

# Chatbot To Shop For Essentials During Pandemic Using Watson Assistant

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# INTRODUCTION

## 1.1 Overview

Covid 19 has affected our lives greatly. It brought a change to many of our lifestyles. One among them is our shopping habits. Before the pandemic shopping was a stress buster, But now safety and savings has become everyone's priority. People prefers to buy essential items during pandemic. But, because of social distancing and other issues it can be risky for some people to shop for essential items in person. This project helps with this issue by giving people an online option to shop for essentials.

## 1.2 Purpose

With the help of Watson assistant, a chatbot is implemented. This chatbot is able to perform answer customer queries regarding grocery lists, offers etc. And also it is able to place take customer details and place order for them.

# LITERATURE SURVEY

## 2.1 Existing problem

During a pandemic the demands or preferences of the consumers are governed by many crucial factors such as, safety and health factors, psychological factors and demographic attributes such as age group and gender of the consumers. Safety and health factors are also playing a very important role as people are aware about the virus and its impact, so they are taking many precautionary measures, their expectations and demands are also changing dayby-day. Inshort people prefer to buy essential items from their home rather going outside.

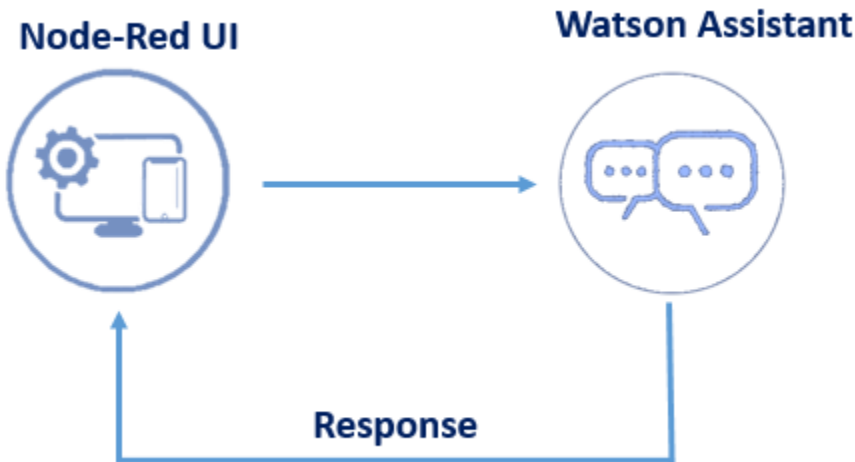
## 2.2 Proposed Solution

A Chatbot using Watson assistant is implemented that can perform the following tasks :

- Give the list of items in the Store
- Should show the prices of vegetables
- Display if there are any offers or discounts
- The bot should be able to take details like name, contact number, address, and the items to place the order.

# THEORITICAL ANALYSIS

## 3.1 Block Diagram



## 3.2 Software design

Services Used:

