

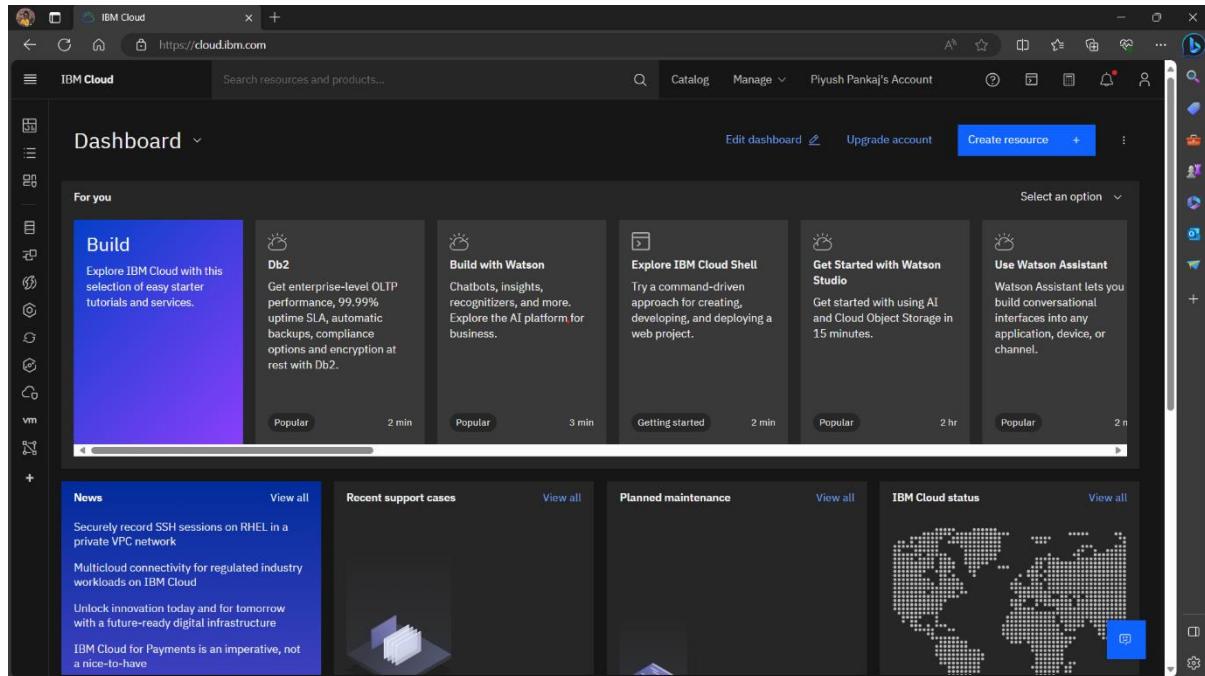
❖ Step-by-Step Guide to Creating a Chatbot with IBM Watson Assistant

Prerequisites:

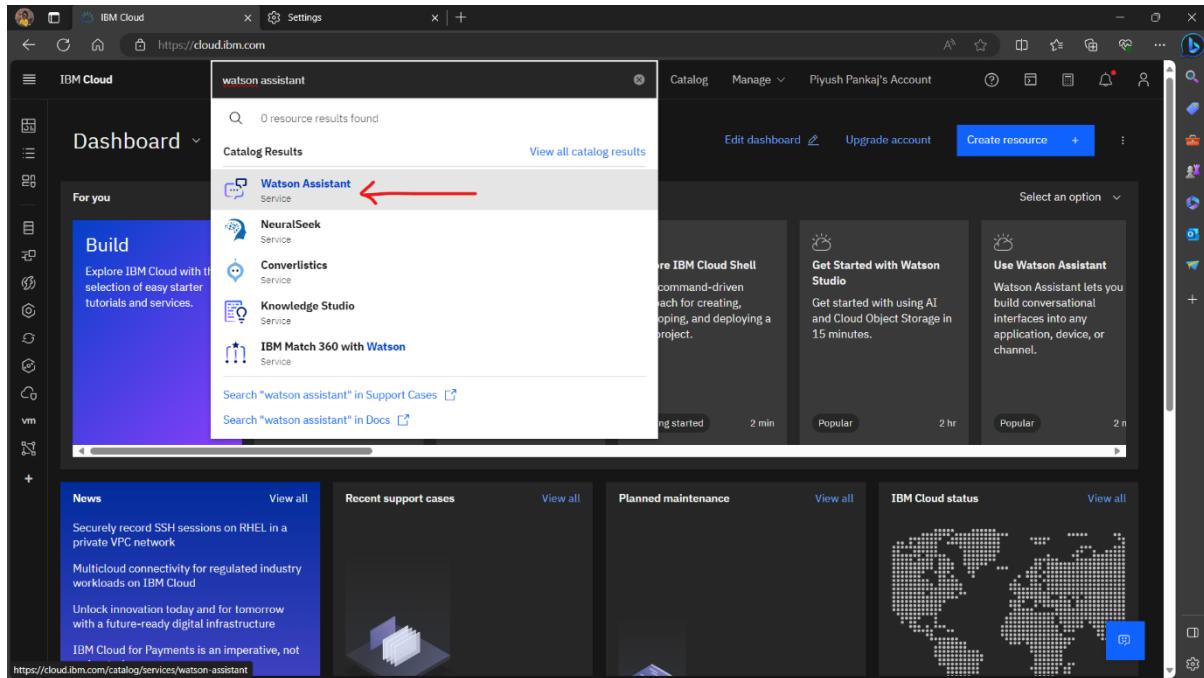
1. IBM Cloud Account: Ensure you have an IBM Cloud account. You can sign up at IBM Cloud if you don't have one.
2. IBM Watson Assistant Service: Create an instance of the Watson Assistant service in your IBM Cloud account.

