CHATBOT DEPLOYMENT WITH IBM CLOUD WATSON ASSISTANT

Project Objective:

The objective of this project is to create an AI-powered chatbot using IBM Watson that is seamlessly integrated with WhatsApp. The chatbot's primary goal is to enhance user engagement, provide information, answer questions, and offer assistance through WhatsApp.

Design Thinking Process:

1. Empathize: Understand the needs of WhatsApp users and stakeholders. Gather insights from potential users to identify their pain points and preferences when using WhatsApp for communication.

2. Define: Clearly define the scope and objectives of the chatbot on WhatsApp. Determine the specific use cases it will address, such as answering FAQs, providing product information, or facilitating transactions.

3. Ideate: Brainstorm ideas for the chatbot's features and functions on WhatsApp. Explore creative ways to address user needs and enhance their WhatsApp experience. Consider potential conversation flows and user interactions within the WhatsApp context.

4. Prototype: Create a preliminary design of the chatbot's conversation flow within WhatsApp. Design the chatbot's responses, including text, multimedia, and interactive elements. Use prototyping tools to visualize the user experience.

5. Test: Gather feedback on the WhatsApp chatbot prototype to refine its design. Conduct usability testing with potential users to ensure that the chatbot's interactions are user-friendly and effective.

Development Phase:

We are developing a chatbot that is related to booking an appointment or confirmation of appointment. In this chatbot, we are using some actions like regex for email (for authentication), options, confirmation, current date, current time & using some specific conditions and end the action. Then, integrate chatbot which is created using IBM Watson Assistant with WhatsApp in Twilio.

Here are the steps for integrating chatbot with WhatsApp…

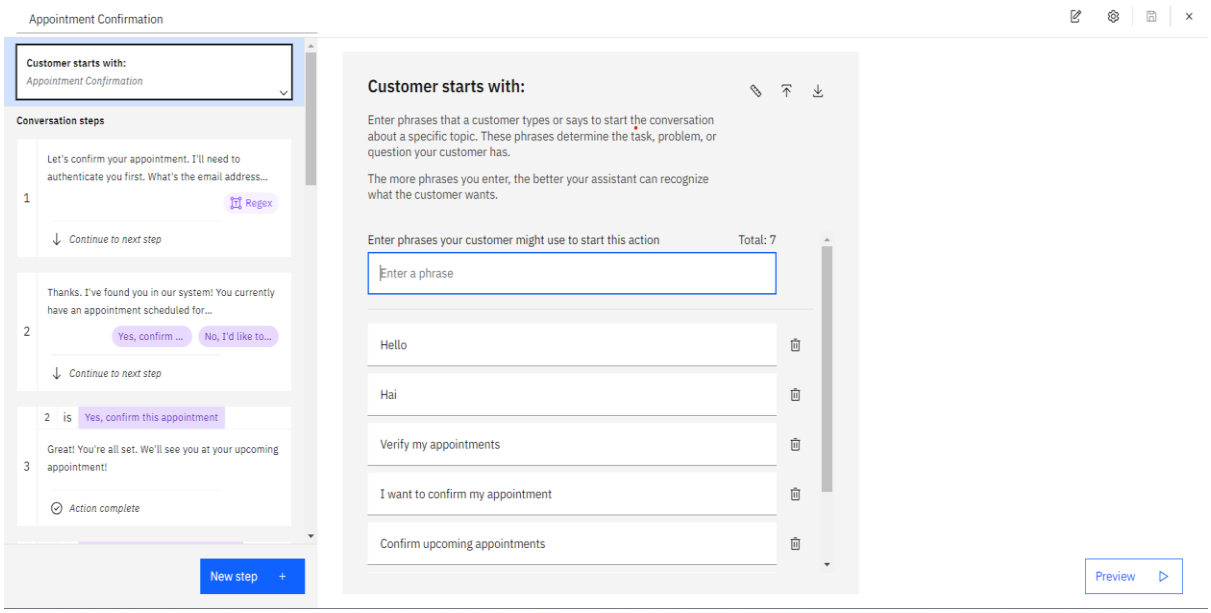
- Login into Twilio account.
- In this dashboard, it has account SID, auth token.
- We connect the account SID and auth token in Twilio with IBM Watson.
- After the above procedure, it will give integration code.
- Save this integration code in sandbox setting.
- After saving this code, the Twilio will give the number. Then it will also provide one code to start the conversation.