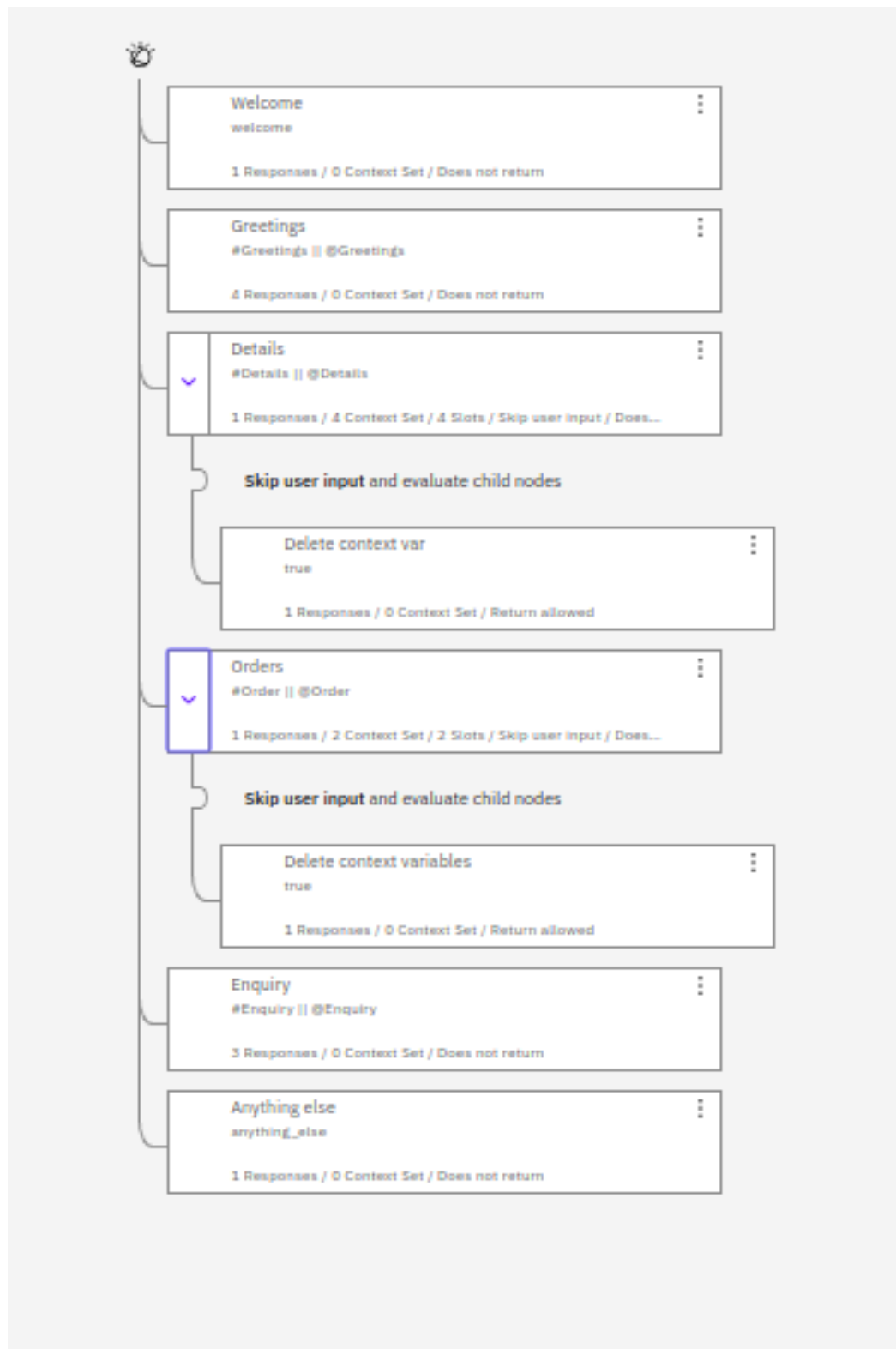
### 1. IBM Watson Assistant

Watson Assistant provides customers with fast, consistent and accurate answers across any application, device or channel. Using AI, Watson Assistant learns from customer conversations, improving its ability to resolve issues the first time while removing the frustration of long wait times, tedious searches and unhelpful chatbots.

### 2. Node-Red

Node-RED is a flow-based development tool for visual programming developed originally by IBM for wiring together hardware devices, APIs and online services as part of the Internet of Things. Node-RED provides a web browser-based flow editor, which can be used to create JavaScript functions.

# FLOWCHART



# RESULT

Home

Chatbot

Enter the input \*  
hello

SUBMITCANCEL

USERhello

CHATBOTHello

Home

Chatbot

Enter the input \*  
show the list of items

SUBMITCANCEL

USERshow the list of items

CHATBOT1. MILK 2. CURD 3. ATTA 4. OIL 5. FISH 6. MEAT

Chatbot

Enter the input \*  
show the offers

SUBMIT

CANCEL

USER

show the offers

CHATBOT 15% off on Meat and Fish....20% off on Dairy and Eggs... .5%  
off on Oil and Fat....Buy 2kg of Sugar, Get 1kg Free