Step 1: Accessing IBM Watson Assistant

1. Log in to your IBM Cloud account at IBM Cloud.

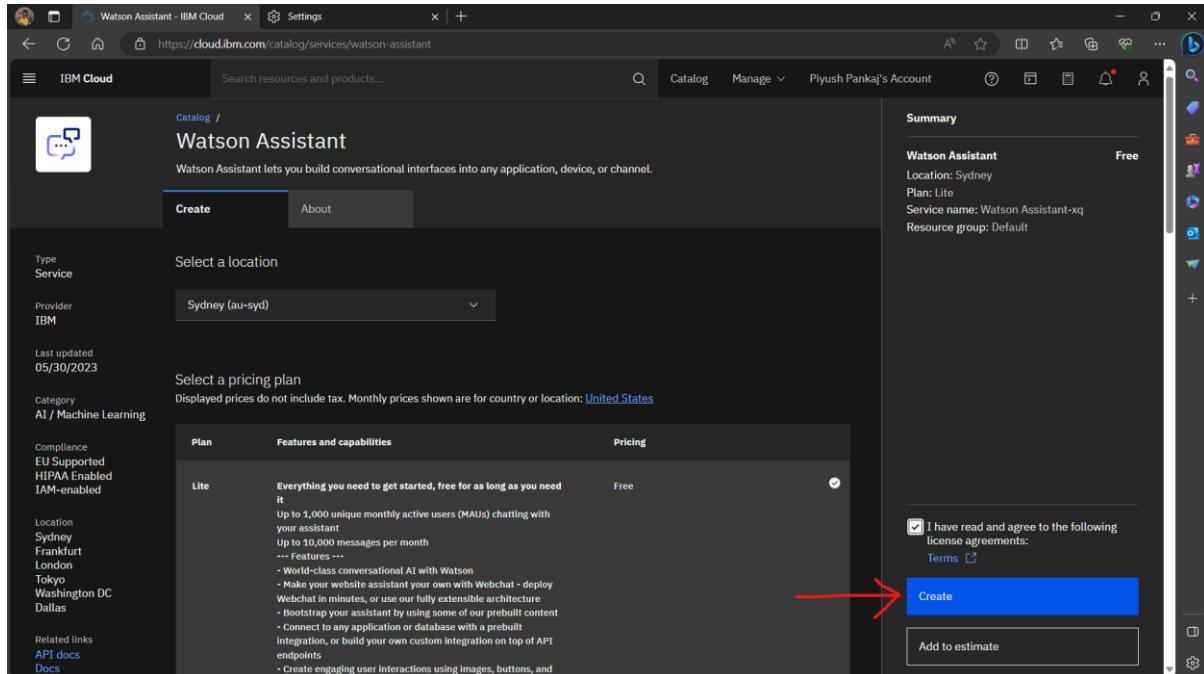


Step 2: Navigate to the IBM Watson Assistant service in the IBM Cloud dashboard.