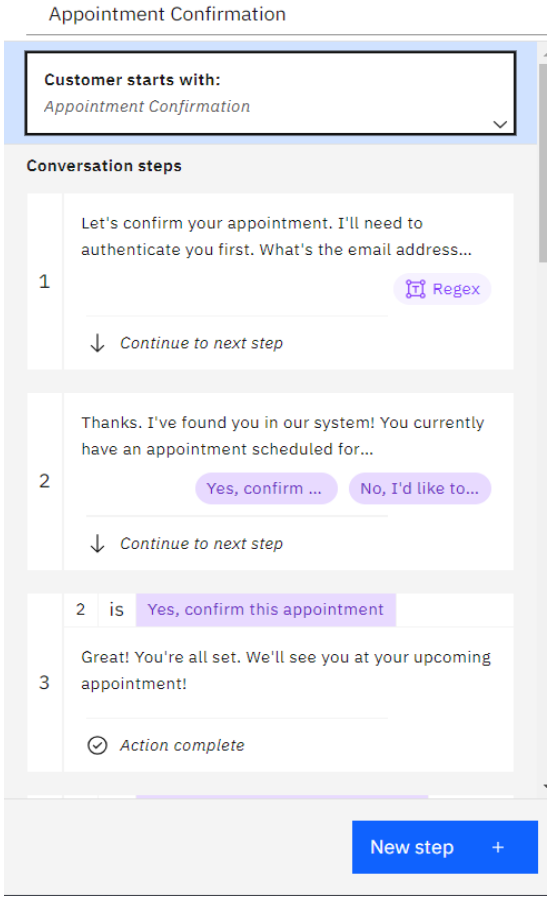
Platform Layout:

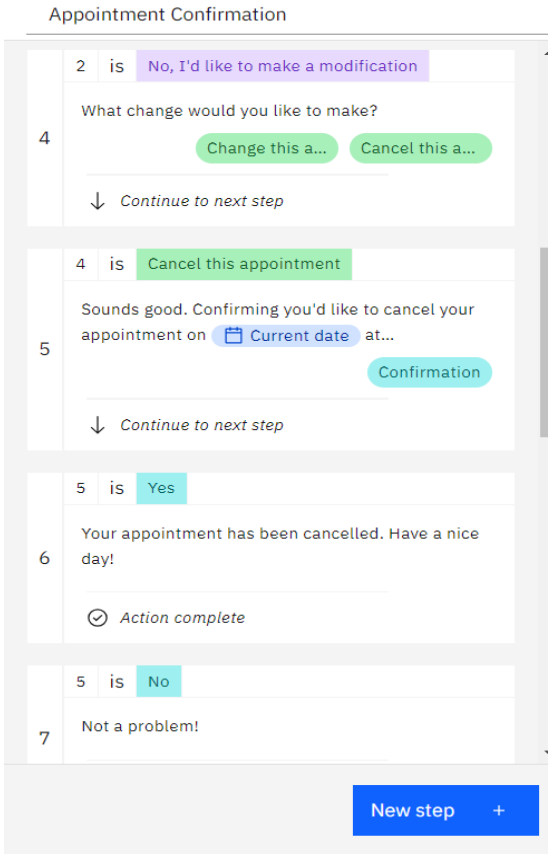
WhatsApp and Twilio: These are the messaging platforms that users will interact with. Users can send messages to the chatbot via WhatsApp using Twilio.

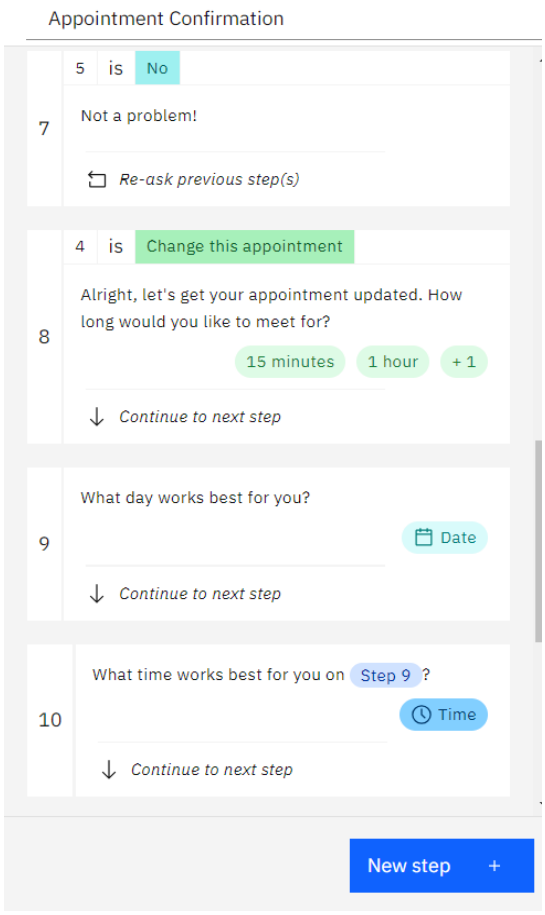
Feature:

