

Chatbot Deployment with IBM Cloud Watson Assistant

Problem Definition:

The project involves creating a chatbot using IBM Cloud Watson Assistant. The goal is to develop a virtual guide that assists users on messaging platforms like Facebook Messenger and Slack. The chatbot should provide helpful information, answer frequently asked questions (FAQs), and offer a friendly conversational experience. The project includes designing the chatbot's persona, configuring responses, integrating with messaging platforms, and ensuring a seamless user experience.

Frequently Asked Questions and it's Answers:

1. How can I retrieve deleted messages on Facebook Messenger?

- Facebook Messenger does not provide a straightforward way to retrieve deleted messages once they are removed.

2. Is it possible to use Facebook Messenger without the Messenger app?

- While Facebook encourages the use of the Messenger app, you can access Messenger through a mobile web browser or on the desktop at messenger.com.

3. Can I change my Messenger username or ID?

- As of my last knowledge update in January 2022, you cannot change your Messenger username or ID once it's set.

4. What is the storage limit for photos and videos in Messenger?

- Messenger has a storage limit for photos and videos, and older media may be deleted to make space for new content. The exact limit may vary.

5. How can I prevent someone from knowing I've read their message in Messenger?

- You can disable reading receipts by turning off "Send Read Receipts" in the Messenger settings, but this will also disable your ability to see when others have read your messages.

6. What does it mean when a message is "unsend" in Messenger?

- "Unsend" allows you to remove a message you've sent within a certain time frame. However, a notification will inform the recipient that the message was removed.

7. Is there a way to see who has unfriended me on Messenger?

- Facebook and Messenger do not provide a direct feature to see who has unfriended you.

8. How do I prevent someone from adding me to group chats in Messenger without my permission?

- You can control who can add you to groups by adjusting your privacy settings in Messenger.

9. Can I use Messenger with a virtual phone number or a non-mobile number?

- Messenger often requires a valid phone number for initial setup, but you may be able to use it with a virtual or non-mobile number.

10. How can I clear my Messenger search history and suggestions?

- You can clear your Messenger search history by going to the settings, selecting "Privacy," and then "Clear Search History."

11. How do I set up Messenger for a group event or party?

- To set up Messenger for a group event, you can create a group chat, add the event details, and invite friends to join the conversation.

12. Can I use Messenger to order food or make restaurant reservations?

- Yes, you can use Messenger to order food and make restaurant reservations in some regions by interacting with specific restaurant chatbots.

13. What's the difference between a Messenger conversation and a group chat?

- A Messenger conversation is a one-on-one chat, while a group chat allows you to chat with multiple friends in the same conversation.

14. How can I customize the emoji reaction options in Messenger?

- You can customize emoji reaction options in a chat by holding down an existing reaction, selecting "More," and adding or removing reactions.

15. Is there a way to schedule messages to be sent at a later time in Messenger?

- Currently, Messenger does not have a built-in feature to schedule messages for later.

16. Can I send voice messages in Messenger, and how long can they be?

- Yes, you can send voice messages in Messenger. They can be up to one minute long.

17. How do I change the default thumbs-up reaction in Messenger?

- You can change the default thumbs-up reaction by tapping and holding the reaction you want to set as the default.

18. What are "vanishing messages," and how do they work in Messenger?

- Vanishing messages are messages that disappear after a set period. You can enable this feature in a chat by tapping the contact's name and selecting "Vanishing Messages."

19. Can I use Messenger for international calls, and are there any charges?

- Messenger offers international calls, but charges may apply depending on your phone plan and the destination.

20. How can I export or save a chat from Messenger for backup purposes?

- You can export a chat from Messenger by opening the conversation, tapping the contact's name, selecting "More," and choosing "Export Chat." You can save it as a file.

21. How do I set up notifications for specific contacts in Messenger?

- You can customize notifications for individual contacts by opening the chat, tapping their name, and selecting "Custom Notifications."

22. What's the difference between a regular call and a Wi-Fi call in Messenger?

- Regular calls use your mobile network, while Wi-Fi calls use an internet connection. Wi-Fi calls are often clearer if you have a good Wi-Fi connection.

23. Can I use Messenger for group video calls?

- Yes, you can make group video calls by selecting multiple contacts and tapping the video icon.

24. How can I share my location in Messenger?

- In a chat, tap the "More" option (it looks like three dots), then select "Location" to share your current location.

25. Is it possible to delete a conversation from both sides in Messenger?

- No, you can only delete a conversation from your side. The other person will still have the conversation unless they delete it themselves.

26. How do I invite someone to join Messenger if they don't have it installed?

- You can invite them by opening a chat, tapping their name, and selecting "Invite to Messenger."

27. What is the difference between the active status and last active on Messenger?

- Active status shows when you're currently using Messenger, while "last active" displays the time of your last interaction on the platform.

28. How do I create and send GIFs in Messenger?

- In a chat, tap the GIF icon, search for a GIF, and send it to your friend.

29. Can I use Messenger for international calls or messages?

- Yes, you can use Messenger for international communication, but data charges may apply depending on your plan.

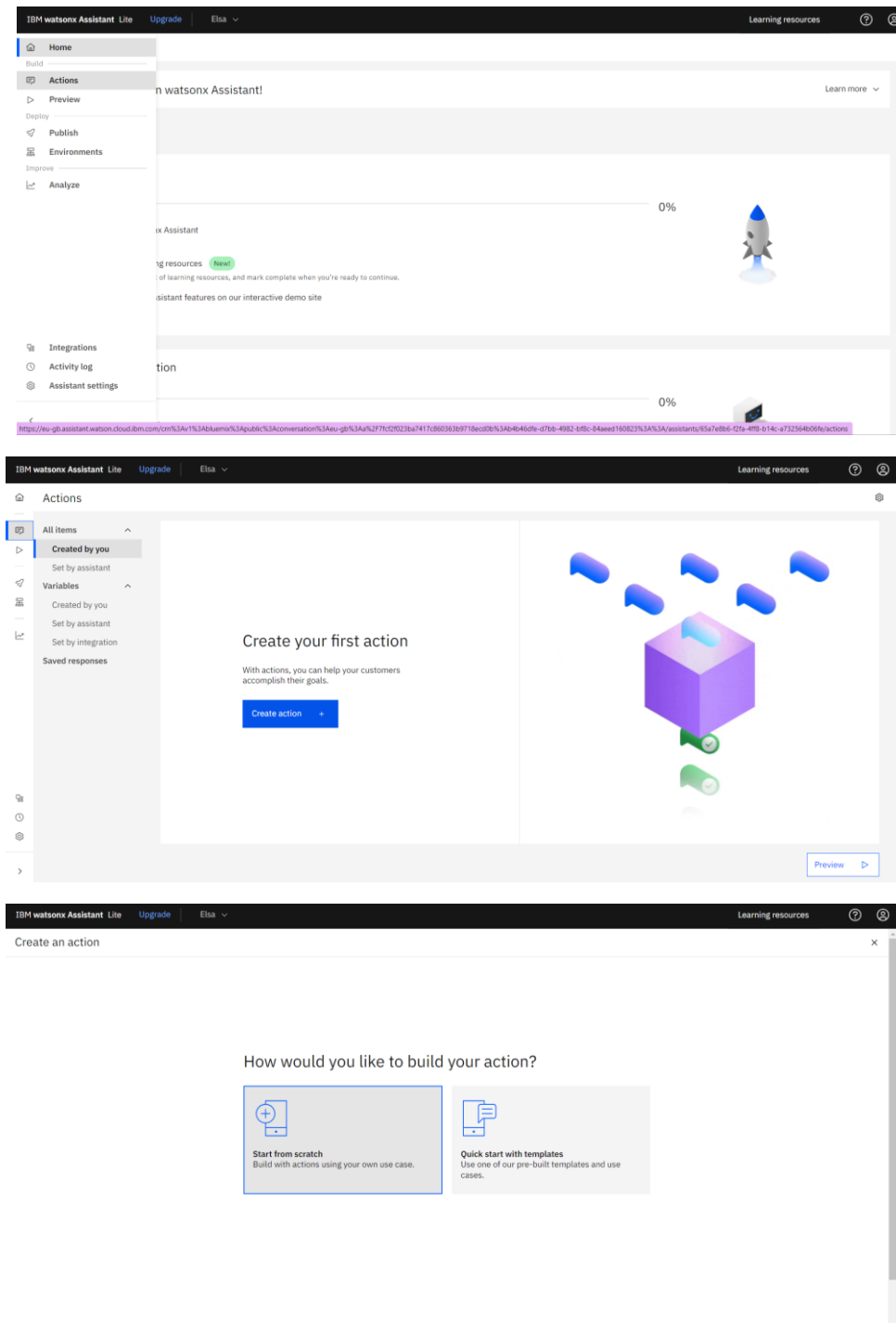
30. How do I access my archived messages in Messenger?