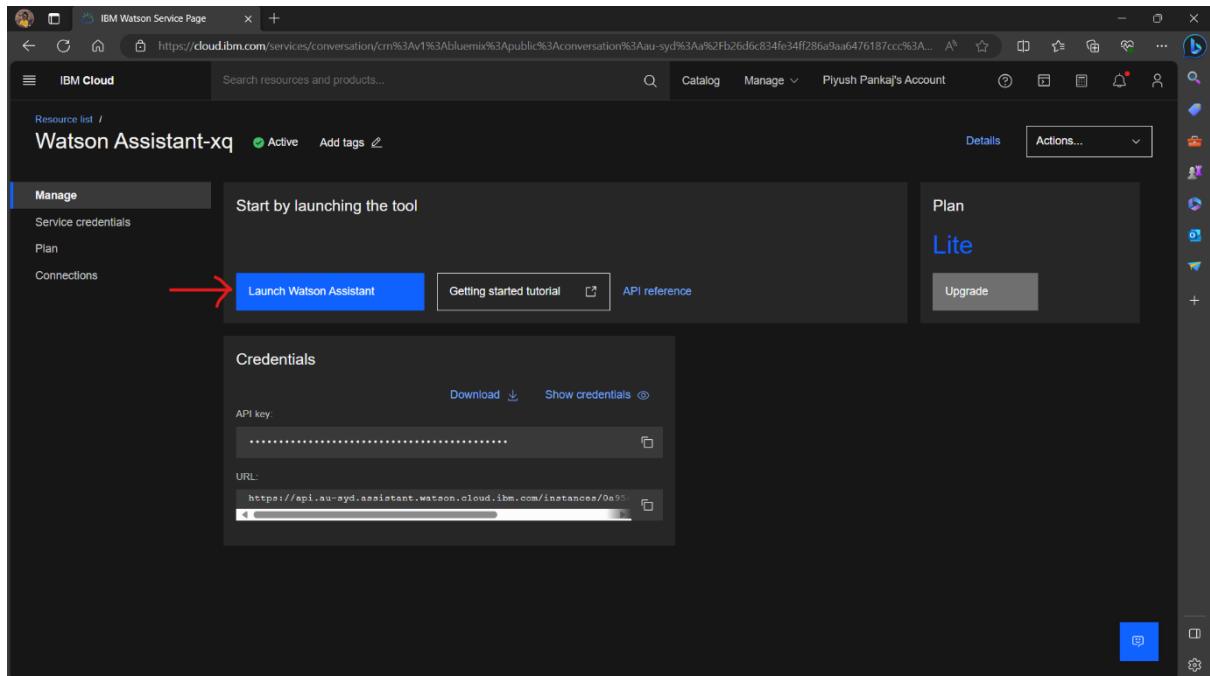
The screenshot shows the IBM Cloud dashboard. In the top search bar, 'watson assistant' is typed. Below the search bar, a modal window titled 'Catalog Results' displays a list of services. The 'Watson Assistant' service is highlighted with a red arrow pointing to its icon and name. Other services listed include NeuralSeek, Conversitics, Knowledge Studio, and IBM Match 360 with Watson. To the right of the catalog results, there are several cards: 'Explore IBM Cloud Shell', 'Get Started with Watson Studio', and 'Use Watson Assistant'. At the bottom of the catalog results, there are links to 'Search "watson assistant" in Support Cases' and 'Search "watson assistant" in Docs'.

Step 3: To create your chatbot, click on "Create assistant" within the Watson Assistant service

