

Project Title: Chatbot Deployment using IBM Cloud Watson Assistant

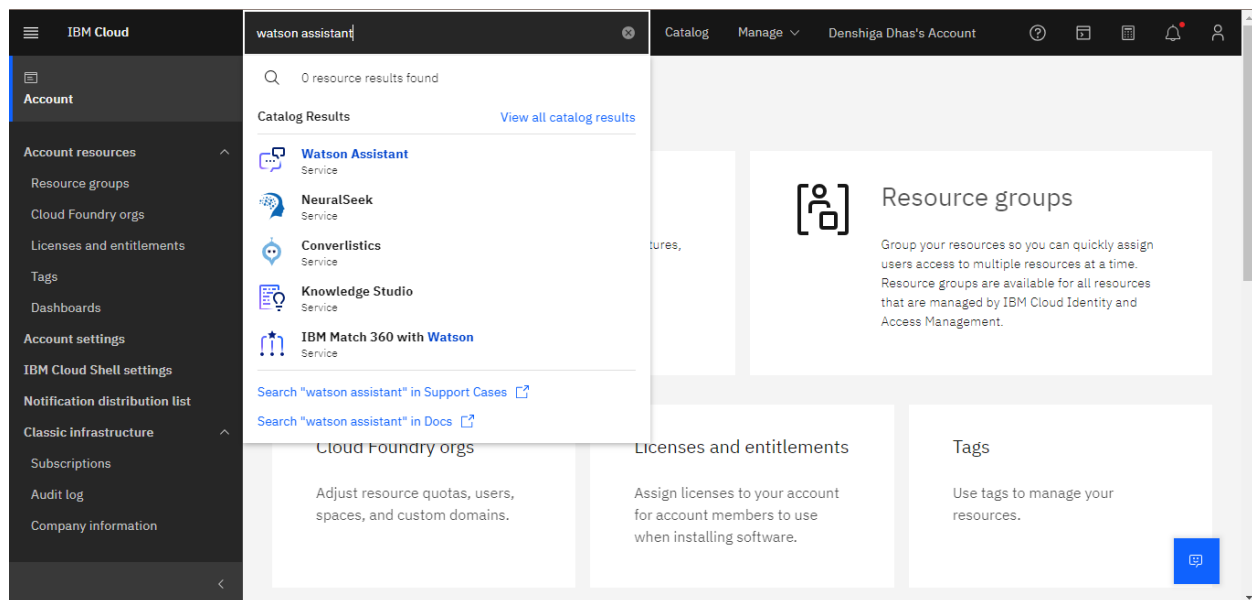
Phase 3: Development Part 1

The steps to start building the ChatMATE chatbot using IBM Watson Assistant are as follows:

Step 1: Create an IBM Cloud account

- If we already have an account sign in to it
- Else follow the prompts to create one.

Step 2: Create a Watson Assistant Service Instance.



- From the IBM Cloud dashboard, click on "Create Resource."
- In the catalog, search for "Watson Assistant" and select the service.
- Choose the appropriate plan based on the requirements