- To view archived messages, go to your chat list, tap your profile picture, and select "Archived."

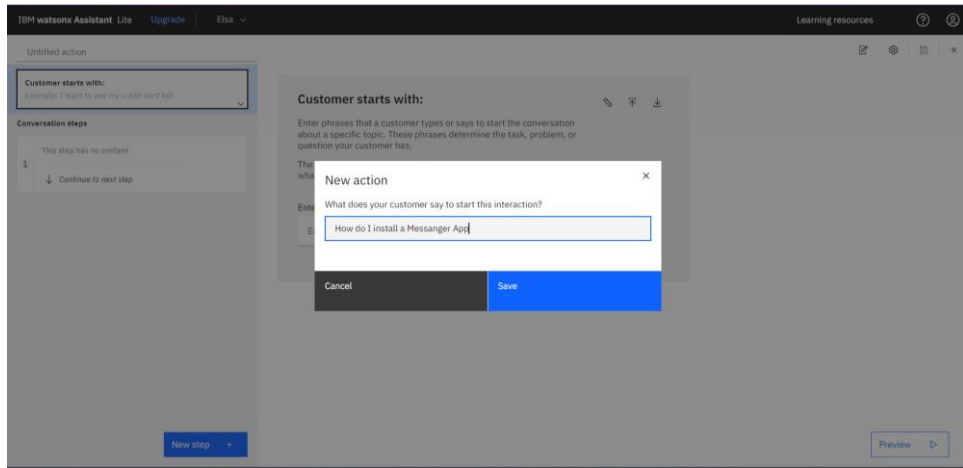
These are the questions used to train chatbot.

Chatbot Trained with above FQS,

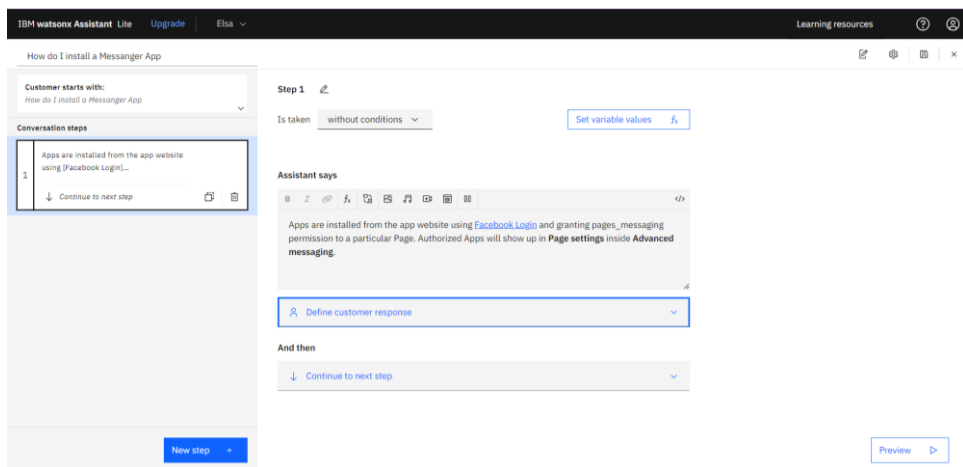
To create chatbot create new action from scratch,



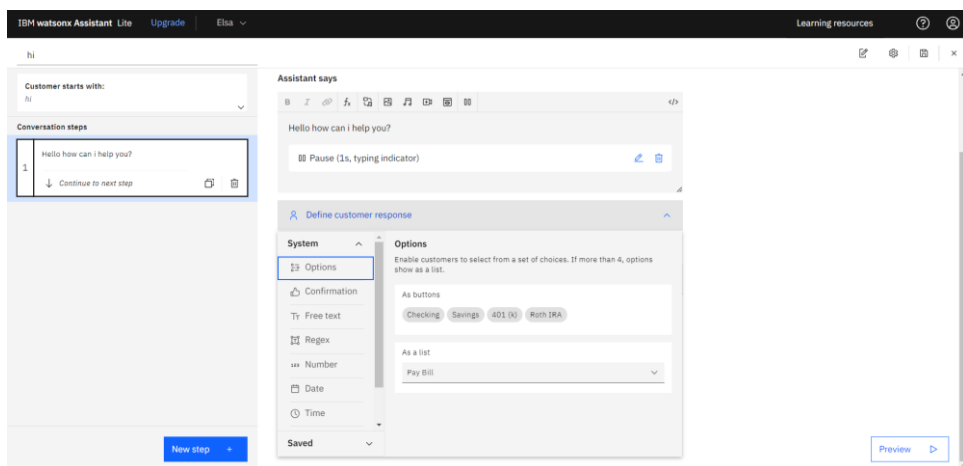
After that in new action give a question phrase which is asked by a user