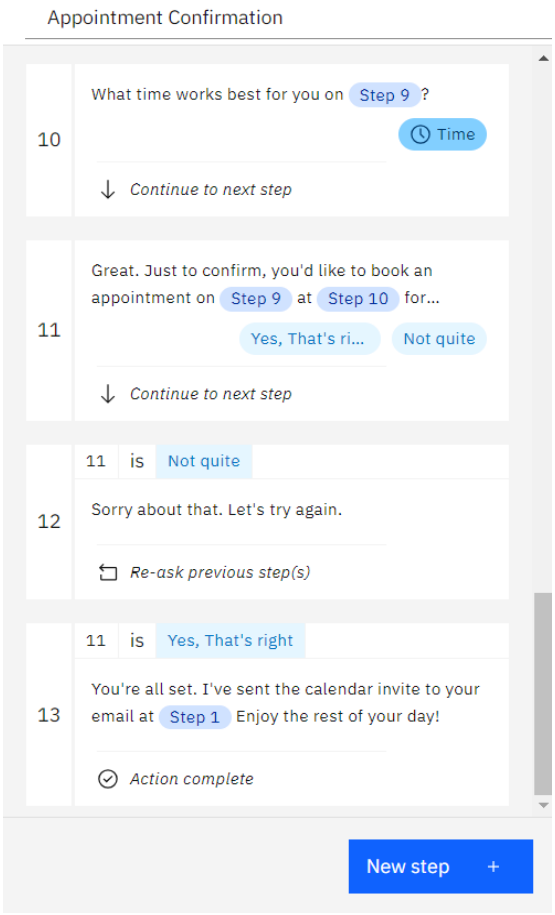
Using this chatbot, the users can booking an appointment or confirmation of appointment.


Appointment Confirmation
Customer starts with:
Appointment Confirmation
Conversation steps
Let's confirm your appointment. I'll need to authenticate you first. What's the email address...
Regex
Continue to next step
Thanks. I've found you in our system! You currently have an appointment scheduled for...
Yes, confirm ...
No, I'd like to...
Continue to next step
2 is Yes, confirm this appointment
Great! You're all set. We'll see you at your upcoming appointment!
Action complete
New step
Customer starts with:
Enter phrases that a customer types or says to start the conversation about a specific topic. These phrases determine the task, problem, or question your customer has.
The more phrases you enter, the better your assistant can recognize what the customer wants.
Enter phrases your customer might use to start this action
Total: 7
Enter a phrase
Hello
Hai
Verify my appointments
I want to confirm my appointment
Confirm upcoming appointments
Preview