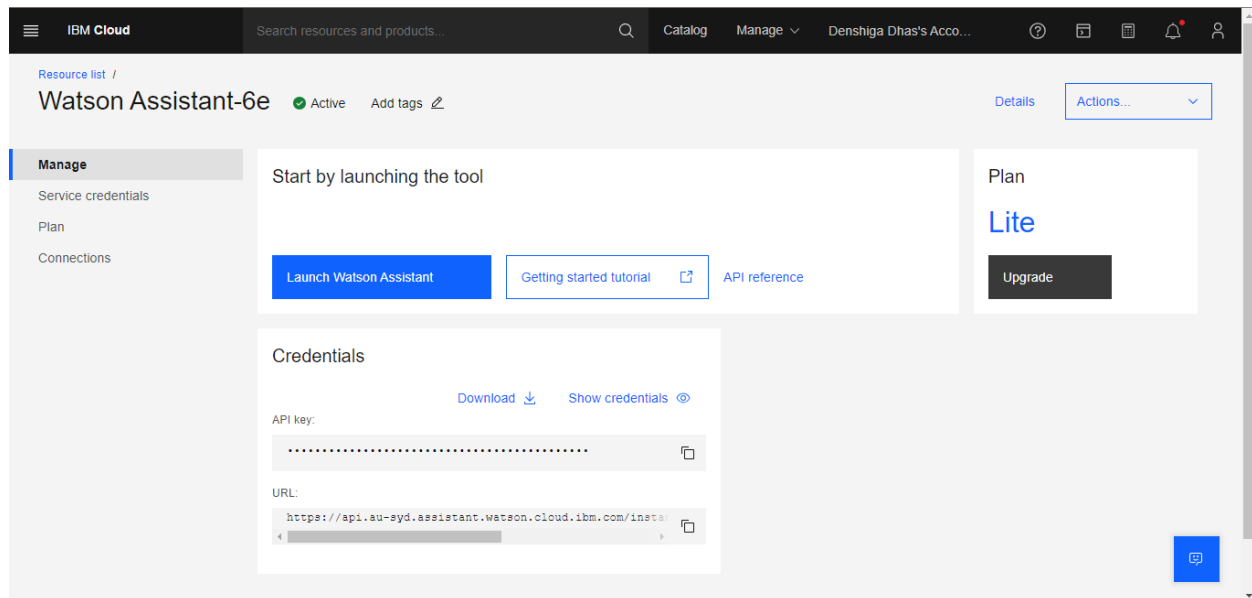
- Enter a service name, or keep the generated name, and click "Create."

The screenshot displays the IBM Cloud Watson Assistant creation interface. The top navigation bar includes the IBM Cloud logo, a search bar, and user account details. The main content area is titled "Watson Assistant" and features a "Create" tab. A sidebar on the left provides service details: Type (Service), Provider (IBM), Last updated (10/04/2023), Category (AI / Machine Learning), and Compliance (EU Supported, HIPAA Enabled, IAM-enabled). The main form area includes a "Select a location" dropdown set to "Sydney (ibm:yp:au-syd)", a "Select a pricing plan" section with an error message "Error retrieving plans data", and a "Configure your resource" section with a "Service name" field. A right-hand "Summary" panel shows "Watson Assistant" and "Resource group: Default". Below the main form, a "Welcome to watsonx Assistant" section guides the user through naming the assistant, adding a description, and selecting a language. The "Assistant name" field contains "ChatMATE", the "Description (optional)" field contains "Chatbot to assist people on messaging platforms like facebook and slack", and the "Assistant language" dropdown is set to "English (US)".

Step 3: Configure Your Watson Assistant Service

1. Once the service instance is created, open it from the IBM Cloud dashboard.

2. Inside the Watson Assistant service, click on the "Launch Watson Assistant" button to go to the Watson Assistant tool.



Step 4: Create Intents, Entities, and Dialog Nodes

1. Create Intents:

- Click on "Create Intent" and define intents such as "greet", "Information Seeker," "FAQ Navigation," etc.
- For each intent, add examples of user queries related to that intent (e.g., "Tell me about your company's history" for Information Seeker).

2. Define Entities:

- Click on "Create Entity" and define entities like "Product," "Contact Details," etc.
- For each entity, add synonyms and patterns to improve recognition accuracy (e.g., "phone number" as a synonym for "contact details").

- 3.Create Dialog Nodes:
- Click on "Create Dialog" and create dialog nodes for each intent and scenario (greeting, Information Seeker, etc.).
- Configure responses, conditions, and context variables within each dialog node.
- Implement fallback responses for handling unclear or unexpected user inputs.

The top screenshot shows the 'Create an action' interface. At the top, there is a navigation bar with 'IBM watsonx Assistant Lite', 'Upgrade', 'ChatMATE', and 'Learning resources'. Below the bar, the title 'Create an action' is displayed. The main content area asks 'How would you like to build your action?' and presents two options: 'Start from scratch' (Build with actions using your own use case.) and 'Quick start with templates' (Use one of our pre-built templates and use cases.).

