high-tech and digital.

accepted. I can offer up to 50,000.

i want it for 39,000

Sorry, the amount you offer can't be accepted. I can offer up to 48,000.

i want it for 40,000

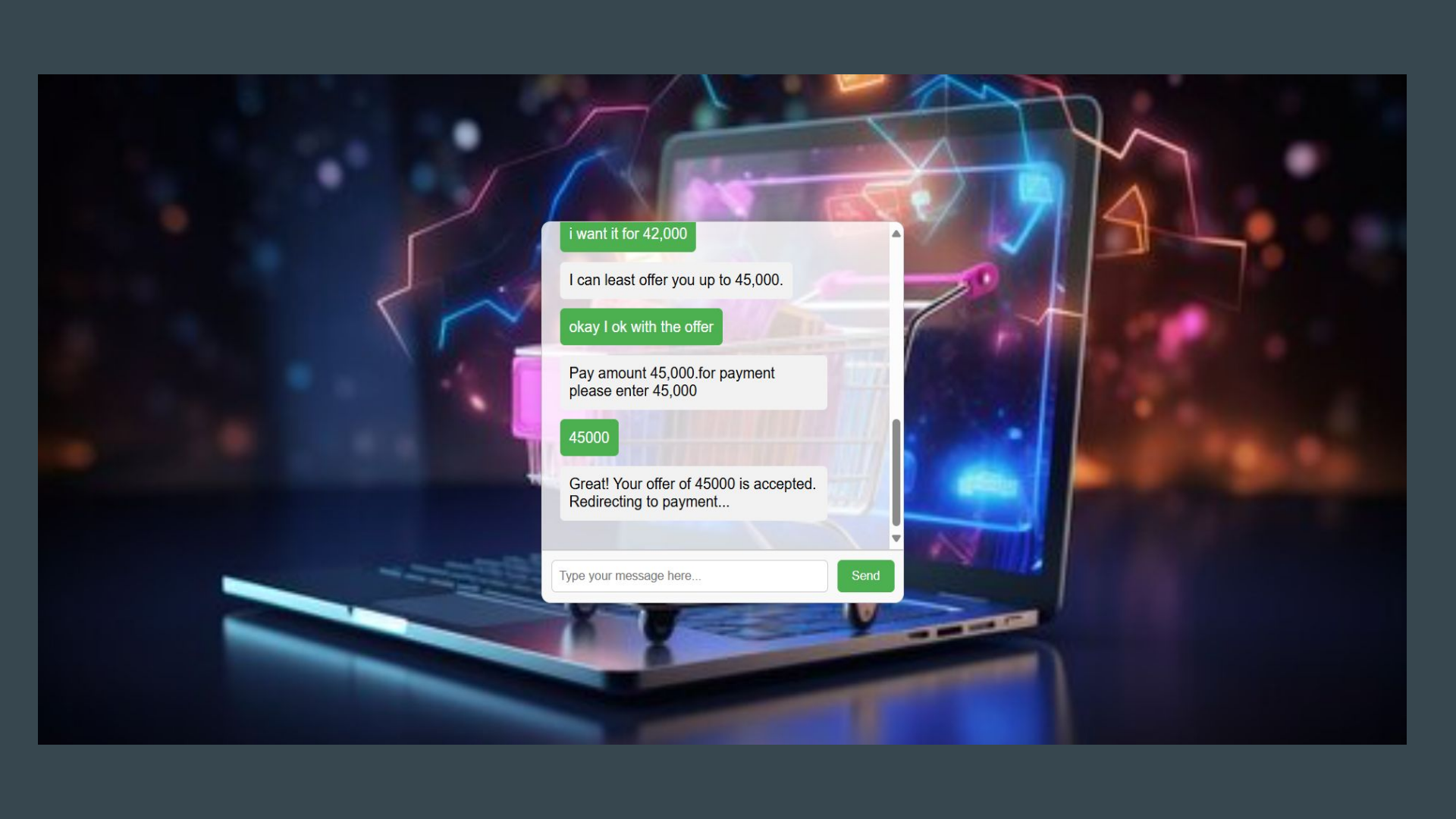
Sorry, the amount you offer can't be accepted. I can offer up to 47,000.

i want it for 42,000

I can least offer you up to 45,000.

Type your message here...

Send

A laptop is shown from a low angle, with its screen displaying a chat interface. The background is dark with glowing, colorful lines (blue, pink, orange) and bokeh light effects, suggesting a digital or futuristic theme. The chat window is a white box with rounded corners, containing several messages and a text input field at the bottom.

i want it for 42,000

I can least offer you up to 45,000.

okay I ok with the offer

Pay amount 45,000.for payment
please enter 45,000

45000

Great! Your offer of 45000 is accepted.
Redirecting to payment...

Type your message here...

Send



Payment successful!

Challenges and Future Scope :

- ❖ In future endeavors, there are several approaches for advancing the capabilities and effectiveness of the price negotiation chatbot
- ❖ Sentiment analysis to gauge user preference and emotions
- ❖ Supporting multiple languages
- ❖ Prioritizing user privacy and security
- ❖ Balancing customer satisfaction and profitability
- ❖ Ethical consideration

Conclusion :

In conclusion ,the price negotiation chatbot presents a promising solution for enhancing the e-commerce shopping experience by empowering users to negotiate prices effectively through NLP it understand the queries,analyze products details. The project successful implementation demonstrates the feasibility of leveraging ,NLP algorithm,such as to develop intelligent conversational bots capable of handling complex negotiation scenarios.

THANK YOU