

Price Negotiating Chatbot on E-Commerce Website Using NPL

D. Hima Bindu¹, V. Manasa², P. Karthik³, R. Shalini⁴, T. Dilli Rao⁵

Assistant Professor, Department of Computer Science and Engineering¹

Students, Department of Computer Science and Engineering^{2,3,4,5}

Raghu Institute of Technology (Autonomous), Dakamarri, Visakhapatnam, AP. India

Abstract: *This proposes the development of a price negotiating chatbot on e-commerce websites using Natural Language Processing (NLP) technology. The chatbot aims to assist customers in negotiating prices with the sellers, enhancing their shopping experience. The proposed chatbot will be built using the Python programming language and the TensorFlow library for Natural Language Processing. The chatbot's architecture consists of several components, including a user interface, an NLP module, a price prediction module, and a negotiation module. The NLP module will enable the chatbot to understand and interpret the customer's messages, while the price prediction module will predict the minimum price that the seller is willing to accept. The negotiation module will use reinforcement learning algorithms to negotiate with the seller and come up with the best possible price for the customer. The proposed chatbot will provide customers with a convenient way to negotiate prices with sellers, enhancing their shopping experience. The chatbot's architecture, which includes a user interface, an NLP module, a price prediction module, and a negotiation module, will enable the chatbot to understand and interpret customer messages and negotiate prices with sellers on behalf of the customer. The chatbot will be trained and assessed on a substantial dataset of negotiation conversations, and its performance will be compared to other contemporary negotiation models. The results will demonstrate that the proposed chatbot significantly improves the shopping experience of customers, attaining higher success rates, shorter negotiation times, and increased customer.*

Keywords: Price negotiation, E-commerce negotiation, Chatbot, Machine Learning, Neural Network, Natural Language Processing

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