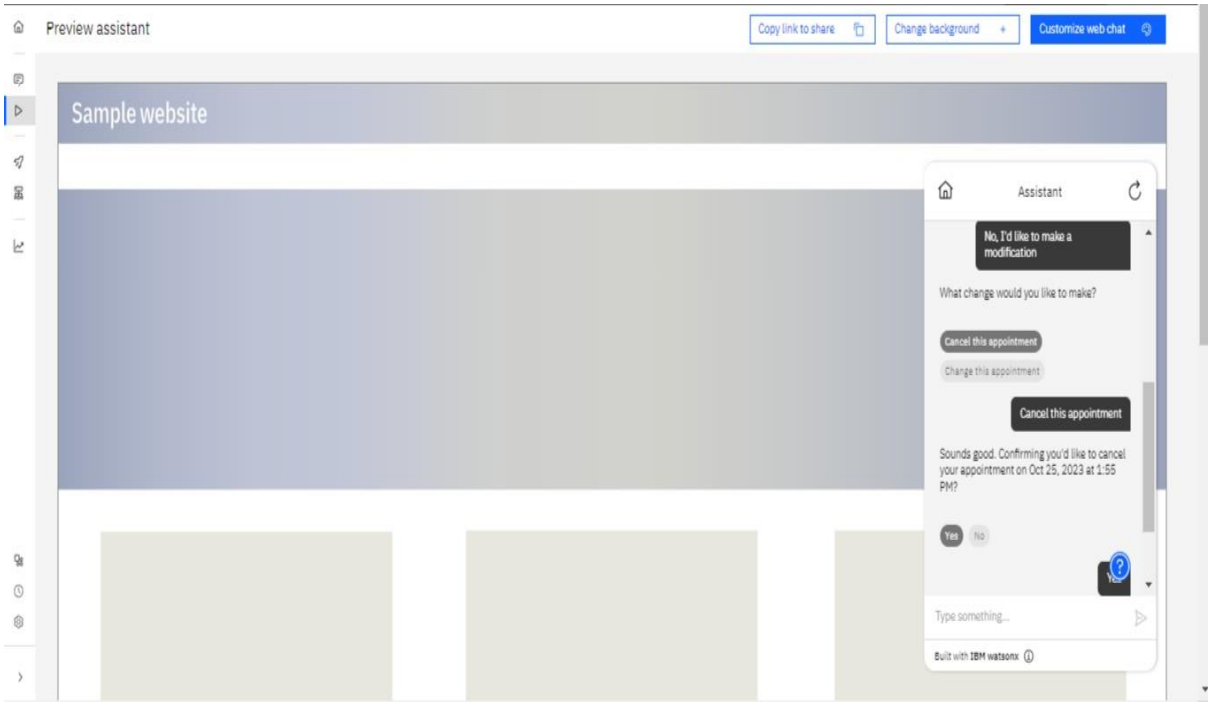

Appointment Confirmation
Customer starts with:
Appointment Confirmation
Conversation steps
1
Let's confirm your appointment. I'll need to authenticate you first. What's the email address...
Regex
Continue to next step
2
Thanks. I've found you in our system! You currently have an appointment scheduled for...
Yes, confirm ...
No, I'd like to...
Continue to next step
3
2 is Yes, confirm this appointment
Great! You're all set. We'll see you at your upcoming appointment!
Action complete
New step

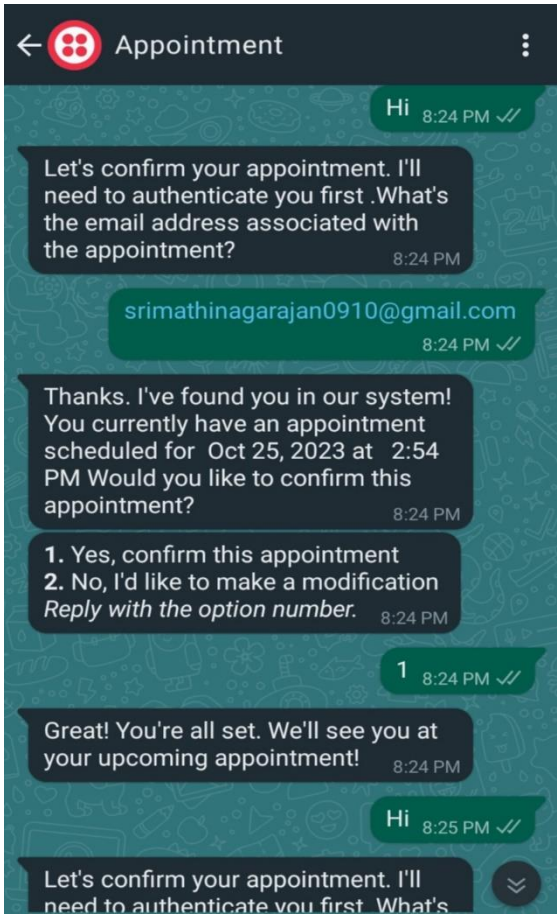

Appointment Confirmation
4
2 is No, I'd like to make a modification
What change would you like to make?
Change this a...
Cancel this a...
Continue to next step
5
4 is Cancel this appointment
Sounds good. Confirming you'd like to cancel your appointment on Current date at...
Confirmation
Continue to next step
6
5 is Yes
Your appointment has been cancelled. Have a nice day!
Action complete
7
5 is No
Not a problem!
New step