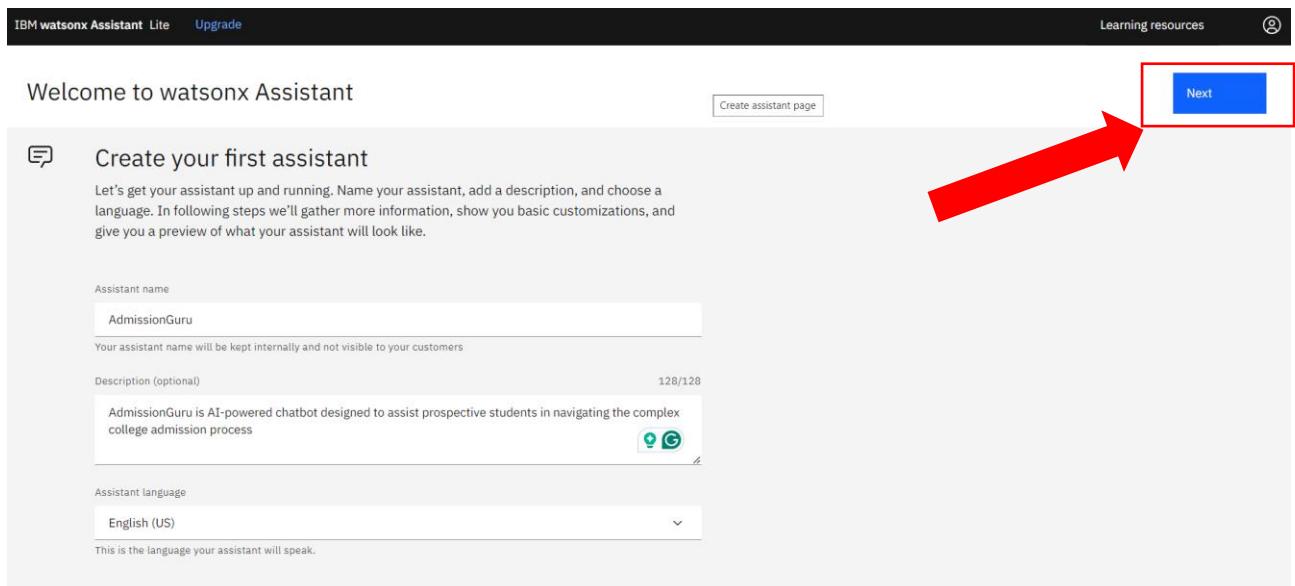


The screenshot shows the 'Watson Assistant' service creation page in the IBM Cloud catalog. On the left, there is a sidebar with service details: Type (Service), Provider (IBM), Last updated (05/30/2023), Category (AI / Machine Learning), and compliance checkboxes for EU Supported, HIPAA Enabled, and IAM-enabled. Below this is a location dropdown set to 'Sydney (au-syd)'. On the right, there is a 'Summary' section showing the service name 'Watson Assistant', location 'Sydney', plan 'Lite', and a 'Free' price. A checkbox for accepting license agreements is checked, and a large red arrow points to the 'Create' button at the bottom right. Other buttons include 'Add to estimate' and a gear icon.

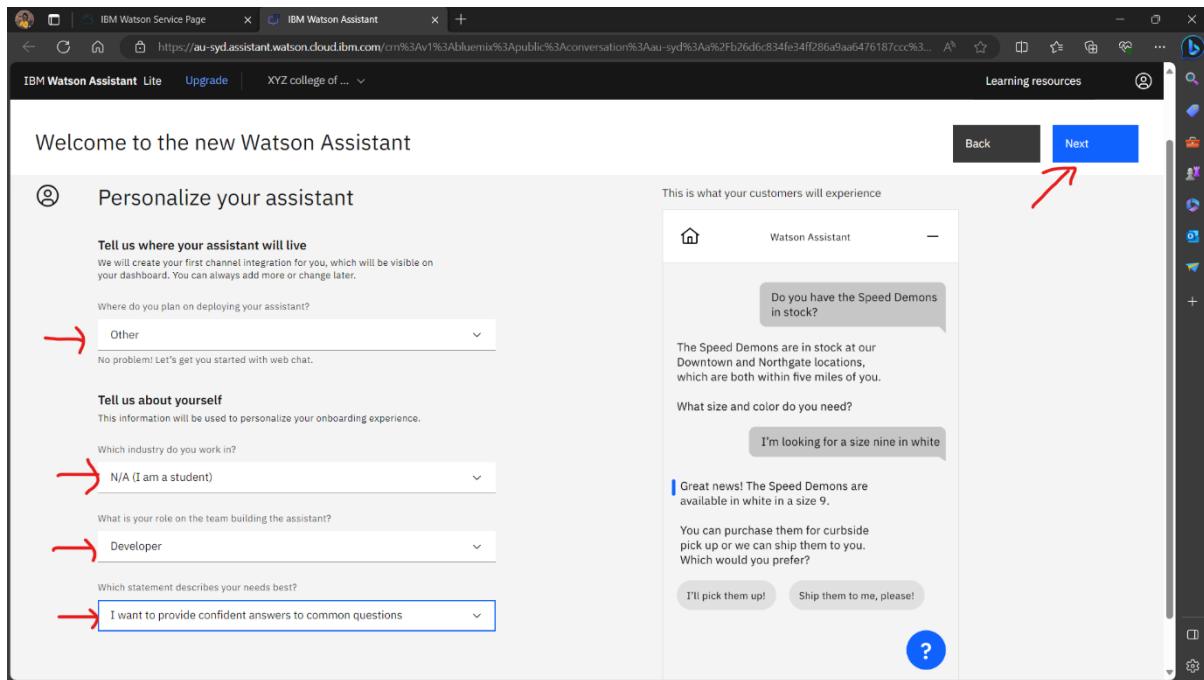
Step 4: Kindly click on the button that says "Launch Watson Assistant."



