

SHOPMATE

- a chatbot to shop the pandemic essentials

INTRODUCTION

OVERVIEW

Due to COVID-19, people's way of purchasing items has changed. The situation has persisted long enough for these patterns to become ingrained.

The topic that I have chosen for my project is "building a chatbot to shop for the essentials during Pandemic". It is built to help the customers purchase items from the store with the help of Shopmate, a shopping assistant. The shopmate is capable of displaying the list of items in the store, different offers or discounts available and also placing orders for the customer with ease. With the help of the chatbot, the customer can navigate through the shopping website without much confusion. Chatbots make it quick and easy for consumers to find what they are looking for, thereby turning visitors into buyers.

PURPOSE

The purpose of my project i.e., building a chatbot to shop the essentials, is to improve the relationship between the customer and the company. Chatbots are capable of instantly communicating with the customers and assisting them to shop items with ease. Chatbots can connect with customers in a personalized way thereby providing valuable customer service, support and comfort. This in turn can increase the company's sales and profit.

LITERATURE SURVEY

EXISTING PROBLEM

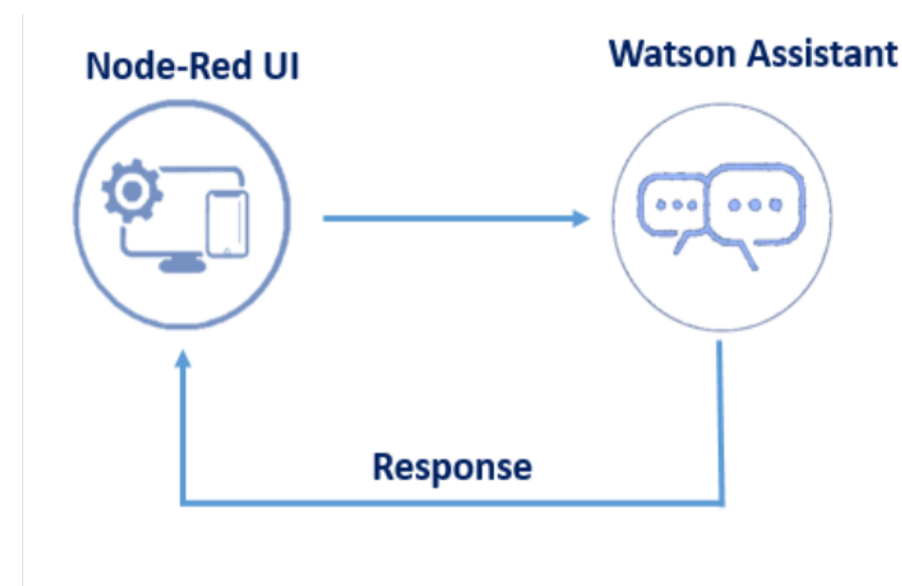
The existing mode of communication between the customers and the company is through the human agents, emails, contact forms etc which are provided in the website. But, the major limitation of all these methods is the delay in response which is not entertained by the customers. While navigating through a website, customers want immediate response to their queries rather than digging around in the website.

PROPOSED SOLUTION

The solution to the existing problem is the implementation of a chatbot that can be incorporated in the website. The use of a chatbot in the website helps the company to improve their customers' experience to generate more sales and build a deeper rapport with the customers.

THEORITICAL ANALYSIS

BLOCK DIAGRAM



EXPERIMENTAL INVESTIGATION

As a part of the experimental investigation, I made comparisons of sites with chatbot assistant and sites without assistance. I found that those sites that provided assistance were easy to navigate, to place orders and to search items. Also, the chatbots gave suggestions regarding the new products in the sites. I found it easier to use those sites than the ones without the bots.

RESULT

A shopbot is built using IBM Watson Assistant and Node-RED.

ADVANTAGES AND DISADVANTAGES

ADVANTAGES :

1. 24*7 availability- Chatbots are available to solve the queries at anytime of the day unlike the human assistants who work for a limited time.
2. Increased sales- Customers can get instant support and solutions for their problems using chatbots while using agents takes a longer time. When customers get such good service, chances are high that they will stick onto this particular company which will drive up sales.
3. Reduced cost- Implementing a chatbot is much cheaper and faster than creating an app or hiring employees for each task.
4. Increased customer satisfaction- Customers will be more satisfied with the quick replies and responses from the chatbots which will make them happier .

DISADVANTAGES:

1.Limited responses-Chatbots are trained with a particular set of questions which the customers are likely to ask. But if the customers ask a question which is untrained, they won't be able to get the answer they are looking for.

2.Constant maintenance-Chatbots require constant maintenance and updations regarding the available products in the shop. Also, the chatbots must be periodically analyzed so that the most common questions of the customers can be identified and the answers can be updated for future customers.

APPLICATIONS OF CHATBOTS

In websites of :

finance, shopping, banking, travels, media, healthcare, restaurants, insurance, media, transportation, marketing, hospitality,

CONCLUSION

From my perspective, chatbots are dramatically changing businesses. There is a wide scope for chatbots in platforms such as e-commerce, retail, banking, leisure, travel, healthcare, and so on.

Chatbots can reach out to a large audience on messaging apps and be more effective than humans. They may develop into a capable information-gathering tool in the near future.

FUTURE SCOPE

The future scope of this chatbot include:

- Order delivery.
- Integration of payment gateways with the chatbot.
- Option for order cancellation.
- Ability to take multiple orders from the same customer.

BIBLIOGRAPHY

services used are:

- IBM Watson Assistant
- Node-Red

APPENDIX

preview link

<https://web-chat.global.assistant.watson.cloud.ibm.com/preview.html?region=eu-gb&integrationID=ab3810db-3c0a-4f4f-af45-3cdae23e644b&serviceInstanceID=0ebe899c-3294-480b-a06b-8ebf81cea5bc>

node-red

<https://node-red-ofuyi-2020-12-17.eu-gb.mybluemix.net/red/#flow/52542bf6.6bee64>

UI

<https://node-red-ofuyi-2020-12-17.eu-gb.mybluemix.net/ui>