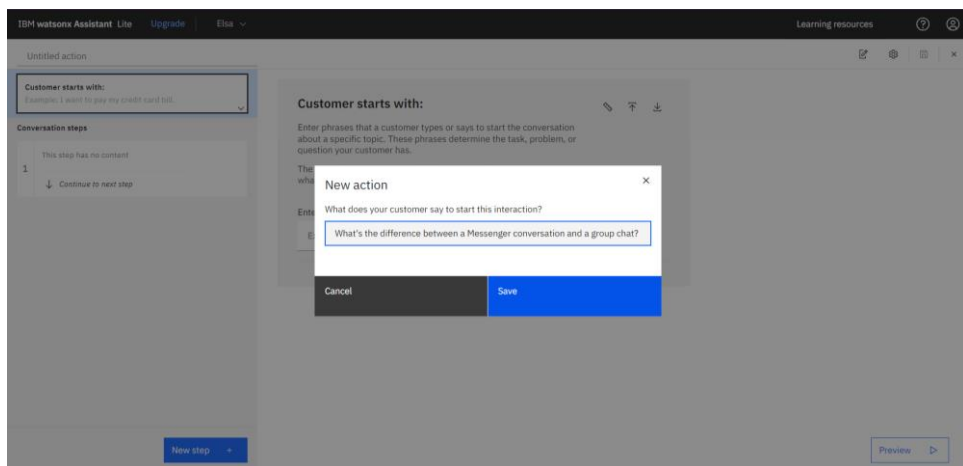
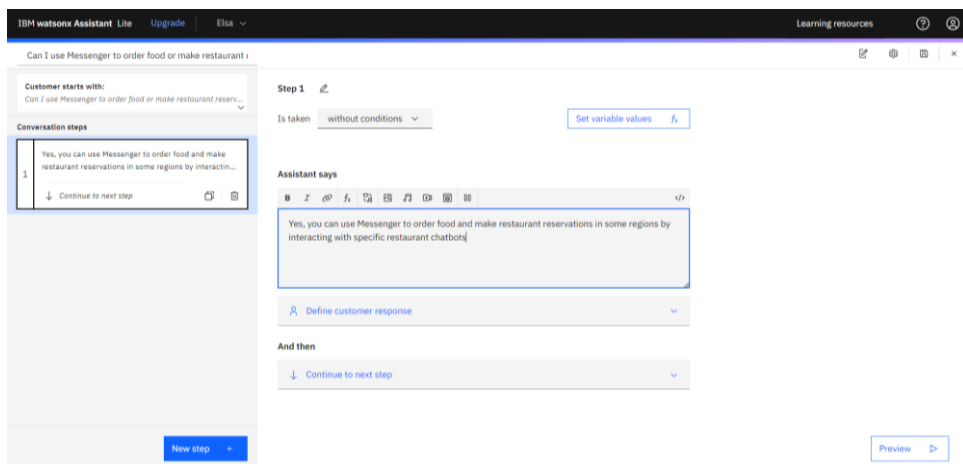
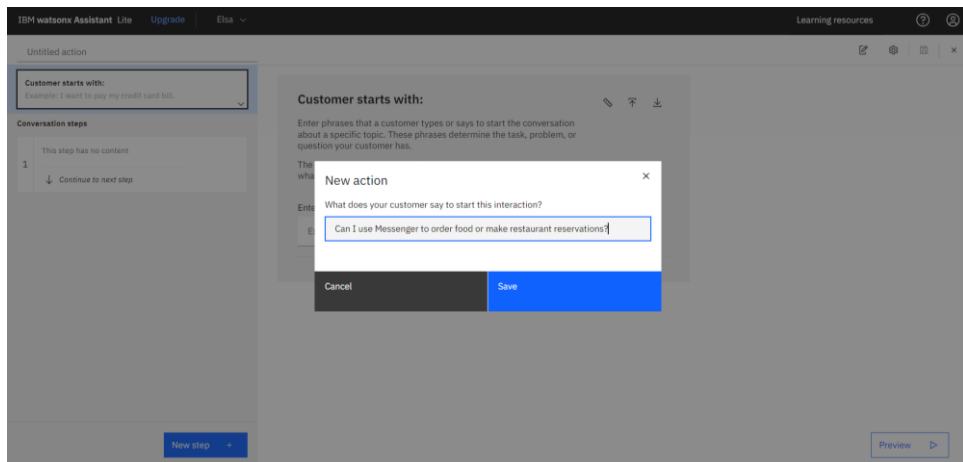


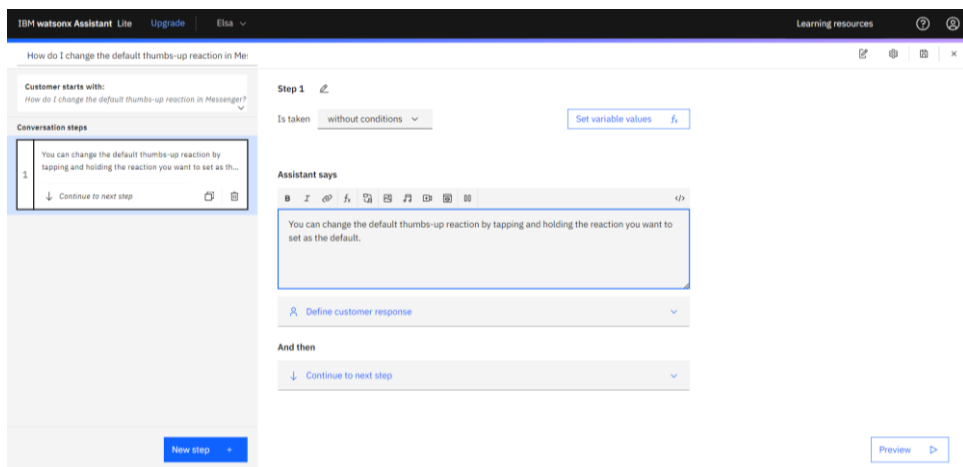
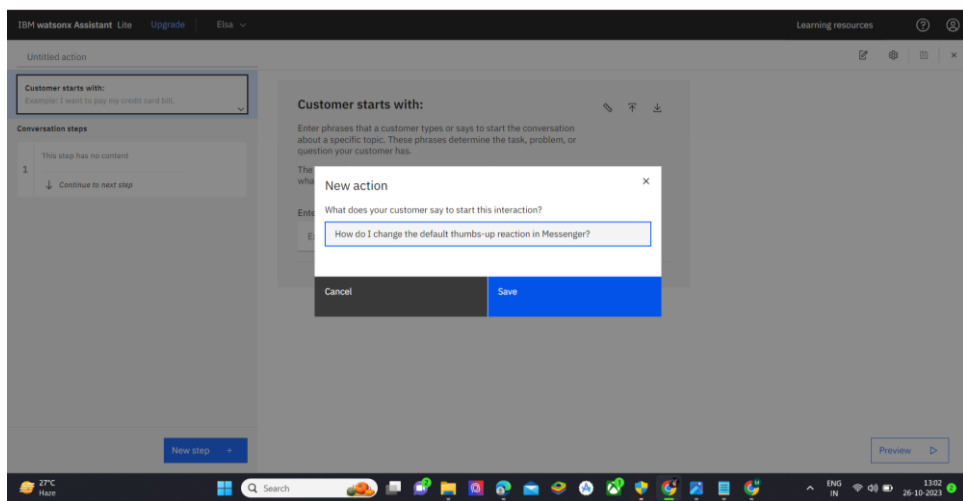
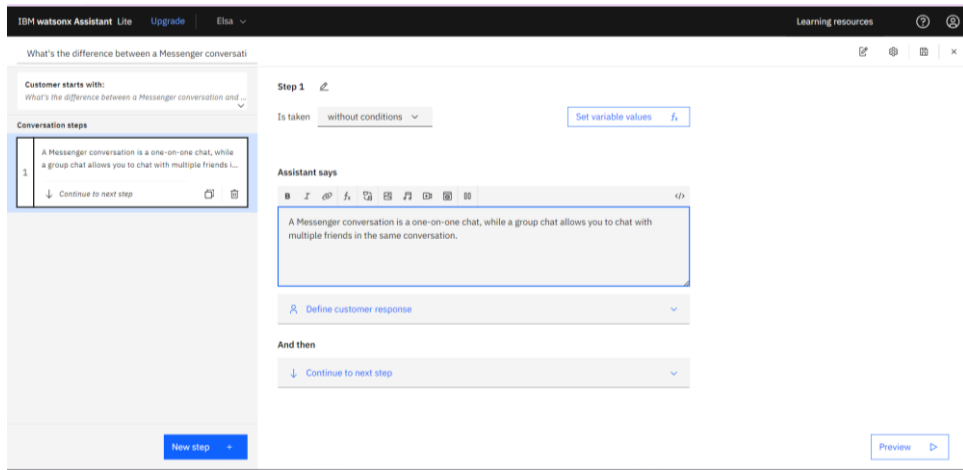
Then give Answer to that question in Assistant says box

