PROJECT SUBMISSION PHASE-3

Project Title : Chatbot Deployment with IBM Cloud Watson Assistant

Project Code : 1662

Team name : Proj_211252_Team_1

Domain : Cloud Application Development

Assignment : Development part 1

SUBMITTED BY

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Phase 3:Development Part 1

In IBM Watson Assistant, which is a cloud-based conversational AI platform, entities, intents, and dialogs are key components used to build and train chatbots or virtual assistants. Here's a brief explanation of each.

Entities:

- In Watson Assistant, an entity represents a specific piece of information within user input. It is used to extract relevant data from user messages.
- Entities can be things like dates, numbers, product names, or any other data you want to capture. You define entities to help the assistant understand and process user queries more effectively.

Intents:

- An intent is the purpose or goal expressed in a user's message. It represents what the user is trying to achieve or communicate.
- Intents are essential for routing user requests to the appropriate responses or actions.
- You define intents to help the assistant recognize and categorize user input accurately.

Dialogs:

- Dialogs in Watson Assistant are used to structure the conversation flow between the user and the chatbot. You create dialog nodes to define how the assistant should respond to user input based on detected intents and entities. Dialogs help in creating dynamic and context-aware interactions.

- Within a dialog node, you can define responses, conditions, and actions to take. You can also incorporate variables to store and retrieve information throughout the conversation, enabling personalized interactions.
- The typical workflow in Watson Assistant involves defining entities and intents, building dialog nodes to handle different conversation paths, and training the assistant using historical data or sample conversations.This training helps the assistant understand user input better, recognize intents and entities accurately, and respond appropriately.
- Entities, intents, and dialogs work together to enable natural and context-aware conversations between users and your chatbot or virtual assistant built with IBM Watson Assistant. By correctly defining and configuring these components, you can create effective and intelligent conversational interfaces

Start building the chatbot using IBM Cloud Watson Assistant:

Here is a step-by-step guide on how to build a chatbot using IBM Cloud Watson Assistant.

1) Create an account and log in.

2) Click on the "Create Assistant" button.

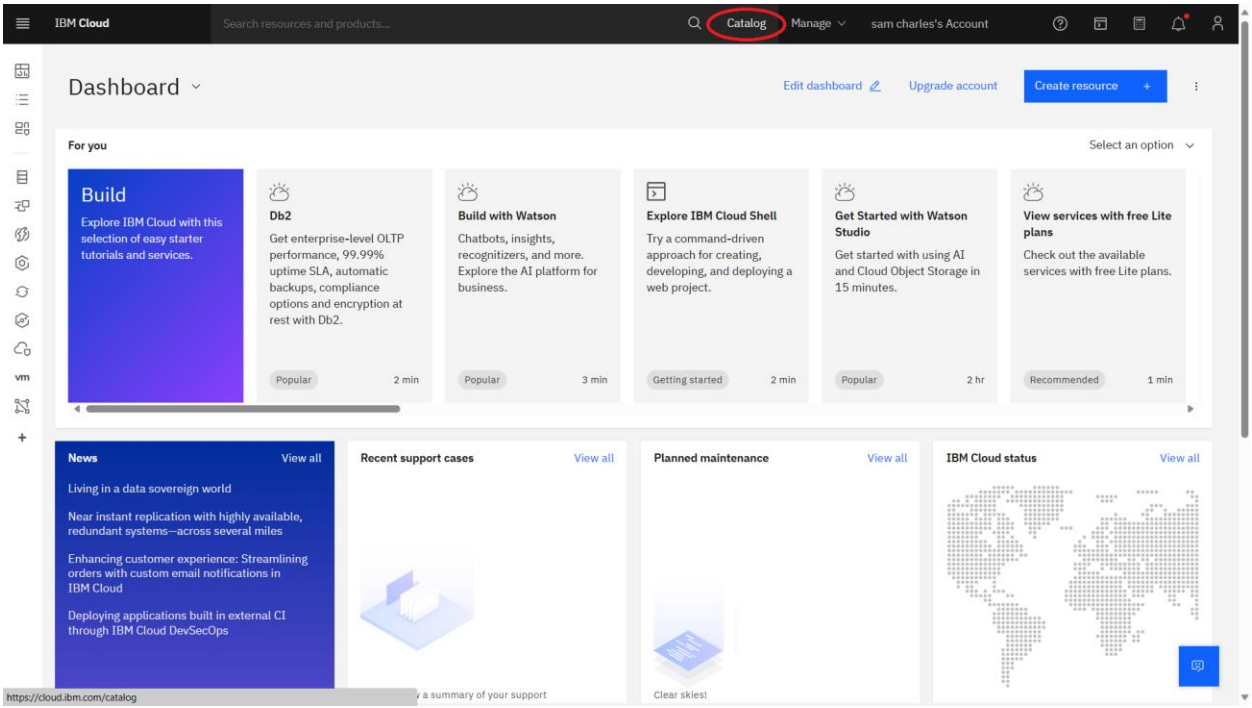
3) Give your assistant a name and select a template.

4) Train your assistant by providing it with examples of conversations.

5) Deploy your assistant to a channel.

Step1:

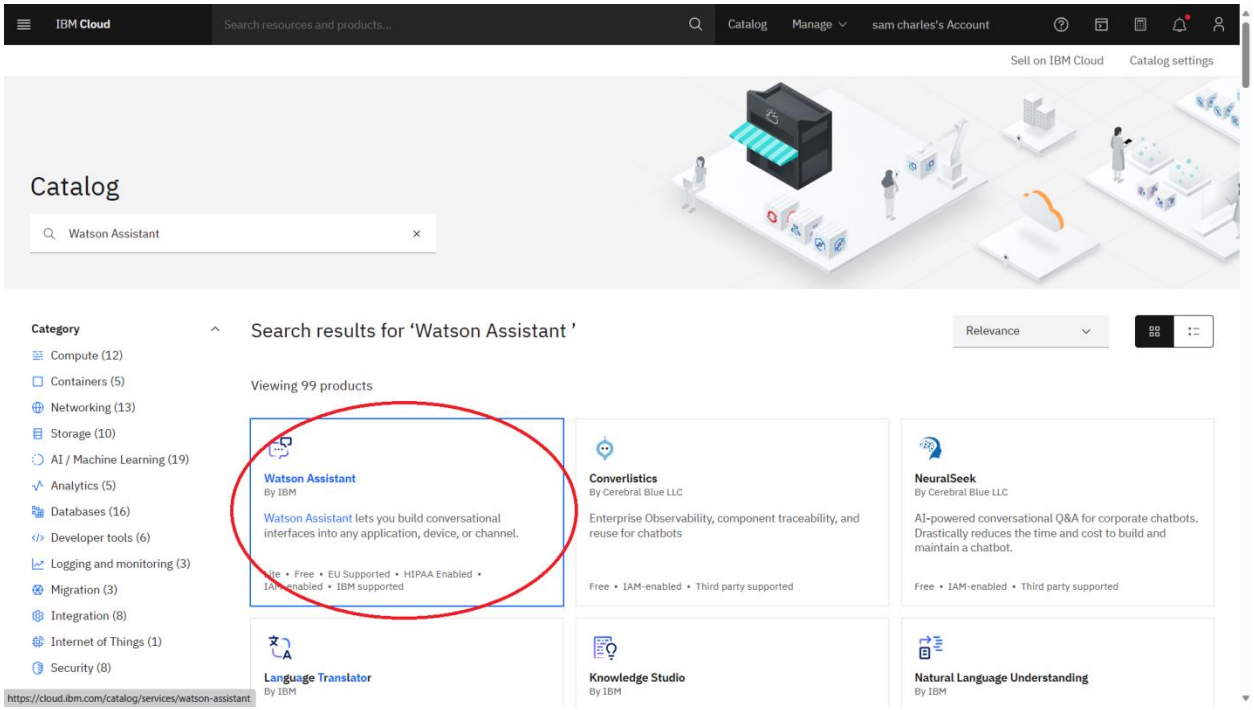
- To start building a chatbot using IBM Cloud Watson Assistant, you will need to create an account and log in. Once you successfully logged in click the “Catalog”.



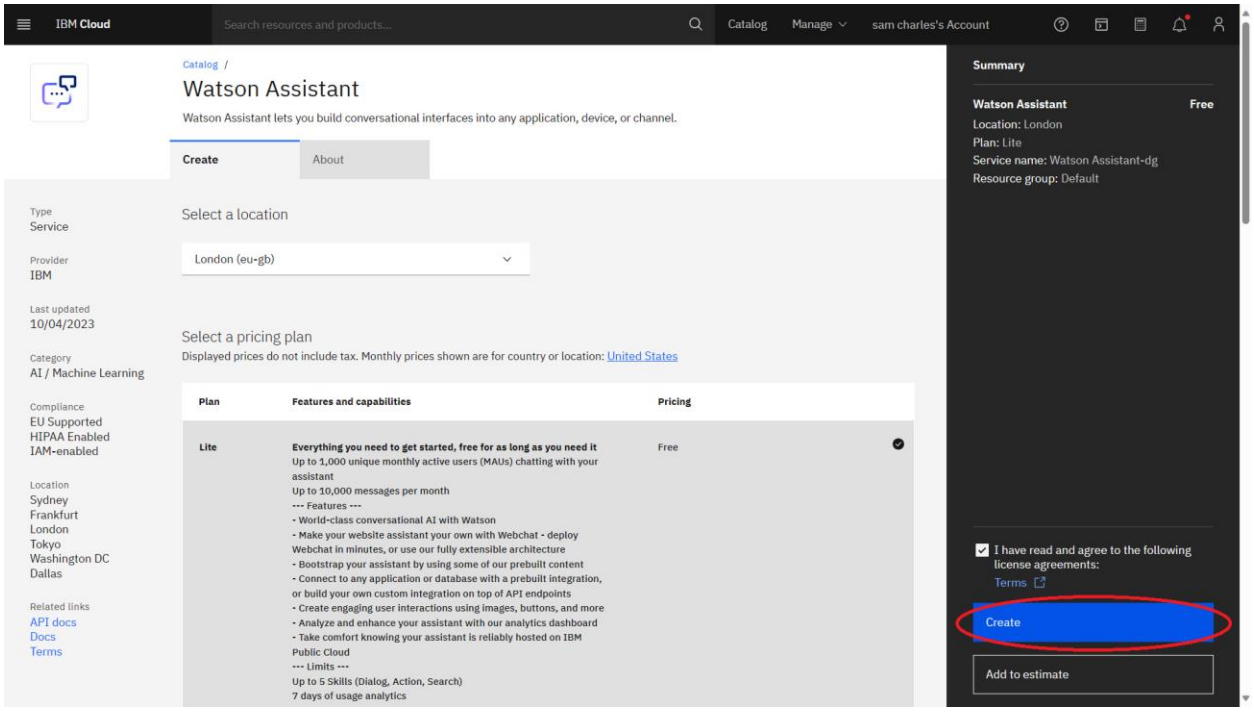
Fig(1)

Step 2:

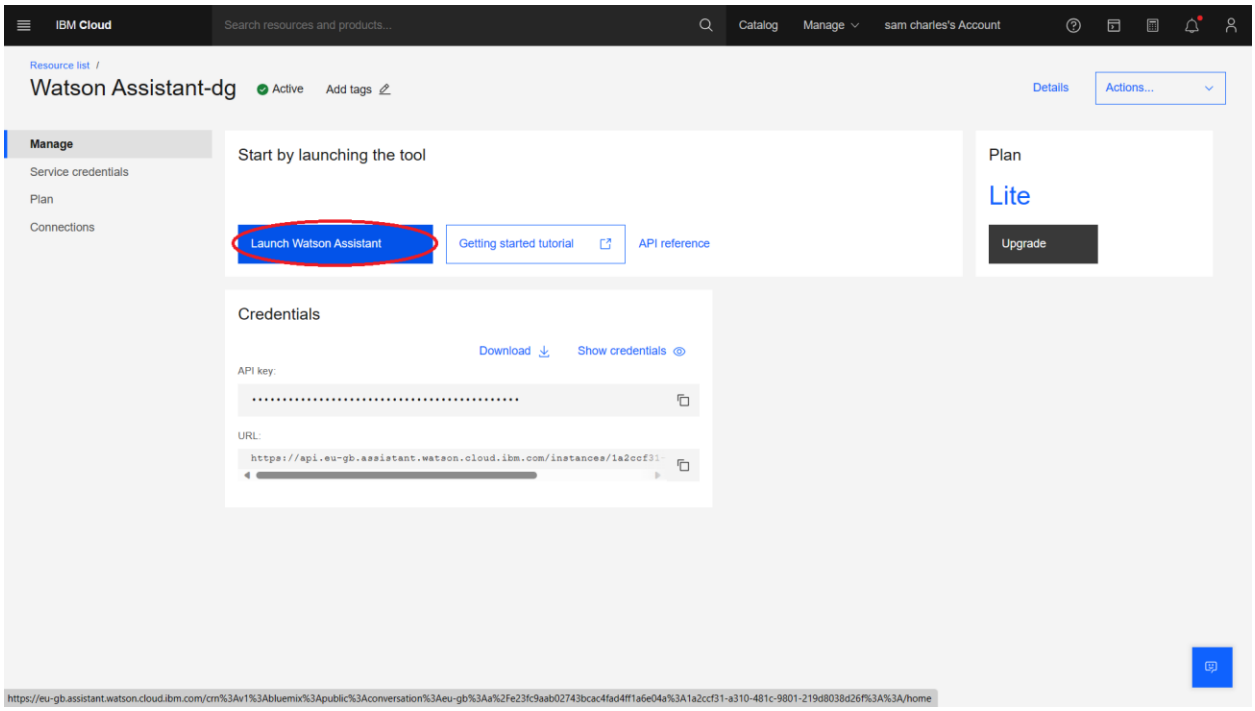
- Search for Watson Assistant in the search bar, you can create a new assistant by clicking on the "Create Assistant" button.