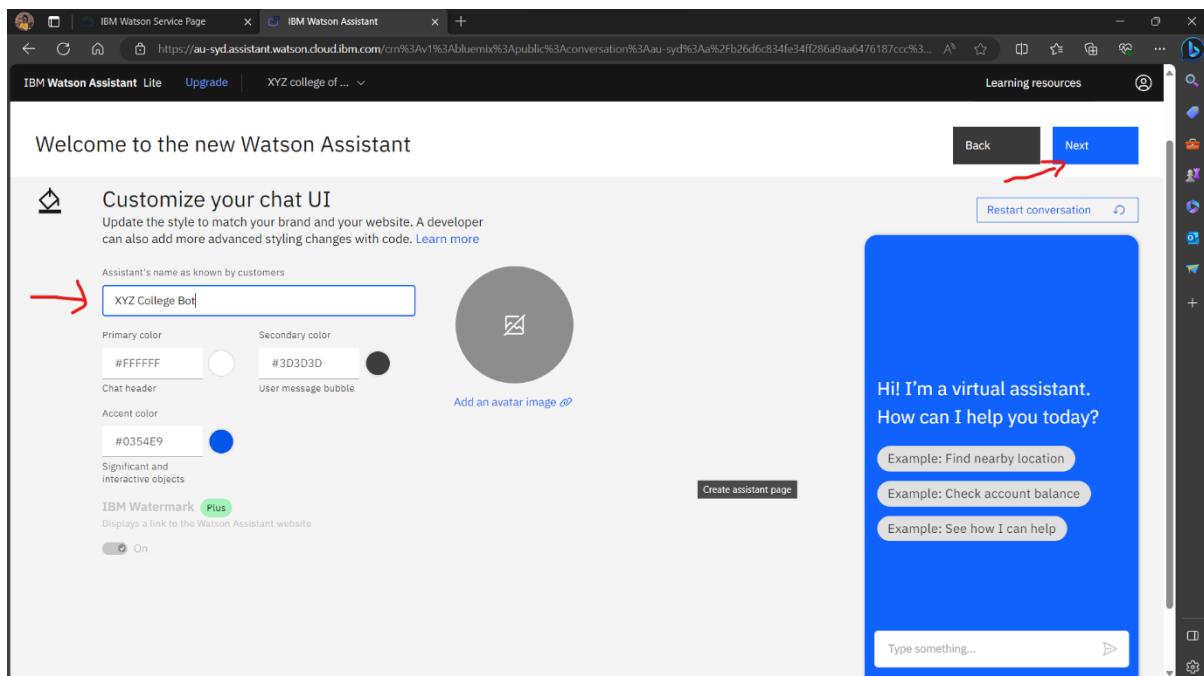
Step 5: Choose a name and description for your assistant for easy identification later.