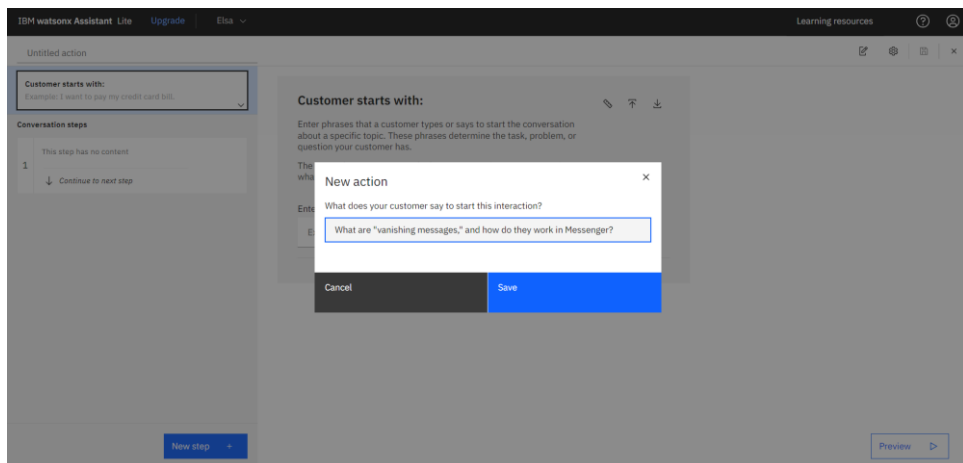
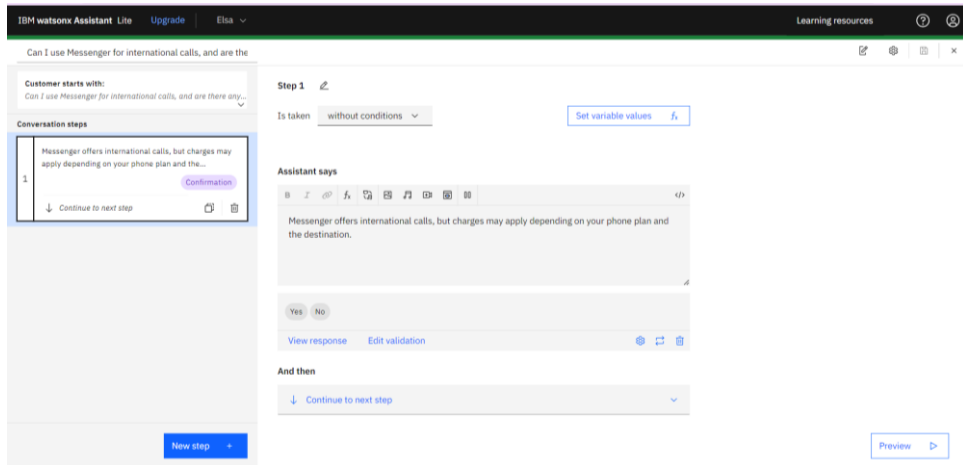
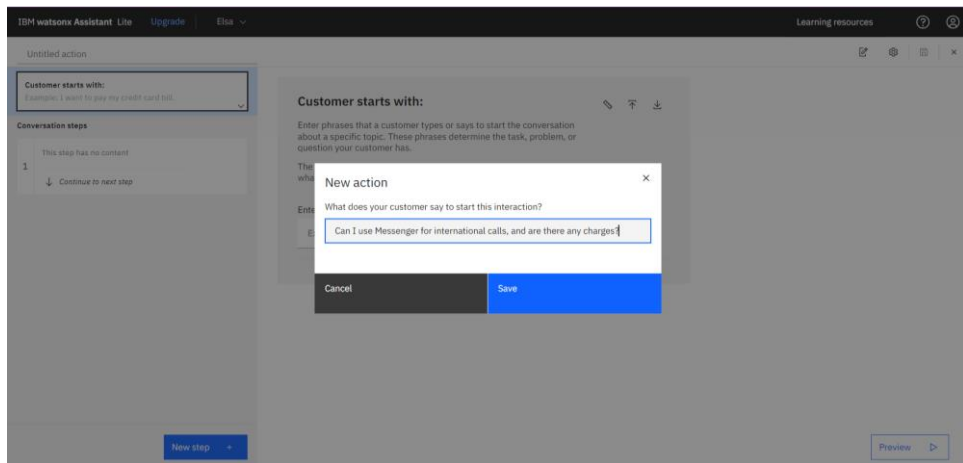


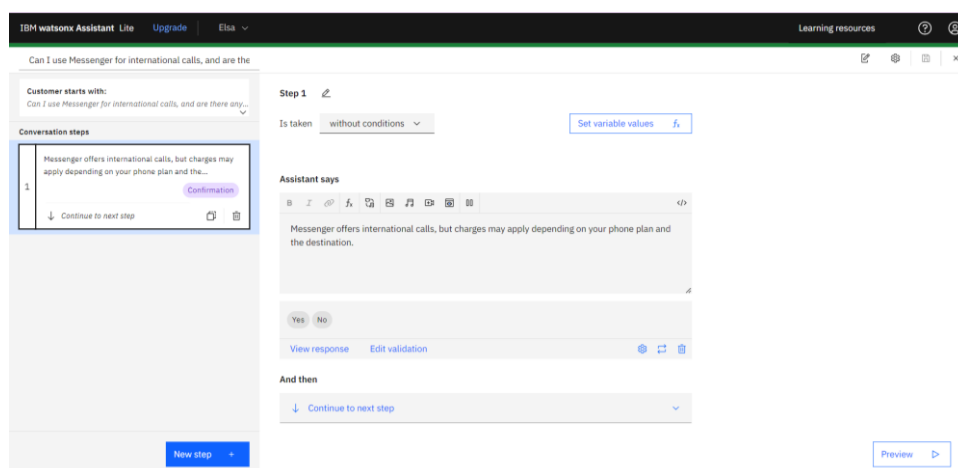
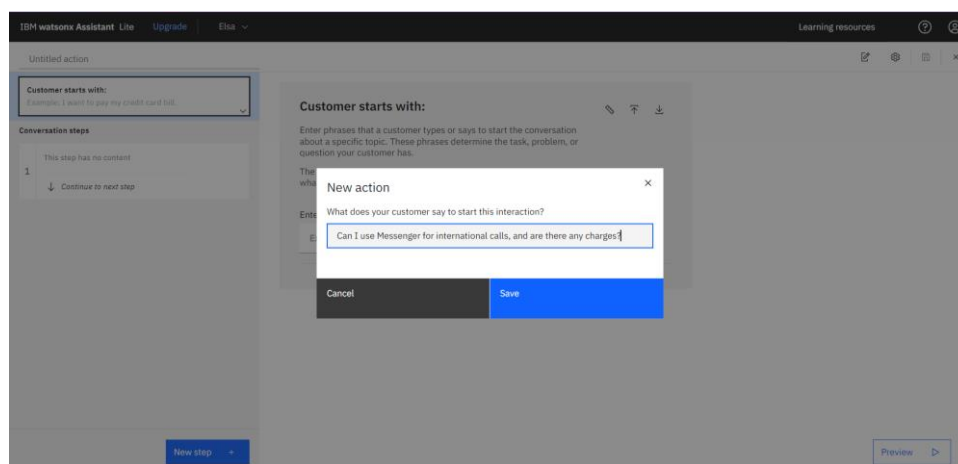
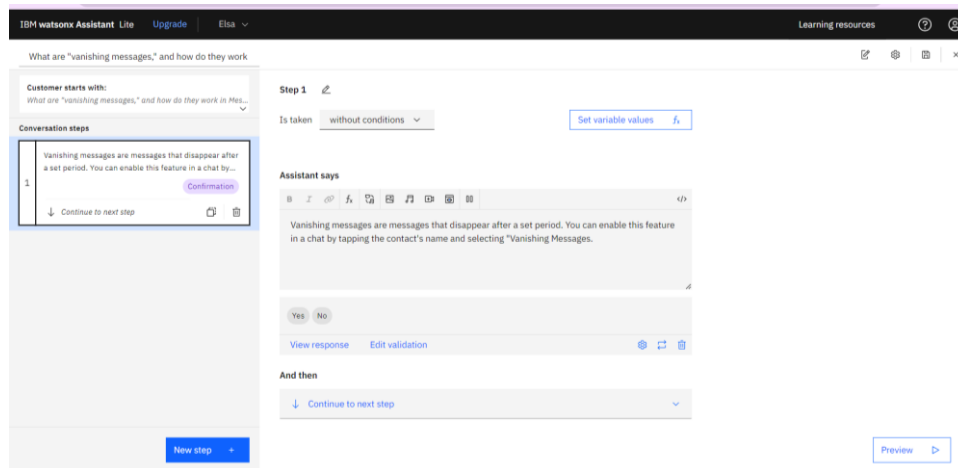
Here Select the Define Customer response for easy service to users