Fig(2.1)



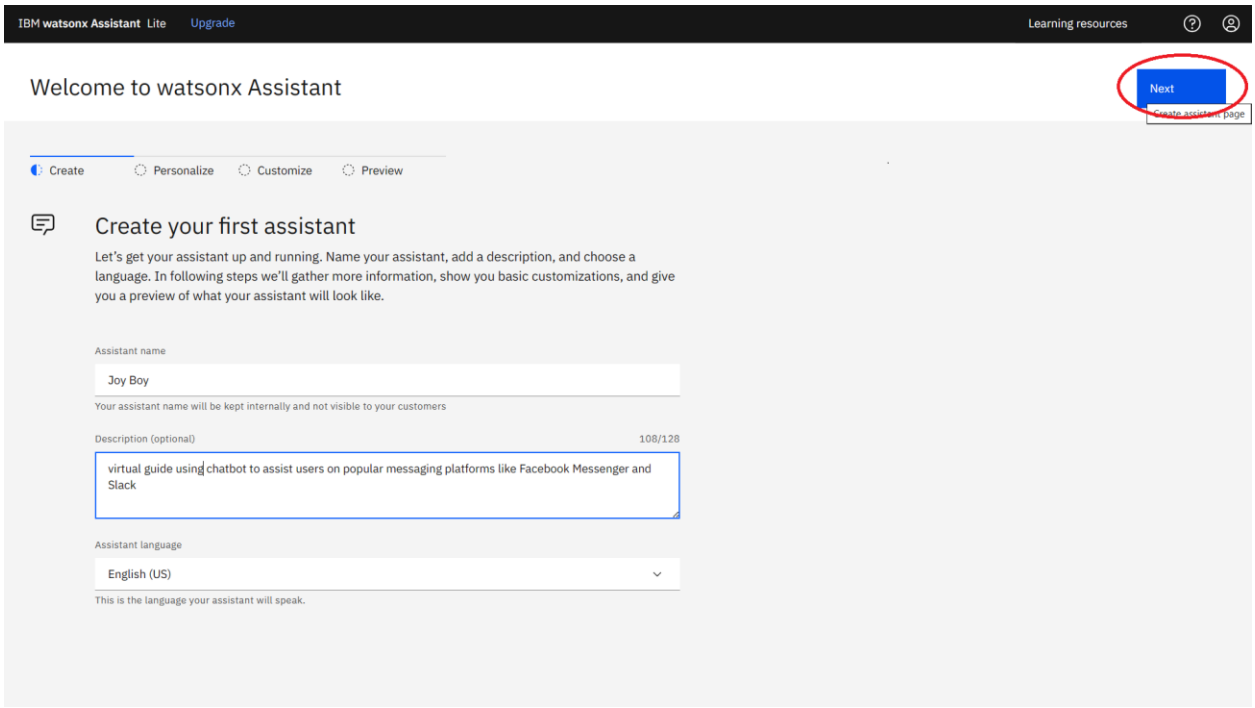
Fig(2.2)



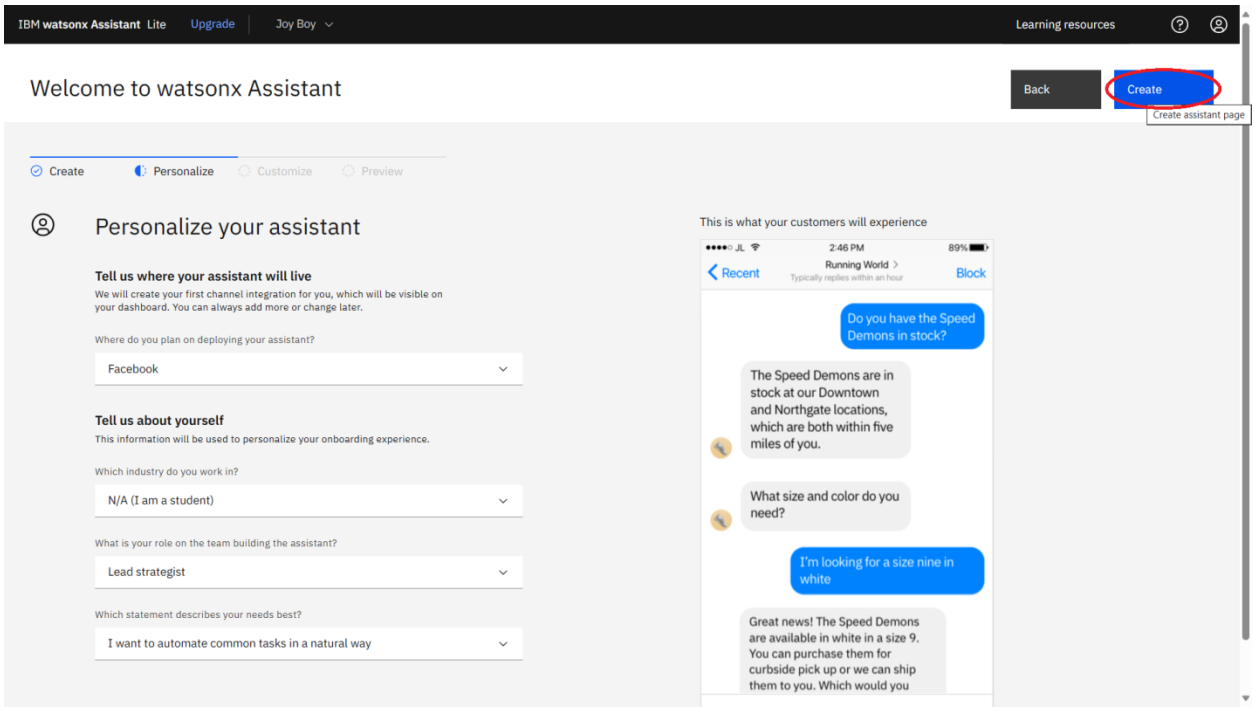
Fig(2.3)