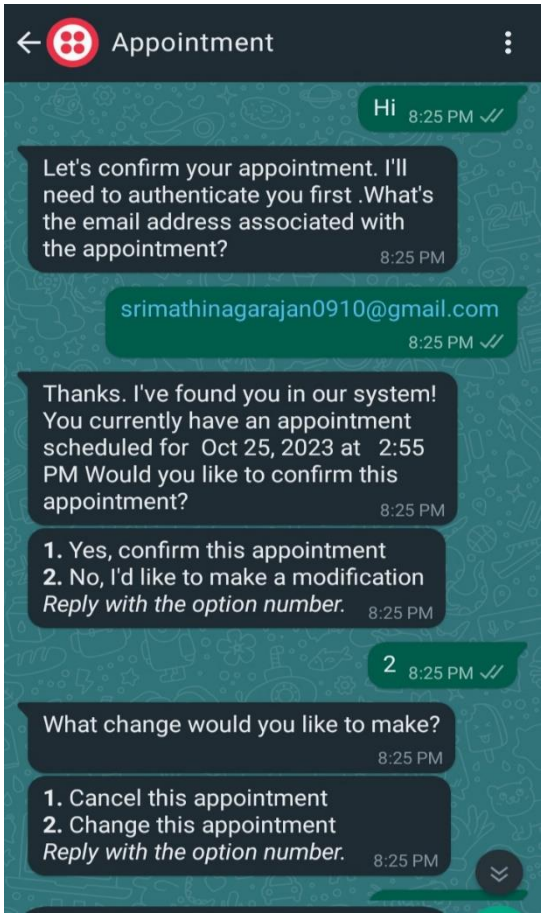

Appointment Confirmation
5 is No
7
Not a problem!
Re-ask previous step(s)
4 is Change this appointment
8
Alright, let's get your appointment updated. How long would you like to meet for?
15 minutes
1 hour
+ 1
Continue to next step
9
What day works best for you?
Date
Continue to next step
10
What time works best for you on Step 9 ?
Time
Continue to next step
New step +

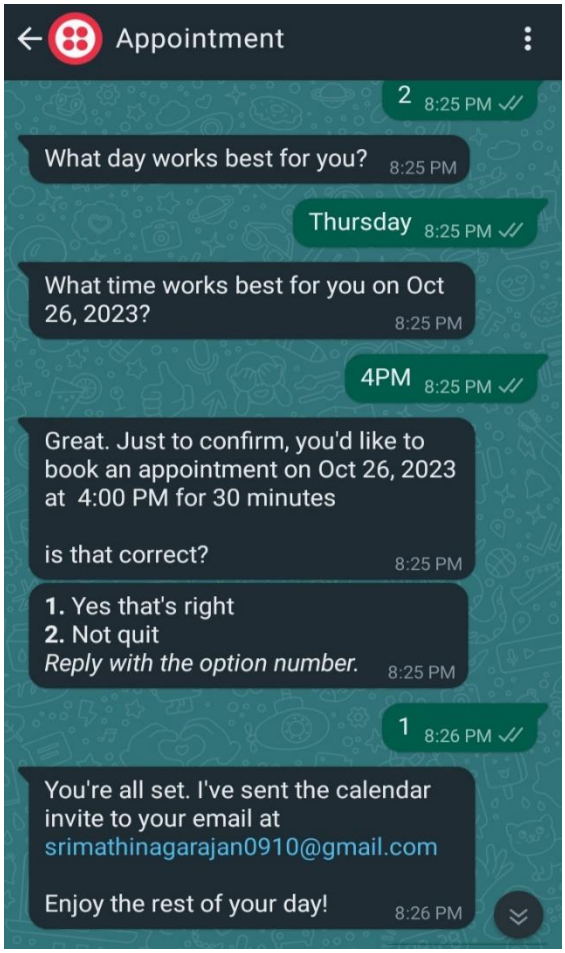

Appointment Confirmation
10
What time works best for you on Step 9 ?
Time
Continue to next step
11
Great. Just to confirm, you'd like to book an appointment on Step 9 at Step 10 for...
Yes, That's ri...
Not quite
Continue to next step
12
11 is Not quite
Sorry about that. Let's try again.
Re-ask previous step(s)
13
11 is Yes, That's right
You're all set. I've sent the calendar invite to your email at Step 1 Enjoy the rest of your day!
Action complete
New step +