List of Questions that trained by us in Watson Assistant:

IBM watsonx Assistant LiteUpgradeElsa

Learning resources

Actions

All items

Created by you

Set by assistant

Variables

Created by you

Set by assistant

Set by integration

Saved responses

Created by you /

Filter by name

<input type="checkbox"/>	Name	Last edited	Examples count	Steps
<input type="checkbox"/>	Hi	43 minutes ago	1	
<input type="checkbox"/>	How do I install a Messenger App	43 minutes ago	1	
<input type="checkbox"/>	How do I set up Messenger for a group event or par...	40 minutes ago	1	
<input type="checkbox"/>	What's the difference between a Messenger conver...	31 minutes ago	1	1
<input type="checkbox"/>	How can I customize the emoji reaction options in ...	31 minutes ago	1	1
<input type="checkbox"/>	Can I use Messenger to order food or make restaur...	31 minutes ago	1	1
<input type="checkbox"/>	Is there a way to schedule messages to be sent at ...	29 minutes ago	1	1
<input type="checkbox"/>	Can I send voice messages in Messenger, and how L...	26 minutes ago	1	1

Items per page: 50Showing 1-31 of 31 items

Preview

Greet customer [default]

Welcome, how can I assist you?

Hi

Hi recognized

Hello how can I help you?

YesNo

How do I set up Messenger for a group event or party?

IBM watsonx Assistant LiteUpgradeElsa

Learning resources

Actions

All items

Created by you

Set by assistant

Variables

Created by you

Set by assistant

Set by integration

Saved responses

Created by you /

Filter by name

<input type="checkbox"/>	Name	Last edited	Examples count	Steps count	Status
<input type="checkbox"/>	How do I change the default thumbs-up reaction in...	6 hours ago	1	1	
<input type="checkbox"/>	What are "vanishing messages," and how do they w...	6 hours ago	1	1	
<input type="checkbox"/>	How can I retrieve deleted messages on Facebook ...	6 hours ago	1	1	
<input type="checkbox"/>	Can I use Messenger for international calls, and are...	6 hours ago	1	1	
<input type="checkbox"/>	Is it possible to use Facebook Messenger without L...	5 hours ago	1	1	
<input type="checkbox"/>	How can I export or save a chat from Messenger for...	6 hours ago	1	1	
<input type="checkbox"/>	What does it mean when a message is "unsent" in ...	5 hours ago	1	1	
<input type="checkbox"/>	Can I change my Messenger username or ID?	5 hours ago	1	1	

Items per page: 50Showing 1-31 of 31 items

Preview

IBM watsonx Assistant LiteUpgradeElsa

Learning resources

Actions

All items

Created by you

Set by assistant

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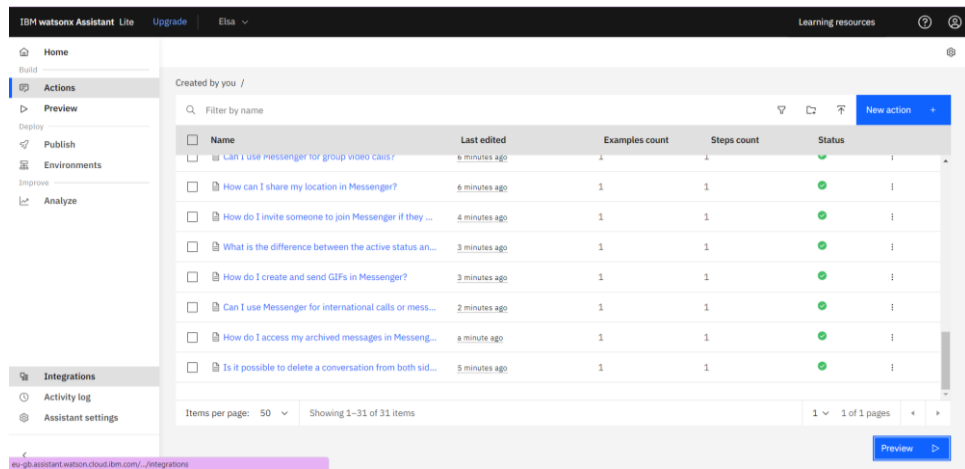
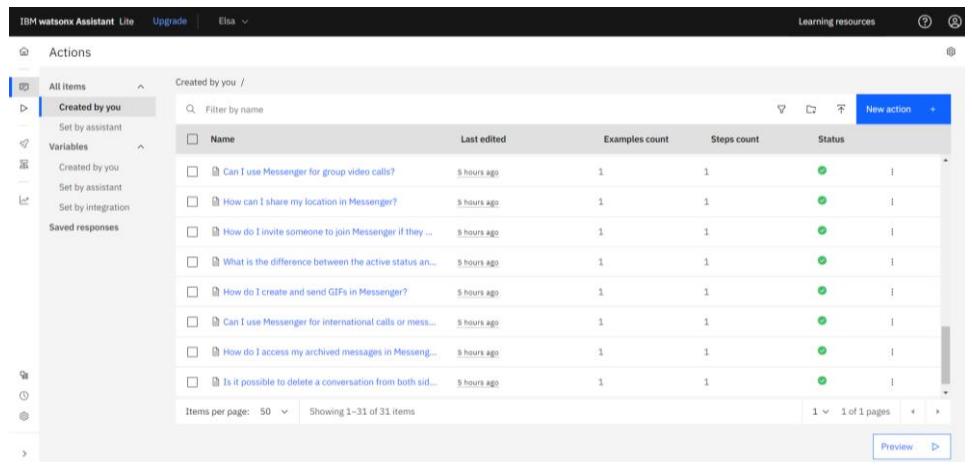
Created by you /

Filter by name

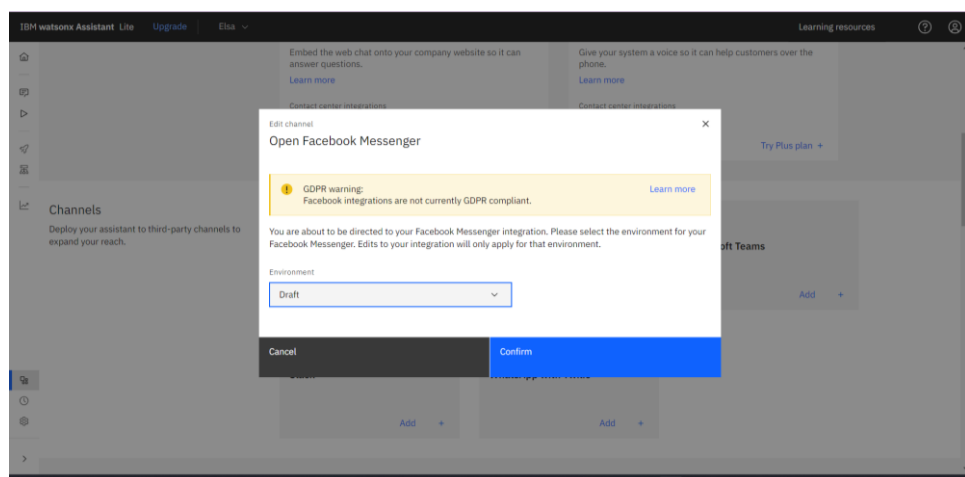
<input type="checkbox"/>	Name	Last edited	Examples count	Steps count	Status
<input type="checkbox"/>	Can I change my Messenger username or ID?	5 hours ago	1	1	
<input type="checkbox"/>	Is there a way to see who has unfriended me on Me...	5 hours ago	1	1	
<input type="checkbox"/>	What is the storage limit for photos and videos in M...	5 hours ago	1	1	
<input type="checkbox"/>	How do I prevent someone from adding me to grou...	5 hours ago	1	1	
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<input type="checkbox"/>	How can I clear my Messenger search history and s...	5 hours ago	1	1	
<input type="checkbox"/>	How do I set up notifications for specific contacts I...	5 hours ago	1	1	
<input type="checkbox"/>	What's the difference between a regular call and a ...	5 hours ago	1	1	

Items per page: 50Showing 1-31 of 31 items

Preview



After that Integrate chatbot with Facebook Manager and Slack. Below steps shows the integration.