Step 3:

- When creating a new assistant, you will need to give it a name and select a template. The template will determine the basic capabilities of your assistant.



Fig(3.1)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Upgrade
Joy Boy
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Welcome to watsonx Assistant
Back
Create
Create assistant page
Create
Personalize
Customize
Preview
Personalize your assistant
Tell us where your assistant will live
We will create your first channel integration for you, which will be visible on your dashboard. You can always add more or change later.
Where do you plan on deploying your assistant?
Facebook
Tell us about yourself
This information will be used to personalize your onboarding experience.
Which industry do you work in?
N/A (I am a student)
What is your role on the team building the assistant?
Lead strategist
Which statement describes your needs best?
I want to automate common tasks in a natural way
This is what your customers will experience
2:46 PM
89%
Recent
Running World
Typically replies within an hour
Block
Do you have the Speed Demons in stock?
The Speed Demons are in stock at our Downtown and Northgate locations, which are both within five miles of you.
What size and color do you need?
I'm looking for a size nine in white
Great news! The Speed Demons are available in white in a size 9. You can purchase them for curbside pick up or we can ship them to you. Which would you

Fig(3.2)

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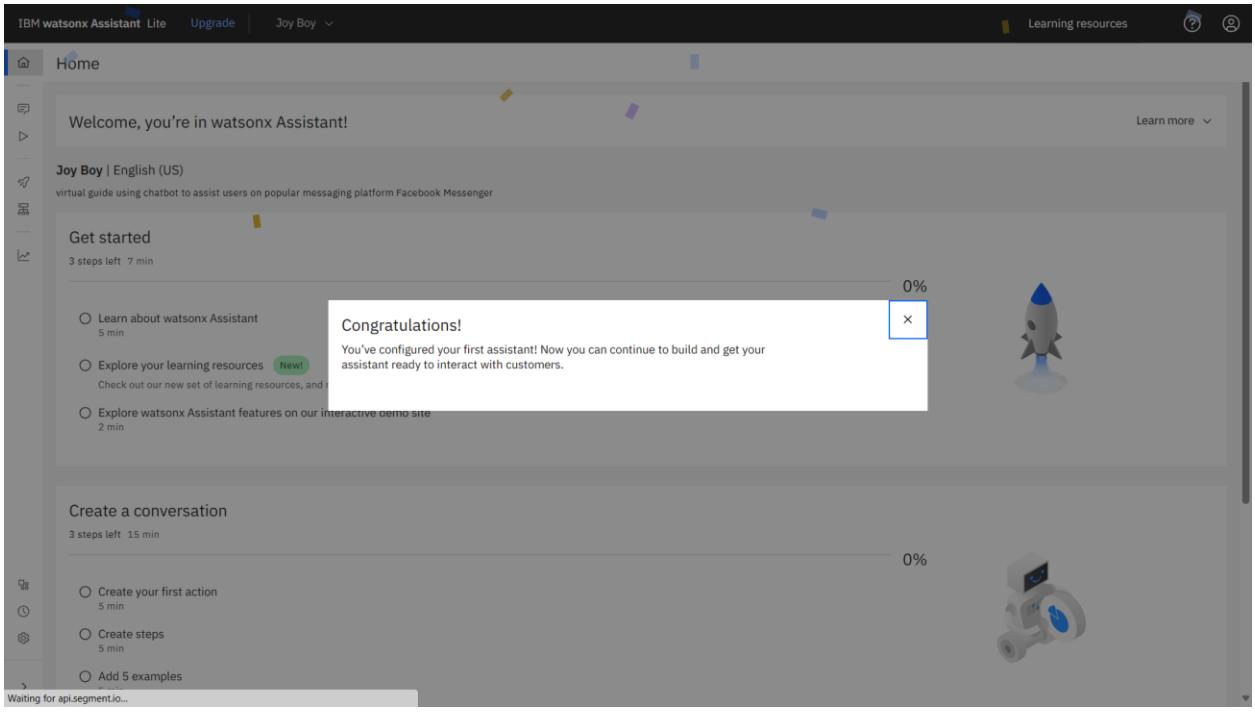
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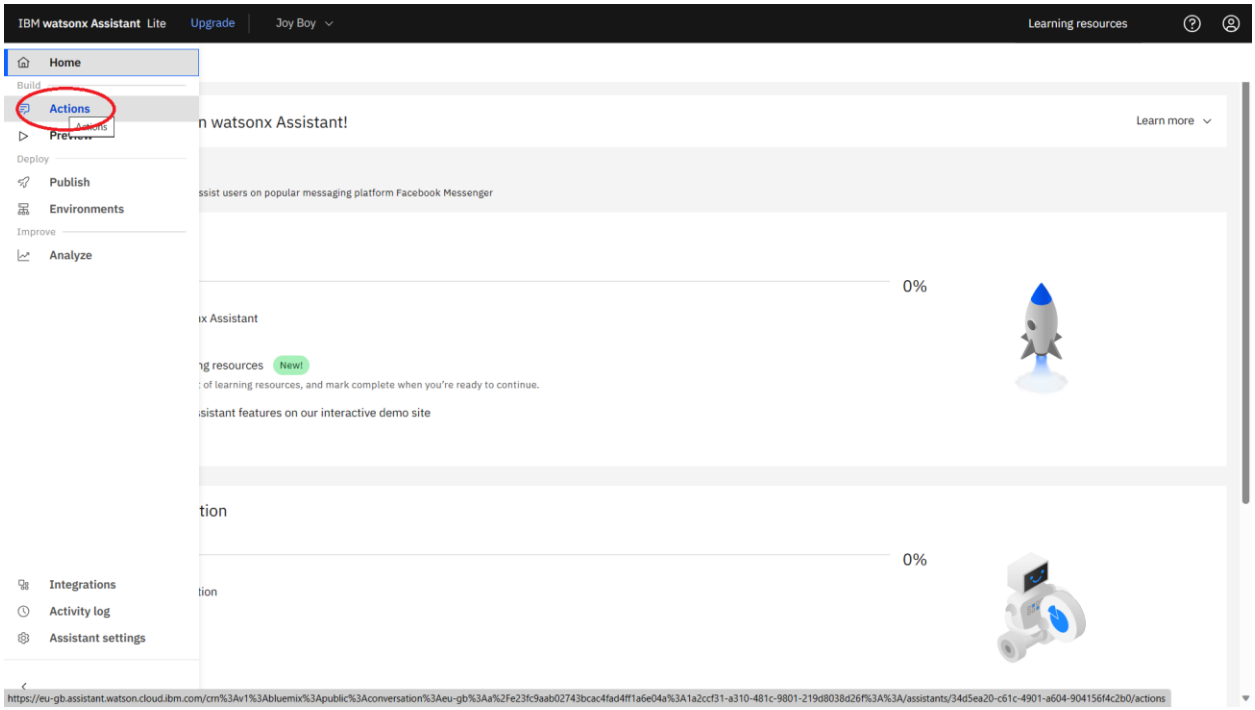
Home
Welcome, you're in watsonx Assistant!
Learn more
Joy Boy | English (US)
virtual guide using chatbot to assist users on popular messaging platform Facebook Messenger
Get started
3 steps left 7 min
0%
Learn about watsonx Assistant
5 min
Explore your learning resources
New!
Check out our new set of learning resources, and
Explore watsonx Assistant features on our interactive demo site
2 min
Congratulations!
You've configured your first assistant! Now you can continue to build and get your assistant ready to interact with customers.
Create a conversation
3 steps left 15 min
0%
Create your first action
5 min
Create steps
5 min
Add 5 examples
Waiting for api.segment.io...