The bottom screenshot shows the 'Actions' page. The left sidebar contains a menu with 'All items', 'Created by you', 'Variables', and 'Saved responses'. The main content area is titled 'Create your first action' and includes the text 'With actions, you can help your customers accomplish their goals.' and a 'Create action' button. On the right, there is a 3D graphic of a purple cube with blue speech bubbles and green checkmarks. A 'Preview' button is located at the bottom right.

IBM watsonx Assistant LiteUpgradeChatMATE

Learning resources

Untitled action

Customer starts with:
Example: I want to pay my credit card bill.

Conversation steps

1

This step has no content

Continue to next step

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.

New action

What does your customer say to start this interaction?

Hi

CancelSave

Error
Network Error

Transaction id: e58f6da3-bd3b-4d9b-b60b-66ade900b57f

Preview

IBM watsonx Assistant LiteUpgradeChatMATE

Learning resources

Hi

Customer starts with:
Hi

Conversation steps

1

This step has no content

Continue to next step

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: 3

Enter a phrase

Helo

Hello

Hi

Error
Network Error

Transaction id: e58f6da3-bd3b-4d9b-b60b-66ade900b57f

Preview

IBM watsonx Assistant LiteUpgradeChatMATE

Learning resources

Hi

Customer starts with:
Hi

Conversation steps

1

Heyy! Wats up?

Continue to next step

New step

Step 1

Is takenwithout conditions

Set variable values

Assistant says

Heyy! Wats up?

Define customer response

And then

Continue to next step

Preview

IBM watsonx Assistant LiteUpgradeChatMATE

Learning resources

Untitled action

Customer starts with:
Example: I want to pay my credit card bill.

Conversation steps

1

This step has no content

Continue to next step

New step

Customer starts with:

Enter phrases that a customer types or says to start the conversation

New action

What does your customer say to start this interaction?

What products/services do you offer?

CancelSave

Preview

IBM watsonx Assistant LiteUpgradeChatMATE

Learning resources

What products/services do you offer?

Customer starts with:
What products/services do you offer?

Conversation steps

1

You can find them under the services tab

Continue to next step

New step +

Step 1

Is takenwithout conditions

Set variable valuesfx

Assistant says

You can find them under the services tab

Define customer response

And then

Continue to next step

Preview

Welcome, how can I assist you?

Hi

Hi recognized

Heyy! Wats up?

There are no additional steps for this action. Add a new step or end the action.

What products/services do you offer?

What products/services do you offer? recognized

You can find them under the services tab

There are no additional steps for this action. Add a new step or end the action.

Type something...

IBM watsonx Assistant LiteUpgradeChatMATE

Learning resources

Untitled action

Customer starts with:
Example: I want to pay my credit card bill.

Conversation steps

1

This step has no content

Continue to next step

New step +

Customer starts with:

Enter phrases that a customer types or says to start the conversation

New action

What does your customer say to start this interaction?

How can I provide feedback about my experience?

CancelSave

Preview

IBM watsonx Assistant LiteUpgradeChatMATE

Learning resources

How can I provide feedback about my experience?

Customer starts with:
How can I provide feedback about my experience?

Conversation steps

1

Through email

Continue to next step

New step +

Step 1

Is takenwithout conditions

Set variable values

Assistant says

Through email

Define customer response

And then

Continue to next step

Preview

Greet customer (default)

Welcome, how can I assist you?

Hi

Hi recognized

Heyy! Wats up?

There are no additional steps for this action. Add a new step or end the action.

What products/services do you offer?

IBM watsonx Assistant LiteUpgradeChatMATE

Learning resources

Untitled action

Customer starts with:
Example: I want to pay my credit card bill.

Conversation steps

1

This step has no content

Continue to next step

New step +

Customer starts with:

Enter phrases that a customer types or says to start the conversation

New action

What does your customer say to start this interaction?