Close Next

- Get started

Steps to setting up Facebook Messenger

1. Create a Facebook application
2. Connect to Facebook page
3. Configure Facebook webhooks
4. Connect your assistant
5. Start app review process

Rate your experience ✕

☐ Good ☐ Bad

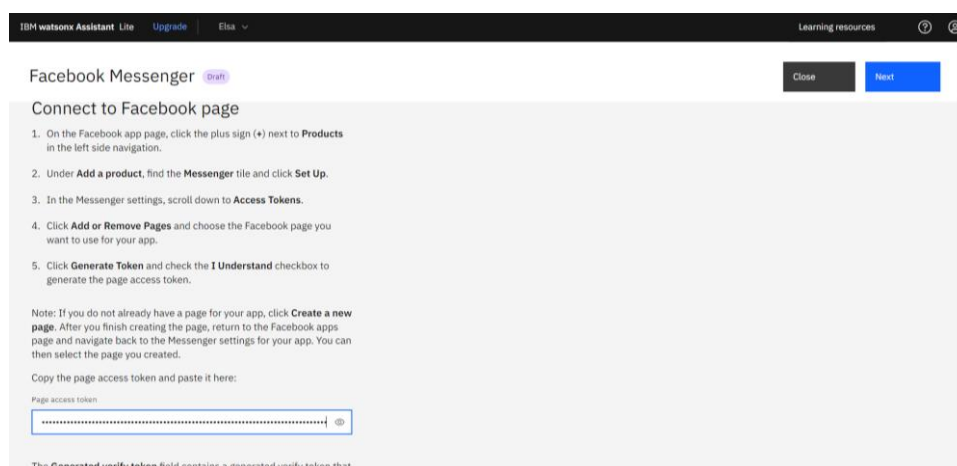
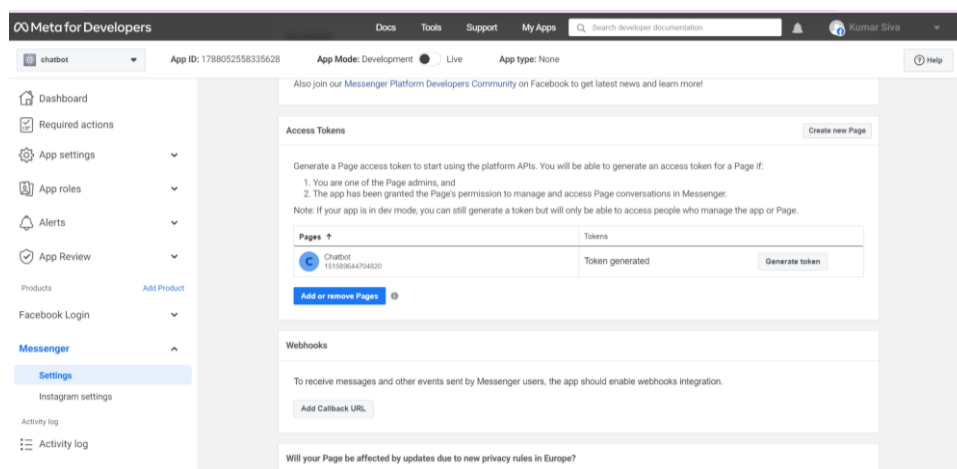
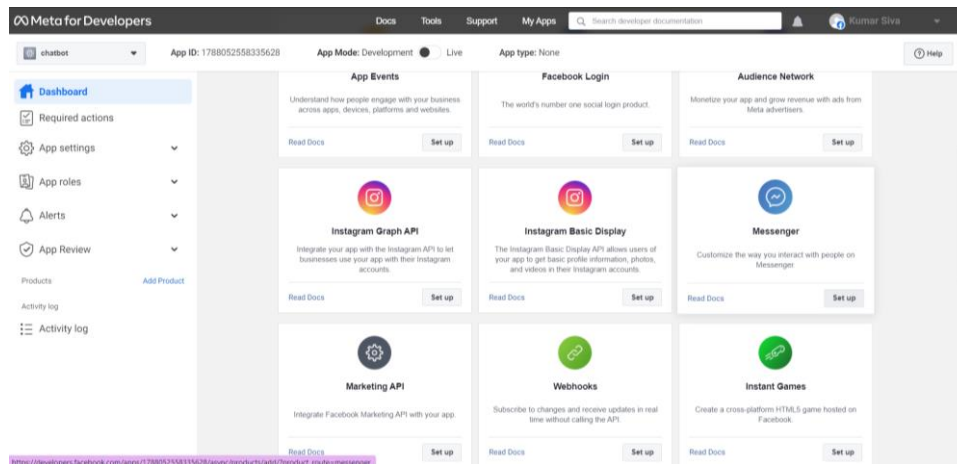
Close Next

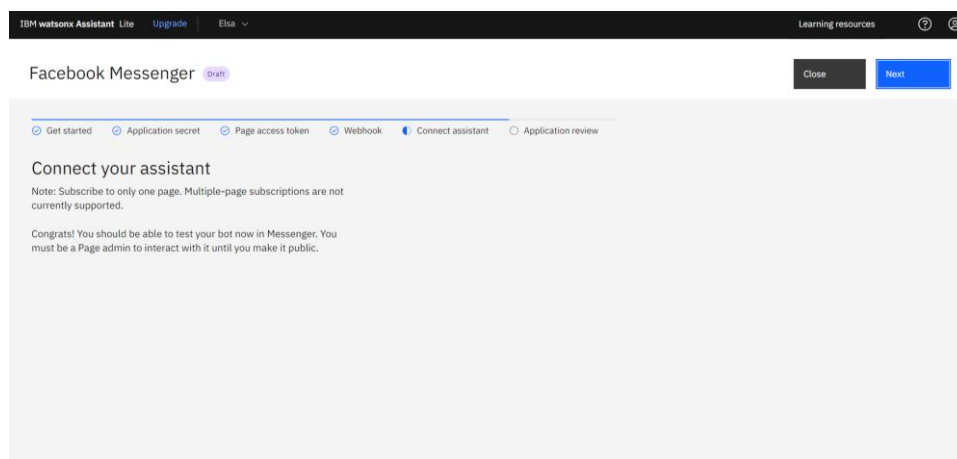
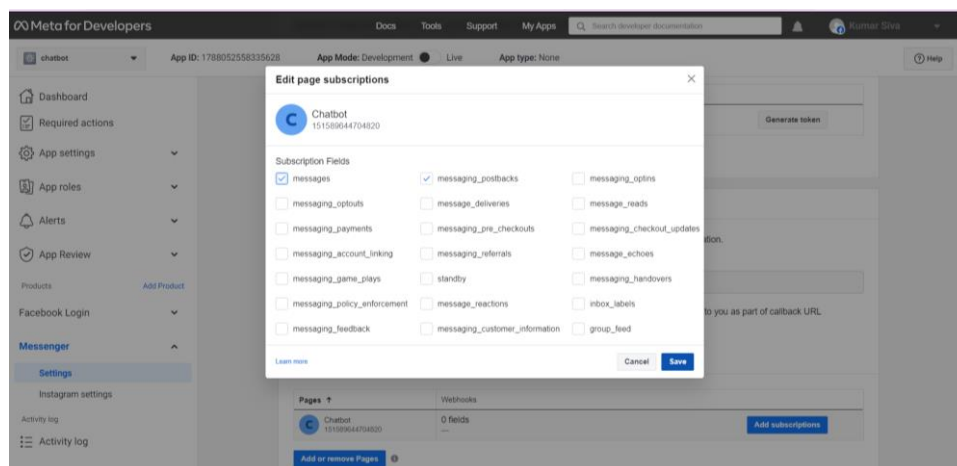
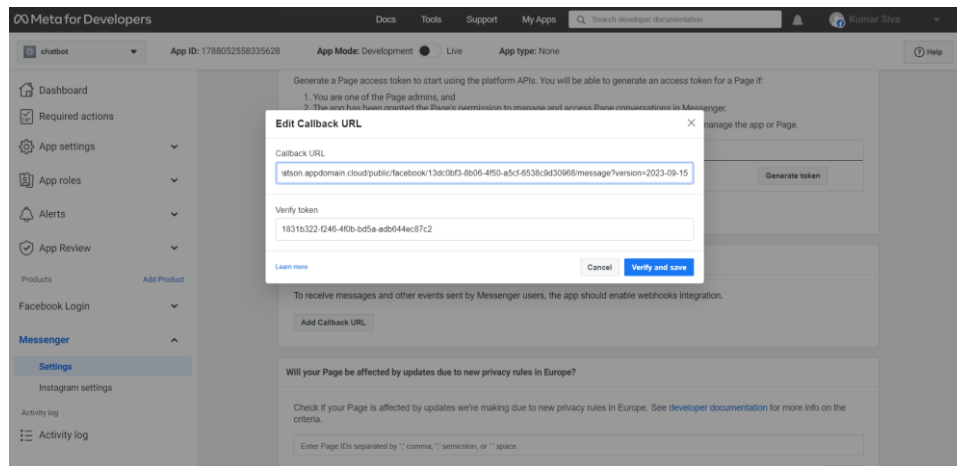
- ## Create a Facebook application