Fig(3.3)

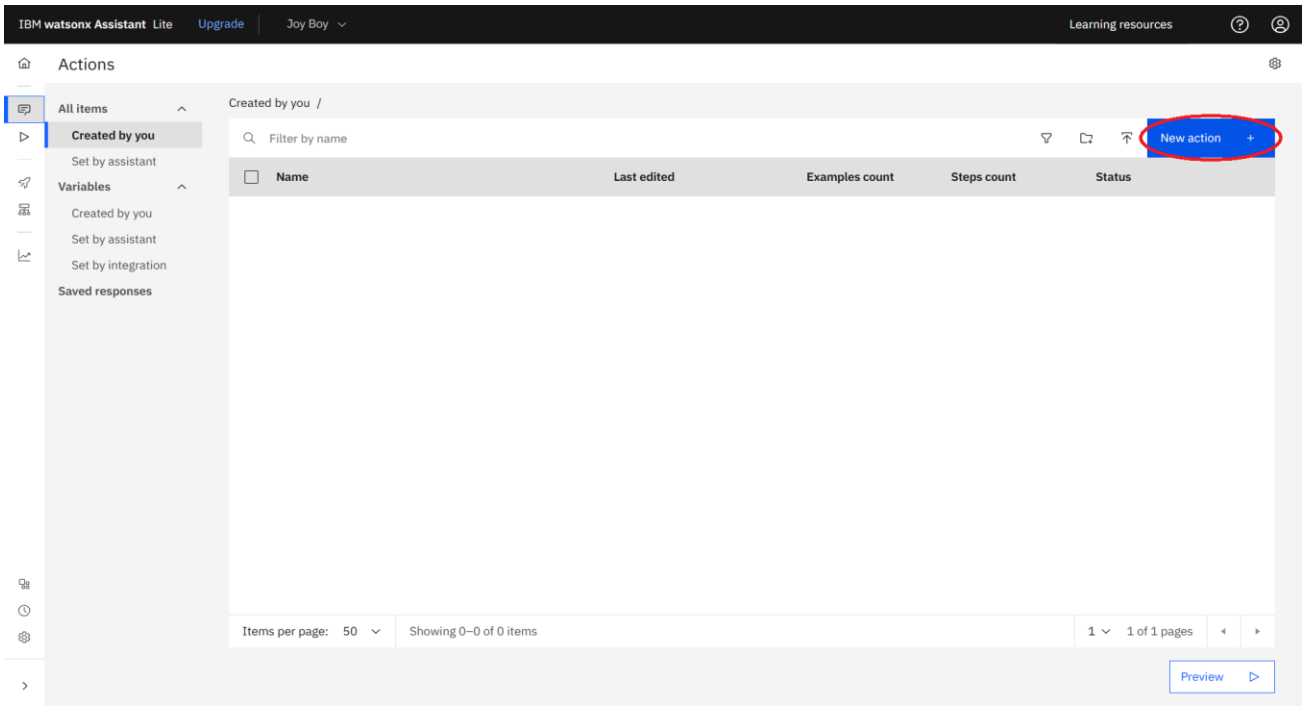
Step 4:

- Once you have created your assistant, you can start training it by providing it with examples of conversations. You can do this by typing in the questions that you want your assistant to be able to answer and the responses that you want it to give.

- You can also train your assistant by uploading a CSV file containing examples of conversations. This is a good option if you have a large number of examples of conversations that you want to train your assistant on.