What is your return and refund policy?

CancelSave

Error

Network Error

Transaction id: 5ce8d19b-3cdf-4c29-b899-31e4407f2382

Preview

IBM watsonx Assistant LiteUpgradeChatMATE vLearning resources

What is your return and refund policy?

Customer starts with:
What is your return and refund policy?

Conversation steps

1

Yes you can return the item within 3 days if you are not satisfied with it and the amount will be credited...

Continue to next step

New step +

Step 1

Is takenwithout conditionsSet variable valuesfx

Assistant says

B I @ fx ↺ ↻ 🔍 📄 📌 📌 📌 📌

Yes you can return the item within 3 days if you are not satisfied with it and the amount will be credited in your account within a week time

Define customer response

And then

Continue to next step

Preview

IBM watsonx Assistant LiteUpgradeChatMATE vLearning resources

How can I reset my password?

Customer starts with:
How can I reset my password?

Conversation steps

1

To reset your password ,you can visit our website and go to the 'Forget Password' page

Continue to next step

2

Alright is there anything more to know?

Confirmation

Continue to next step

2 is Yes

I am always available to answer you

Continue to next step

New step +

Step 4

Is takenwith conditionsSet variable valuesfx

Conditions

1 condition

If All of this is true:

2. Alright is th... is No

and Add condition +

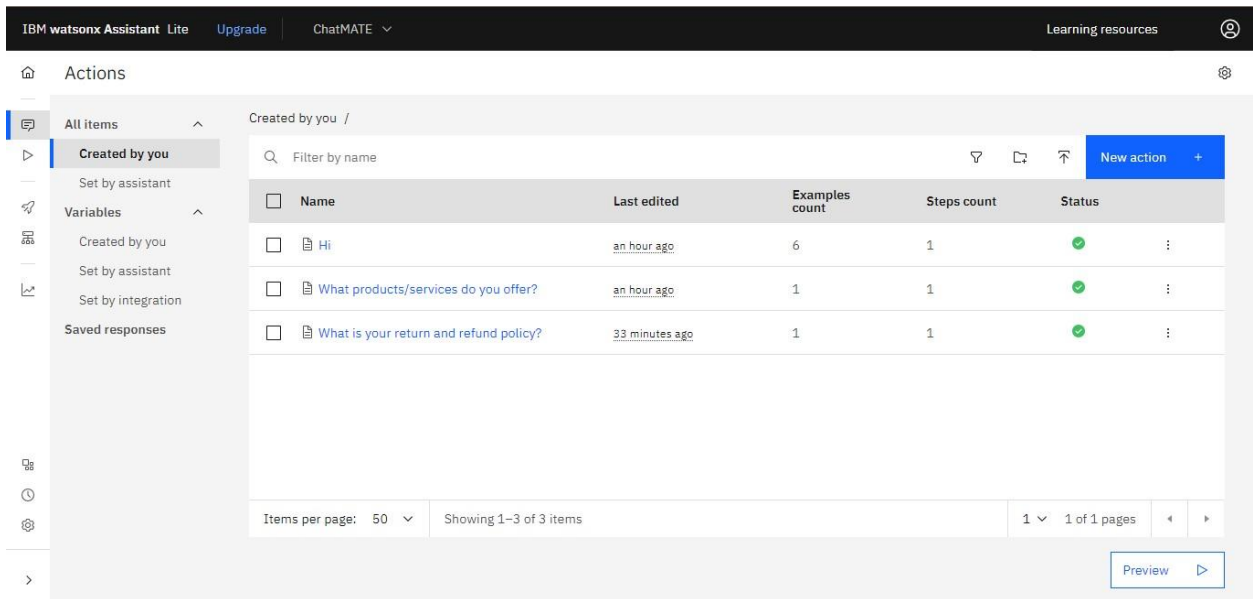
New condition group +

Assistant says

B I @ fx ↺ ↻ 🔍 📄 📌 📌 📌 📌

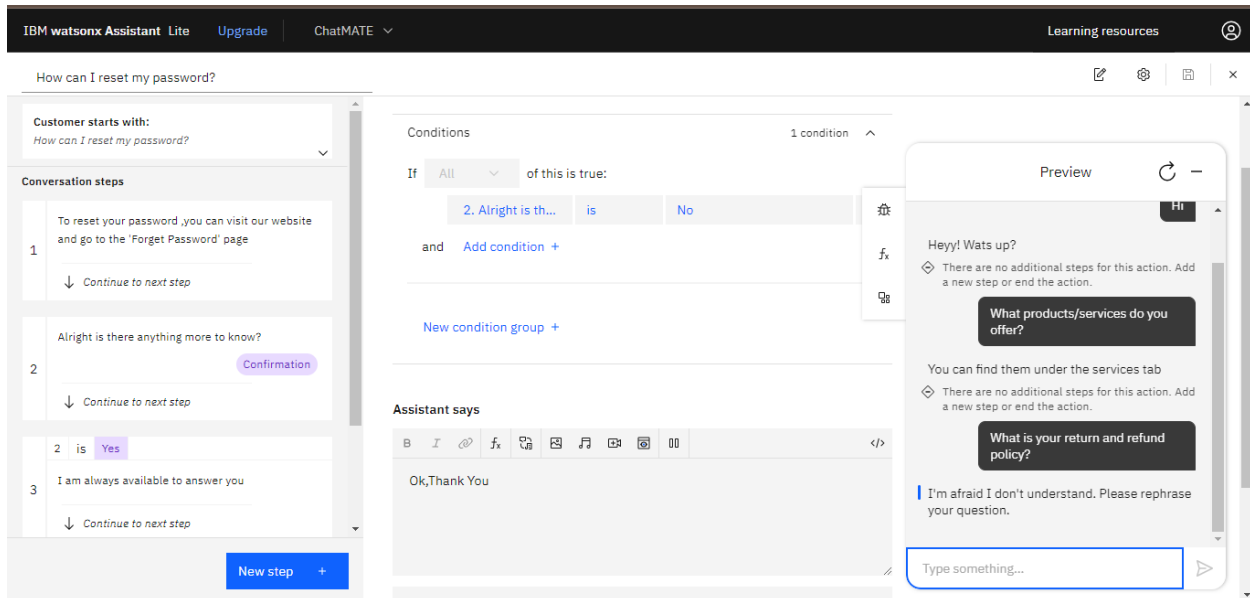
Ok,Thank You

Preview



Step 5: Implement Fallback Responses

1. In the dialog, create a node for fallback responses we can name it as 'anything else'