Note: If you have already created the app you want to use, select it from the **My Apps** menu.

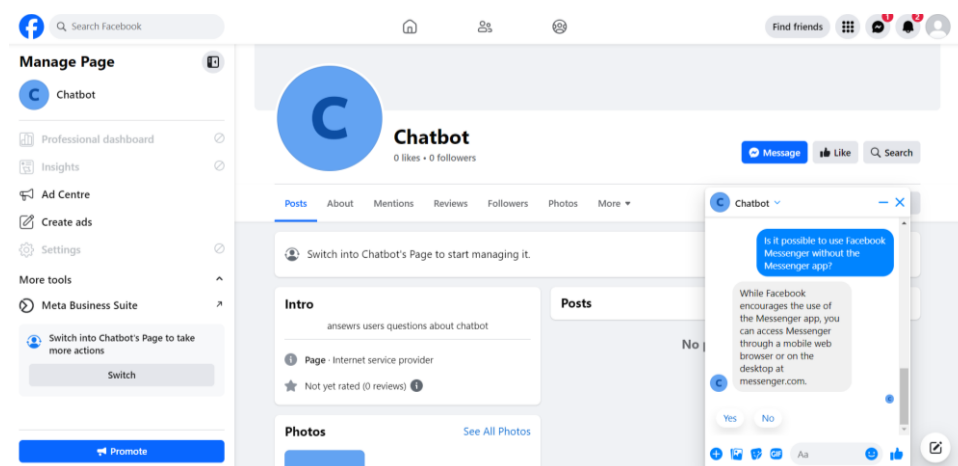
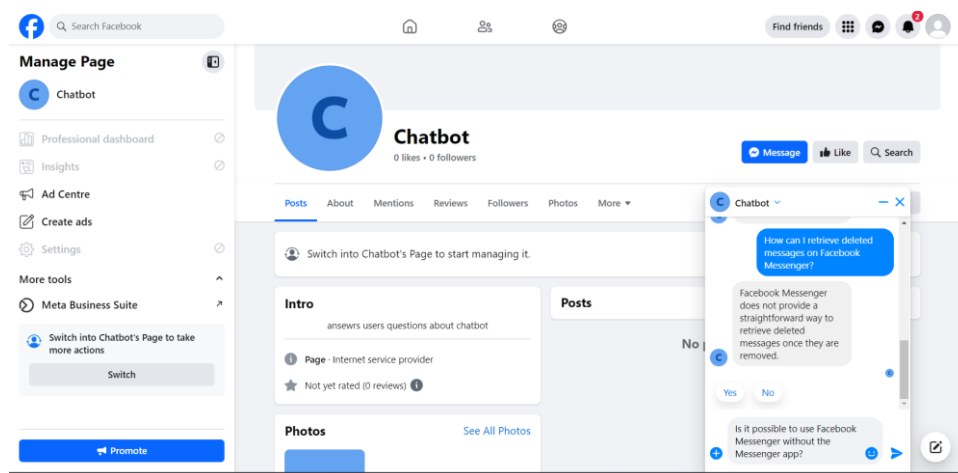
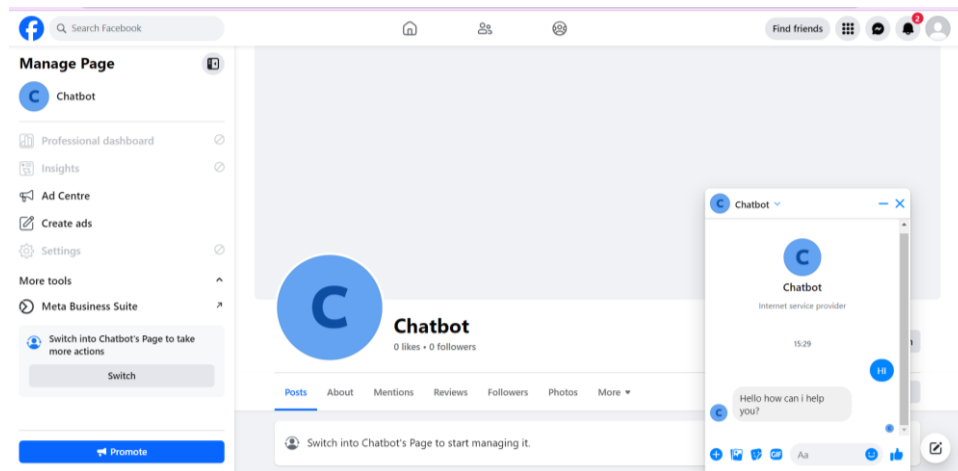
Application secret

***** 12





After connecting Chabot with Facebook Messenger. Now on Facebook Page we can test our chatbot. Below the FAQs answered by chatbot in Facebook messenger are inserted



In slack also test the chatbot performance

IBM watsonx Assistant

Life

Upgrade

Elsa

Learning resources

Slack

Close

Next

Get started

Slack bot

Connect Slack

Configure Slack

Connect assistant

Connect watsonx Assistant to Slack

1. On the Slack app settings page, go to the **Basic Information** tab and find the **App Credentials** section. Copy your verification token from that section to the field below.

Verification token

2. Go to the **OAuth & Permissions** tab. In the **Bot Token Scopes** section click **Add an OAuth Scope**, and then select the following scopes:

– app_mentions:read

– chat:write

– im:history

– im:read

– im:write

slack

This app was created by a member of your workspace, New Workspace.

CHATBOT is requesting permission to access the New Workspace Slack workspace

What will CHATBOT be able to view?

Content and info about channels & conversations

What will CHATBOT be able to do?

Perform actions in channels & conversations

Cancel

Allow

← → ↻

api.slack.com/apps/A06X2SATM0/oauth?success=1

🔖 ⚙️ 📄

Collaborators

Socket Mode

Install App

Manage Distribution

Features

App Home

Org Level Apps

Incoming Webhooks

Interactivity & Shortcuts

Slash Commands

Workflow Steps

OAuth & Permissions

Event Subscriptions

User ID Translation

App Manifest

Beta Features

Submit to App Directory

Review & Submit

Give feedback

Slack

Help

Contact

Policies

Recommended for developers building on or for security-minded organizations – opting into token rotation allows app tokens to automatically expire after they're issued within your app code. [View documentation](#).