Fig(4.1)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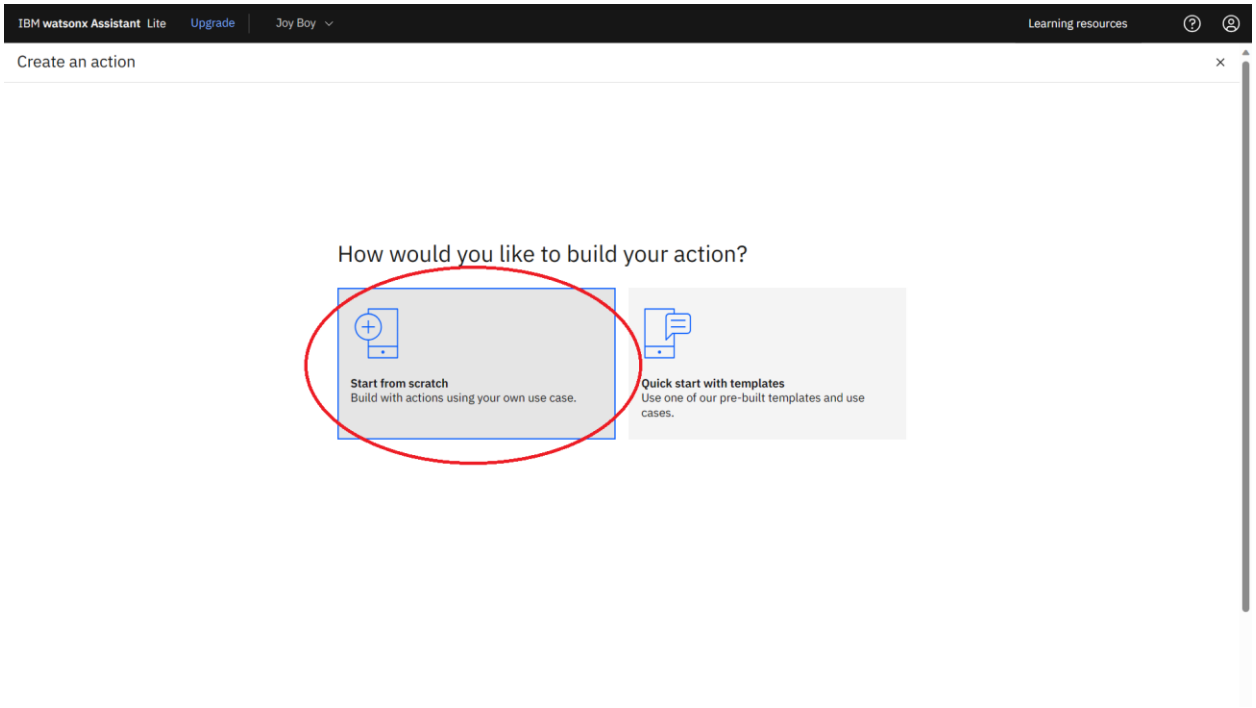
Actions
All items
Created by you
Set by assistant
Variables
Created by you
Set by assistant
Set by integration
Saved responses
Created by you /
Filter by name
New action
Name
Last edited
Examples count
Steps count
Status
Items per page: 50
Showing 0–0 of 0 items
1
1 of 1 pages
Preview

Fig(4.2)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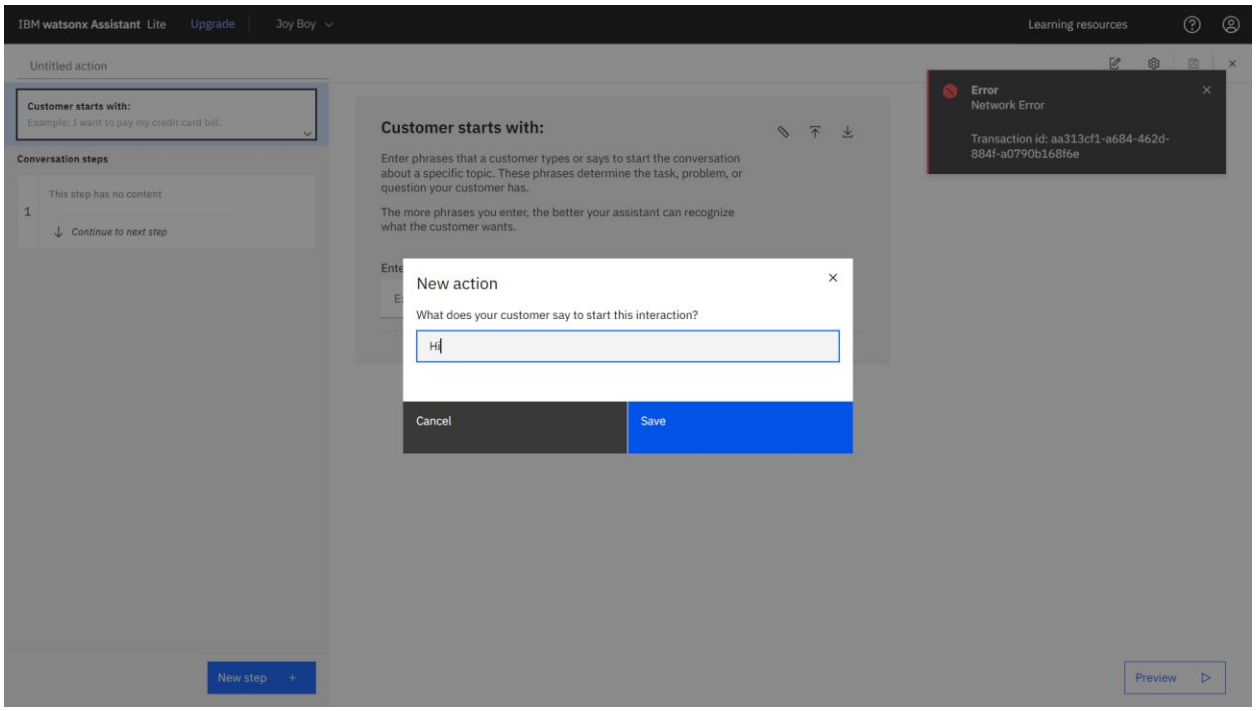
Create an action
How would you like to build your action?
Start from scratch
Build with actions using your own use case.
Quick start with templates
Use one of our pre-built templates and use cases.