2. Configure this node to trigger when the assistant recognizes a #anything_else intent or when it doesn't recognize the user's input.



Step 6: Test Your Chatbot

1. Click on the "Try it" button in the Watson Assistant tool.
2. Interact with your chatbot using the provided user examples and test various scenarios.
3. Ensure that the chatbot responds appropriately to different intents and user inputs.

The image displays two screenshots of the IBM Watson Assistant interface, illustrating the configuration and testing of a chatbot step.

Top Screenshot: The interface shows the configuration for Step 1. The "Customer starts with:" section displays the user input: "How can I provide feedback about my experience?". The "Conversation steps" section shows a single step with the action "Through email" and a "Continue to next step" button. The "Assistant says" section shows the response "Through email". The "And then" section shows the action "Continue to next step". A "Set variable values" button is visible. The "Preview" pane on the right shows the chatbot's response to the user input, including a greeting and a prompt for feedback.

Bottom Screenshot: This screenshot shows the same configuration, but the "Preview" pane displays a different sequence of interactions. It shows the chatbot responding to "What products/services do you offer?" with "You can find them under the services tab". It then shows the chatbot responding to "How can I provide feedback about my experience?" with "Through email". The "Preview" pane also includes a prompt to "Use the up arrow for prior messages".

By these steps, we can start building the chatbot “ChatMATE” using IBM Cloud Watson Assistant.