Chatbot

Enter the input \*  
show the price of vegetables

SUBMIT

CANCEL

USER

show the price of vegetables

CHATBOT 1. TOMATO : Rs 28/- 2. POTATO : Rs 30/- 3. BRINJAL : Rs 20/-  
4. CABBAGE : Rs 35/- 5. ONION : Rs 20/-



### Chatbot

Enter the input +  
I want to give the delivery details

SUBMIT

CANCEL

USER

I want to give the delivery details

CHATBOT

Enter your name

### Chatbot

Enter the input +  
Anu George

SUBMIT

CANCEL

USER

Anu George

CHATBOT

Enter your contact number

### Chatbot

Enter the input \*  
7485987898

SUBMIT

CANCEL

USER

7485987898

CHATBOT

Enter your address

### Chatbot

Enter the input \*  
Rose villa trivandrum kerala

SUBMIT

CANCEL

USER

Rose villa trivandrum kerala

CHATBOT

How would you like to pay?

### Chatbot

Enter the input \*  
upi

SUBMIT

CANCEL

USER

upi

Verify the details : Name - Anu George Contact number -  
CHATBOT 7485987898 Address - Rose villa, Trivandrum, Kerala Payment -  
UPI

### Chatbot

Enter the input \*  
I want to place an order

SUBMIT

CANCEL

USER

I want to place an order

CHATBOT

Which item do you want?

### Chatbot

Enter the input +  
Eggs

SUBMIT

CANCEL

USER

Eggs

CHATBOT

How much quantity do you want?

### Chatbot

Enter the input +  
5

SUBMIT

CANCEL

USER

5

CHATBOT

Thank you. Your order for 5 Eggs has been placed.

# ADVANTAGES

## **Reduced Costs**

Having chatbots do most (or probably all) of your customer service activities can help you save a substantial amount of money on your customer service team

## **Product Guidance**

Very often, e-commerce visitors get lost in the maze of millions of products. Chatbots can help such customers find the exact product they are looking for in a huge catalog and directly jump to the checkout page, or obtain information on current sales.

## **Chatbots create user curiosity**

Chatbots add a new aspect to ecommerce and create a remarkable customer experience.

## **Chatbot integration allows reducing response time**

Naturally, when a customer makes an inquiry, they expect a prompt answer, preferably – immediate.

With phone calls and emails, the waiting time may stretch quite long, as when phoning a call center, you are very likely to be forced to listen to a lot of instructions and promotional material and then be transferred a couple of times.

# DISADVANTAGES

## **Lack Emotions**

Unlike humans, a chatbot has no emotions. However, they are pretty essential to keep a conversation going the right way. Your customer service executives can understand your customers' emotions and respond accordingly, but a chatbot may not be able to do so.

## **Made to Handle First-Level Questions**

One of the greatest disadvantages of chatbots is that they have been designed to handle first-level questions only. They may not be able to solve complex queries. You need to train them to converse with your customers in the right way.

## **Require Maintenance**

Chatbots require ongoing review, maintenance, and optimization in terms of their knowledge base and the way they are supposed to communicate with your customers.

## **Customers Could Become Frustrated**

Because many chatbots work from a limited data base, they can't improvise. In other words, if they get confused, the conversation could run in a circle. That can lead to customers who become frustrated.

## APPLICATIONS

During a pandemic people prefer not to go out unless it is an emergency. Safety becomes their first preference therefore for shopping essentials they will try to use online shopping sites or directly call a shop and place orders. By implementing a Chatbot in this area can reduce labour costs and increase customer satisfaction. The customer can place orders through the chatbots. Later these data can be analyzed and can improve customer recommendations. Also chatbots provides customer support.

## CONCLUSION

The emergence of global pandemic has affected each and every sector. Many new technologies were developed and accepted to solve the problems that arose during this period. Chatbots can be implemented to shop essentials. Customer can directly place the order through the bot. This will reduce labour costs, also the customer will be able to place orders at any time. This way people can shop essentials from without directly going to shops.

## FUTURE SCOPE

Chatbots can be implemented in almost every fields. In future this system can be implemented for a more complex shopping sites. This way customer recommendations can be improves also this will affect the customer experience as they are able to converse with the bot. Customers can easily find out discounts and offers, also they can ask queries about the items to the chatbot.

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