⚠️

At least one redirect URL needs to be set below before this app can be opted into token rotation

Opt In

OAuth Tokens for Your Workspace

These tokens were automatically generated when you installed the app to your team. You can use these to authenticate your app. [Learn more](#).

Bot User OAuth Token

xcxb-6099089357922-6092492085654-3q428AuDn5Rg1BQmImhOXwFd

Copy

Access Level: Workspace

Reinstall to Workspace

Redirect URLs

You will need to configure redirect URLs in order to automatically generate the Add to Slack button or to distribute your app. If you pass a URL in an OAuth request, it must (partially) match one of the URLs you enter here. [Learn more](#).

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Learning resources

SlackDraft

CloseSave and exit

</> Configure your Slack bot

The generated request URL will be using the latest service API version.
[Learn more](#)

- On the Slack app settings page, go to the **Event Subscriptions** tab. Switch the **Enable Events** toggle to the **On** position. In the provided text entry field, paste your request URL.

Generated request URL

```
https://integrations.eu-gb.assistant.watson.appdomain.cloud/...
```

- On the **Event Subscriptions** tab, find the **Subscribe to Bot Events** section. Click **Add Bot User Event**, and then select the event types you want to subscribe to. You must select at least one of the following types:
 - message.im**: Listens for message events that are posted in a direct message channel.
 - app_mention**: Listens for only message events that mention your app or bot.
- Click **Save Changes**.

slack api

Q Search

DocumentationTutorialsYour Apps

CHATBOT

Settings

Basic Information

Collaborators

Socket Mode

Install App

Manage Distribution

Features

App Home

Org Level Apps

Incoming Webhooks

Interactivity & Shortcuts

Slash Commands

Workflow Steps

OAuth & Permissions

Event Subscriptions

User ID Translation

App Manifest

Beta Features

Enable Events

On

Your app can subscribe to be notified of events in Slack (for example, when a user adds a reaction or creates a file) at a URL you choose. [Learn more](#).

Request URL Verifying

:/slack/e03754fc-7c7b-476a-92c1-d8781973cd60/message/version=2023-09-15

We'll send HTTP POST requests to this URL when events occur. As soon as you enter a URL, we'll send a request with a **challenge** parameter, and your endpoint must respond with the challenge value. [Learn more](#).

New event authorization format

Recent changes to Events API payloads

The Events API now sends information about authorized users and workspaces in a new, compact format. [Learn more](#).

Subscribe to bot events

Discard Changes

Save Changes

Event Subscriptions

Features

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Submit to App Directory

Review & Submit

Give feedback

Slack

Help

Contact

Policies

Our Blog

https://integrations.eu-gb.assistant.watson.appdomain.cloud/public/slack/ Change

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Subscribe to bot events

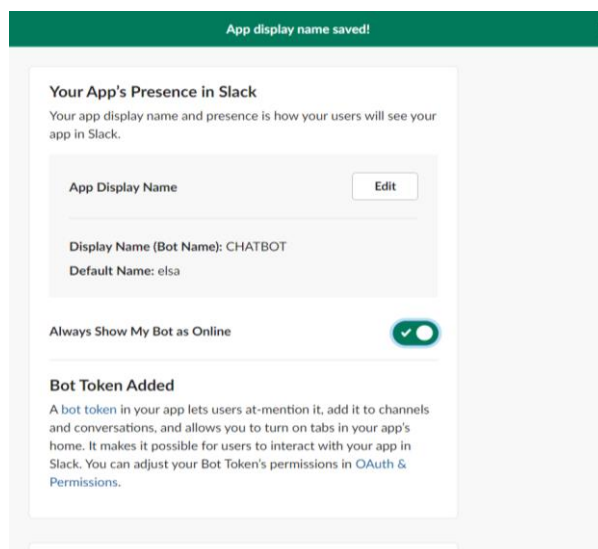
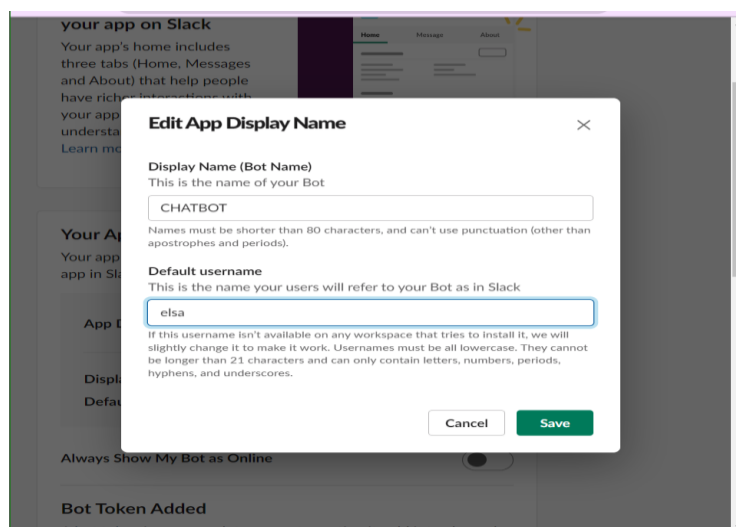
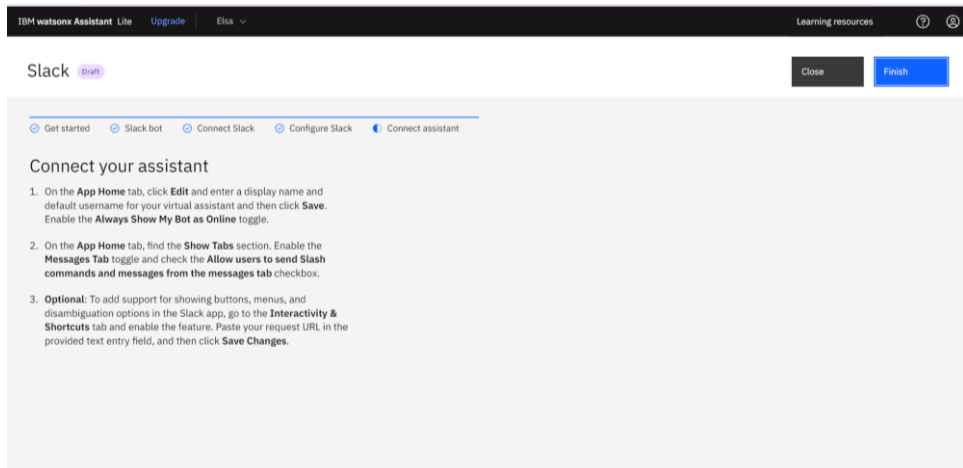
Apps can subscribe to receive events the bot user has access to (like new messages in a channel). If you add an event here, we'll add the necessary OAuth scope for you.

Event Name	Description	Required Scope
app_mention	Subscribe to only the message events that mention your app or bot	app_mentions:read

Add Bot User Event

Discard Changes

Save Changes



App display name saved! X

Turn on the Home tab and/or Message tab to display in your app home.

Home Tab ☐

Block Kit components you add to this tab let people easily interact with this app.

Helpful links

- [App Home documentation](#)
- [How to use Block Kit](#)
- [Block Kit Builder tool](#)

Messages Tab ☒

Direct messages your app sends will show in this tab.

☒ Allow users to send Slash commands and messages from the messages tab

About Tab

Helpful info about what this app does will show in this tab. You can edit this info in the app's [basic information](#) section.

Display Information

This information will be shown in the Slack App Directory and in the Slack App. For more information, view our [App Detail Guidelines](#).

App name

CHATBOT

Short description

provides answers to users questions

App icon & Preview

Add App Icon

CHATBOT APP
provides answers to users questions

Background color

#2C2D30

Long description

Add a long description that will show up on your App Detail page. You can format your description with bold text, lists and more.