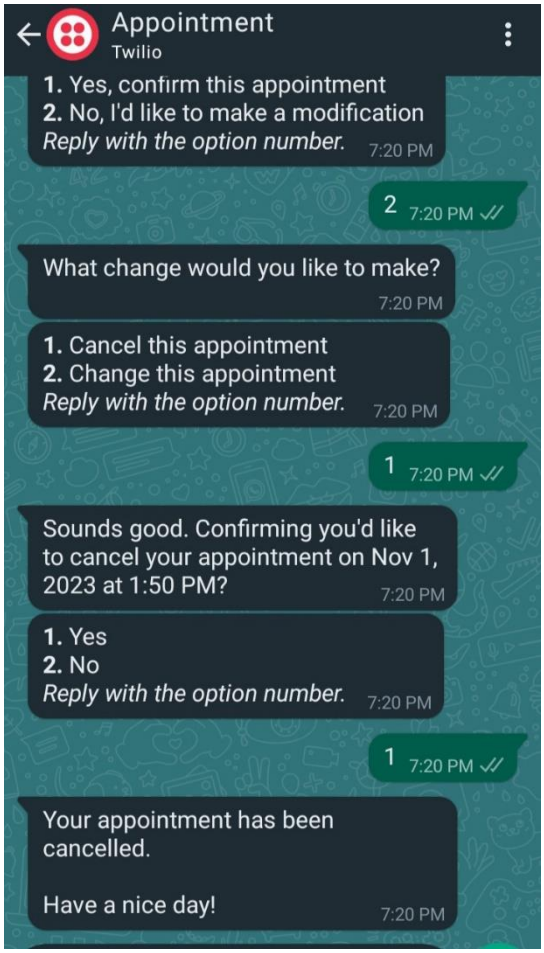

Preview assistant
Copy link to share
Change background
Customize web chat
Sample website
Assistant
srimathinagarajan0910@gmail.com
Thanks. I've found you in our system! You currently have an appointment scheduled for Oct 25, 2023 at 1:50 PM Would you like to confirm this appointment?
Yes, confirm this appointment
No, I'd like to make a modification
Yes, confirm this appointment
Great! You're all set. We'll see you at your upcoming appointment!
Type something...
Built with IBM watsonx


Preview assistant
Copy link to share
Change background
Customize web chat
Sample website
Assistant
No, I'd like to make a modification
What change would you like to make?
Cancel this appointment
Change this appointment
Cancel this appointment
Sounds good. Confirming you'd like to cancel your appointment on Oct 25, 2023 at 1:55 PM?
Yes
No
Type something...
Built with IBM watsonx


Appointment
Hi 8:24 PM
Let's confirm your appointment. I'll need to authenticate you first .What's the email address associated with the appointment? 8:24 PM
srimathinagarajan0910@gmail.com 8:24 PM
Thanks. I've found you in our system! You currently have an appointment scheduled for Oct 25, 2023 at 2:54 PM Would you like to confirm this appointment? 8:24 PM
1. Yes, confirm this appointment
2. No, I'd like to make a modification
Reply with the option number. 8:24 PM
1 8:24 PM
Great! You're all set. We'll see you at your upcoming appointment! 8:24 PM
Hi 8:25 PM
Let's confirm your appointment. I'll need to authenticate you first .What's