Fig(4.3)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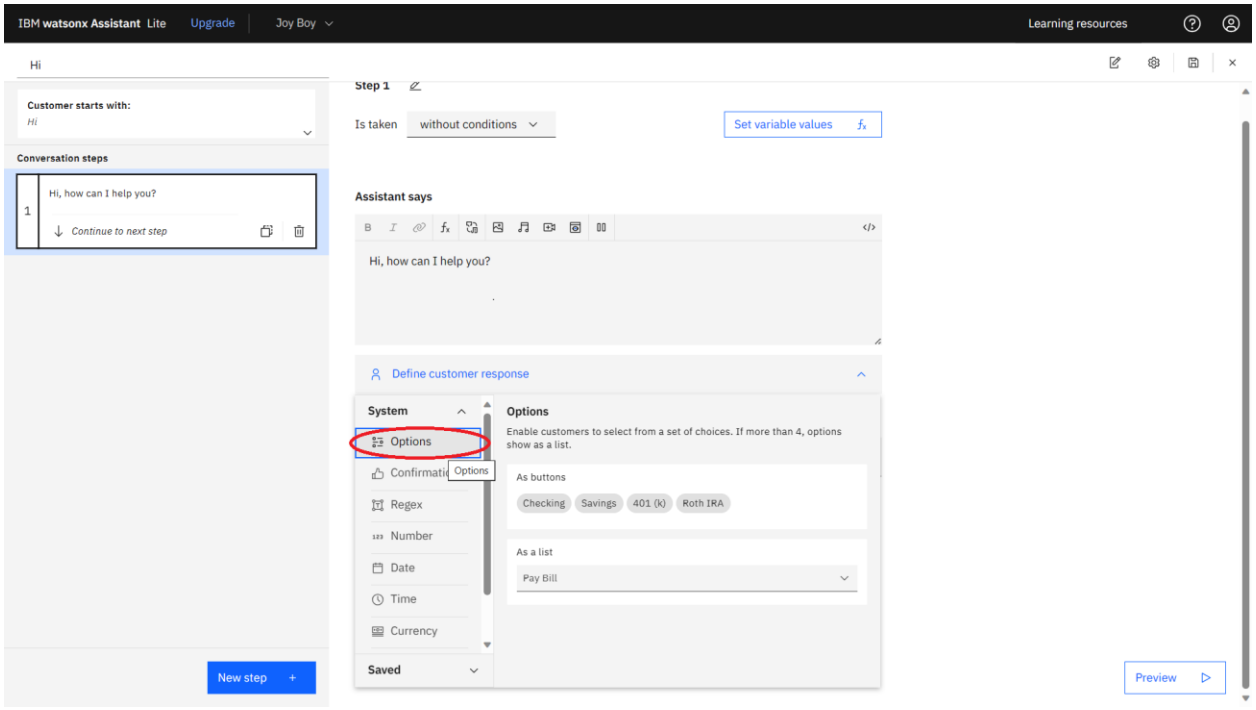
Untitled action
Customer starts with:
Example: I want to pay my credit card bill.
Conversation steps
This step has no content
Continue to next step
Customer starts with:
Enter phrases that a customer types or says to start the conversation about a specific topic. These phrases determine the task, problem, or question your customer has.
The more phrases you enter, the better your assistant can recognize what the customer wants.
New action
What does your customer say to start this interaction?
Hi
Cancel
Save
Error
Network Error
Transaction id: aa313cf1-a684-462d-884f-a0790b168f6e
New step
Preview

Fig(4.4)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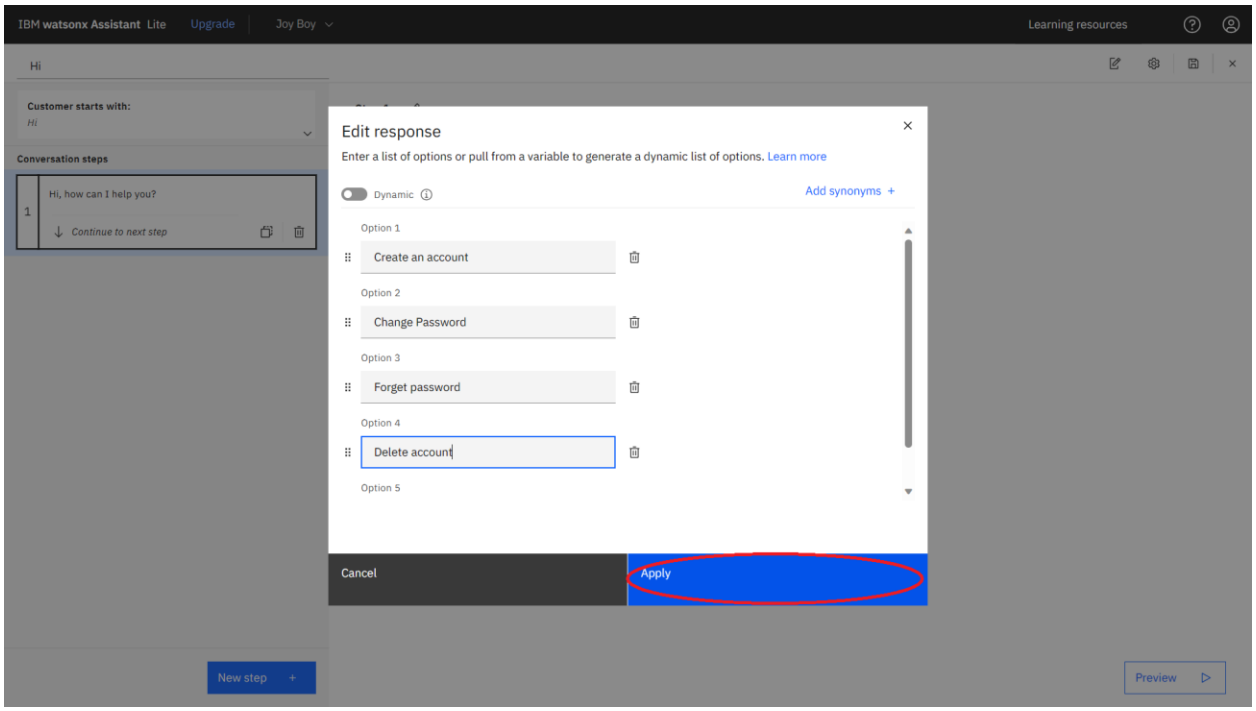
Hi
Customer starts with:
Hi
Conversation steps
Hi, how can I help you?
Continue to next step
Step 1
Is taken
without conditions
Set variable values
Assistant says
Hi, how can I help you?
Define customer response
System
Options
Confirmation
Regex
Number
Date
Time
Currency
Saved
Enable customers to select from a set of choices. If more than 4, options show as a list.
As buttons
Checking
Savings
401 (k)
Roth IRA
As a list
Pay Bill
New step
Preview

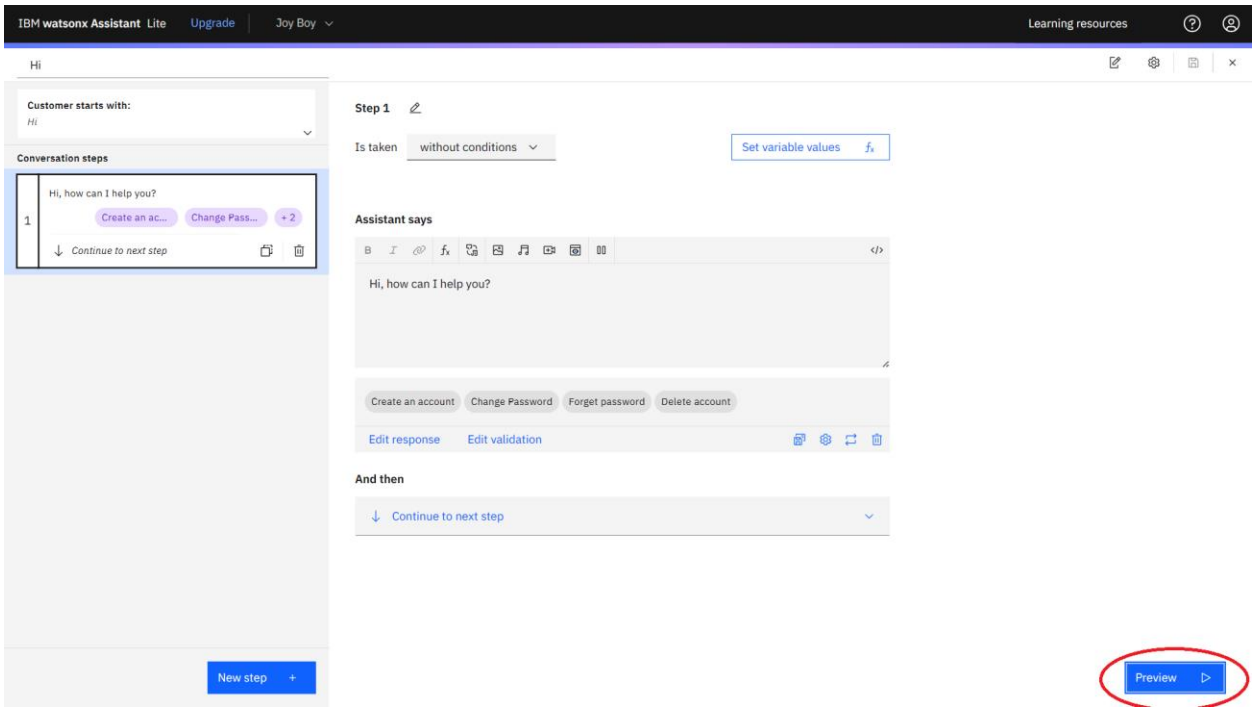
Fig(4.5)



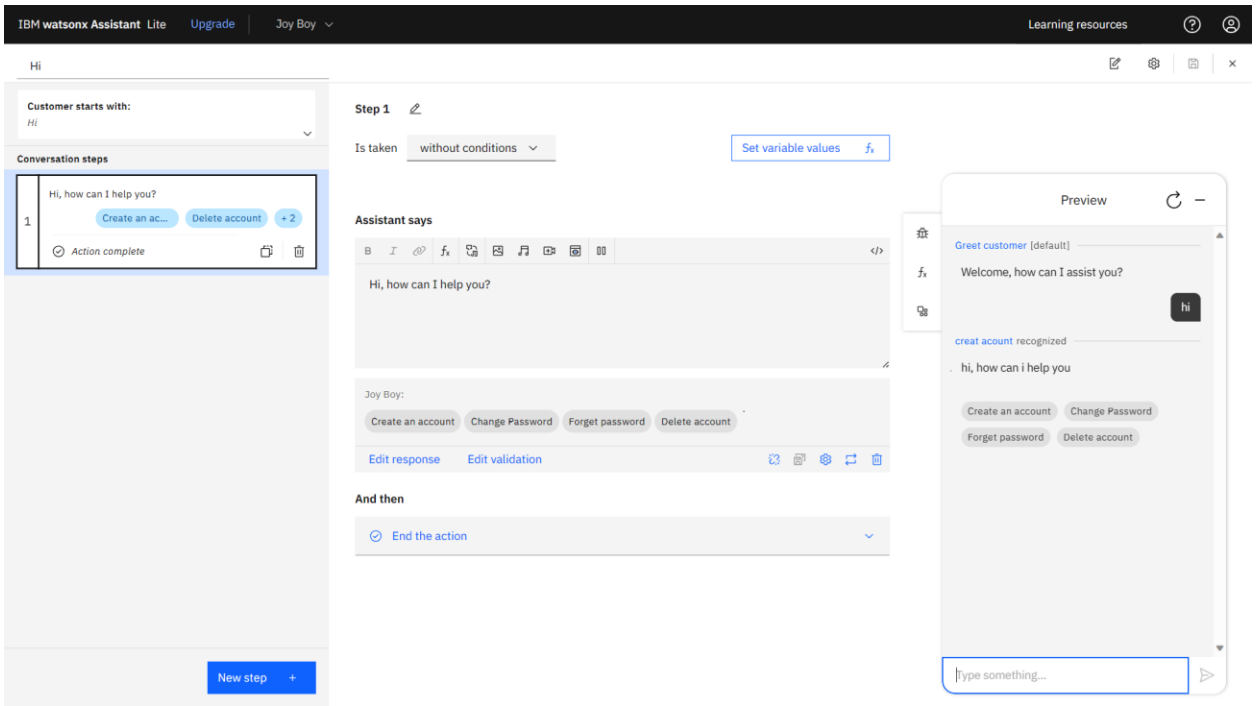
Fig(4.6)

Step 5:

- Once you have trained your assistant, you can deploy it to a channel such as your website, a messaging app, or a voice assistant platform.



Fig(5.1)


IBM watsonx Assistant Lite
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Learning resources
Hi
Customer starts with:
Hi
Conversation steps
1
Hi, how can I help you?
Create an ac...
Delete account
+ 2
Action complete
New step
Step 1
Is taken
without conditions
Set variable values
Assistant says
Hi, how can I help you?
Joy Boy:
Create an account
Change Password
Forget password
Delete account
Edit response
Edit validation
And then
End the action
Preview
Greet customer [default]
Welcome, how can I assist you?
hi
creat acount recognized
hi, how can i help you
Create an account
Change Password
Forget password
Delete account
Type something...

Fig(5.2)