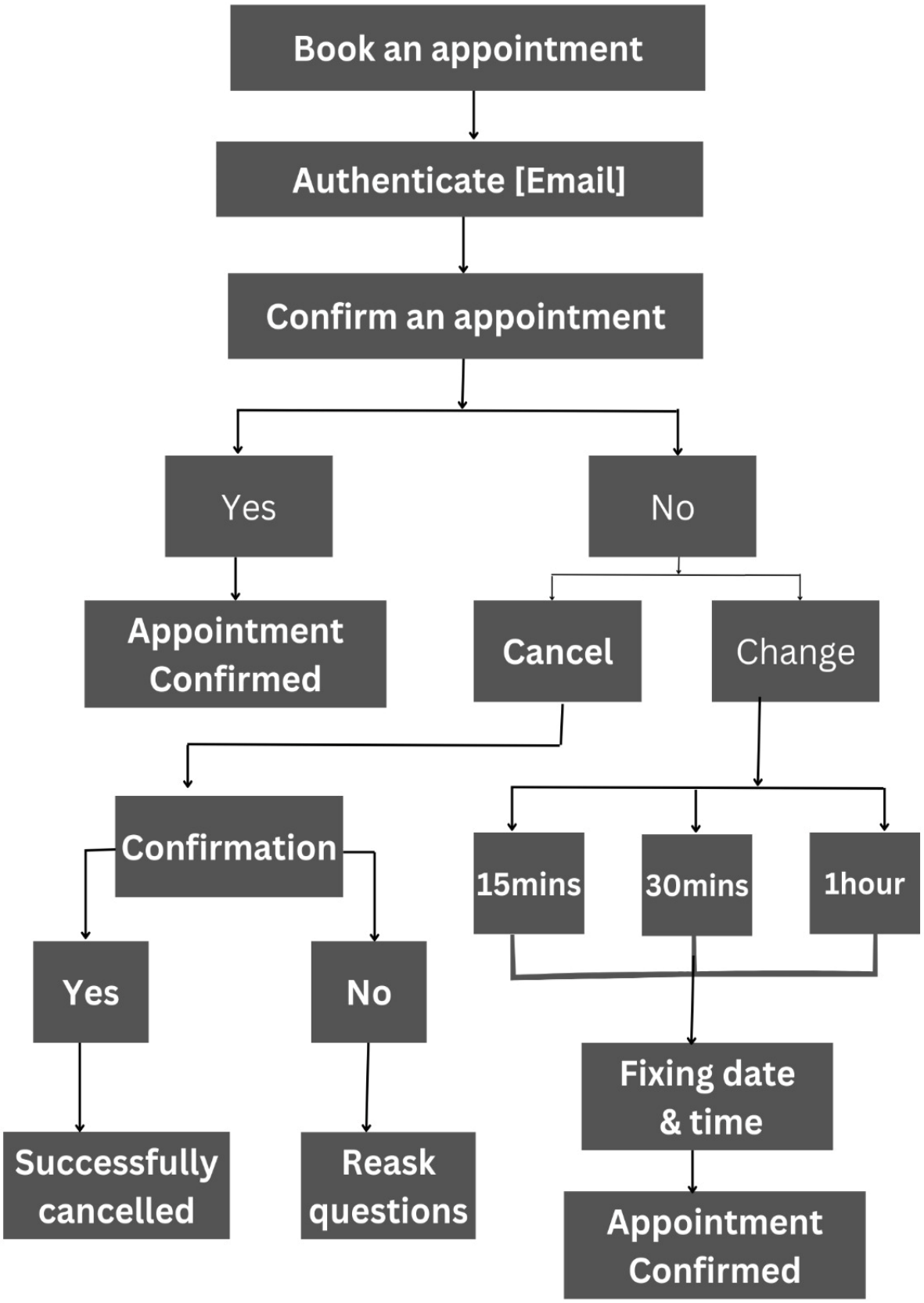

Appointment
Hi 8:25 PM
Let's confirm your appointment. I'll need to authenticate you first .What's the email address associated with the appointment? 8:25 PM
srimathinagarajan0910@gmail.com 8:25 PM
Thanks. I've found you in our system! You currently have an appointment scheduled for Oct 25, 2023 at 2:55 PM Would you like to confirm this appointment? 8:25 PM
1. Yes, confirm this appointment
2. No, I'd like to make a modification
Reply with the option number. 8:25 PM
2 8:25 PM
What change would you like to make? 8:25 PM
1. Cancel this appointment
2. Change this appointment
Reply with the option number. 8:25 PM





Here is the link for our published chatbot:

https://web-chat.global.assistant.watson.appdomain.cloud/preview.html?backgroundImageURL=https%3A%2F%2Feu-gb.assistant.watson.cloud.ibm.com%2Fpublic%2Fimages%2Fupx-bce17197-03b3-4194-9a90-659ac7dfd0ba%3A%3Abbefd24a-65d1-426f-a23c-d74692e0e9ca&integrationID=7eb7850b-8e86-460d-b575-17363ca33d46&region=eu-gb&serviceInstanceID=bce17197-03b3-4194-9a90-659ac7dfd0ba


Book an appointment
Authenticate [Email]
Confirm an appointment
Yes
No
Appointment Confirmed
Cancel
Change
Confirmation
15mins
30mins
1hour
Yes
No
Fixing date & time
Successfully cancelled
Reask questions
Appointment Confirmed