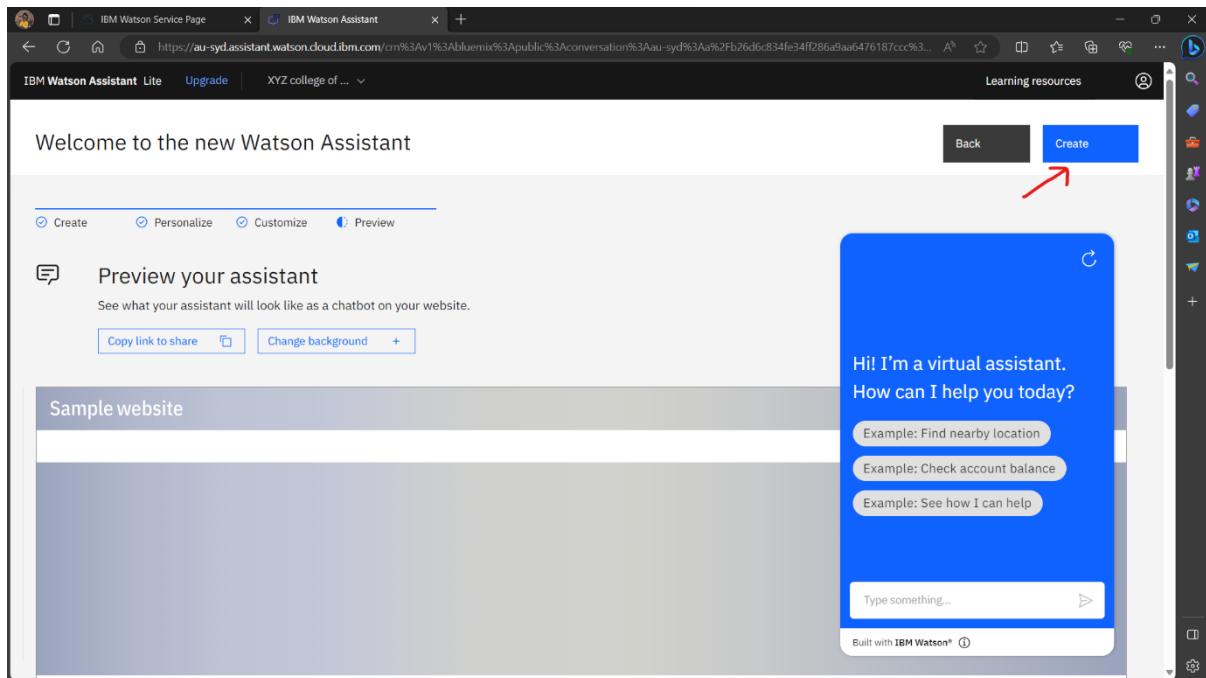
Step 6: Choose "Other" as the plan, fill in the details accordingly, and click Next:



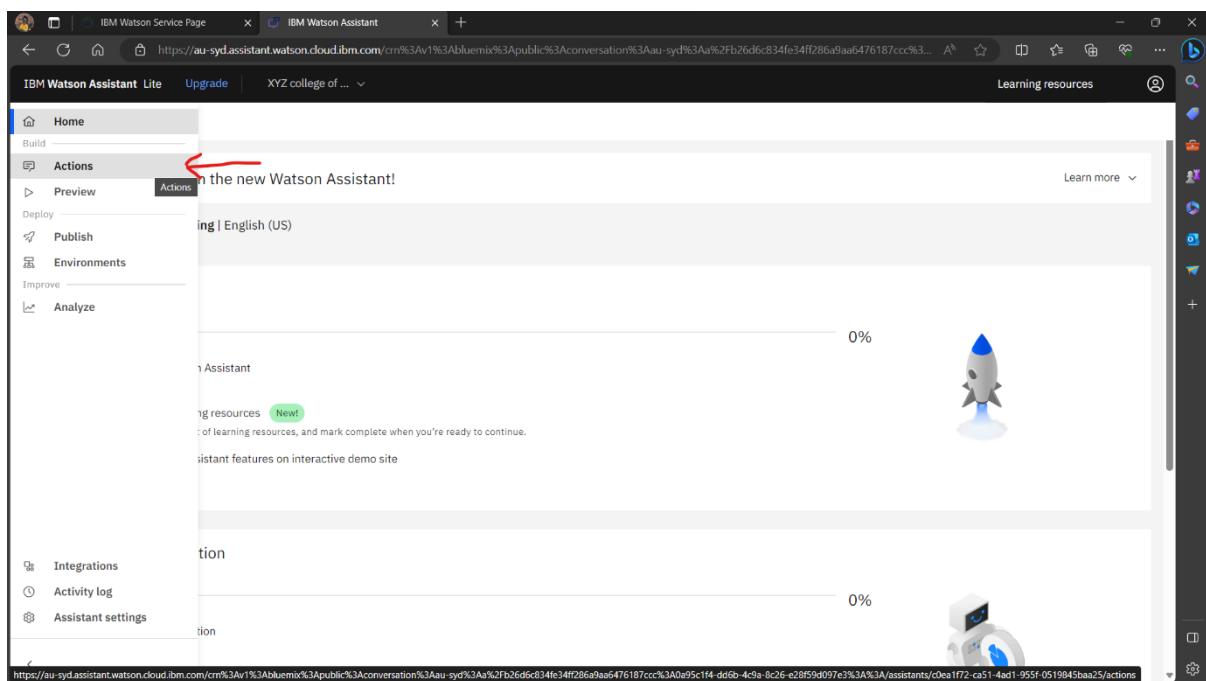
Step 7: Enter the name of your chatbot. Choose the primary and secondary response colours and add an image if desired.



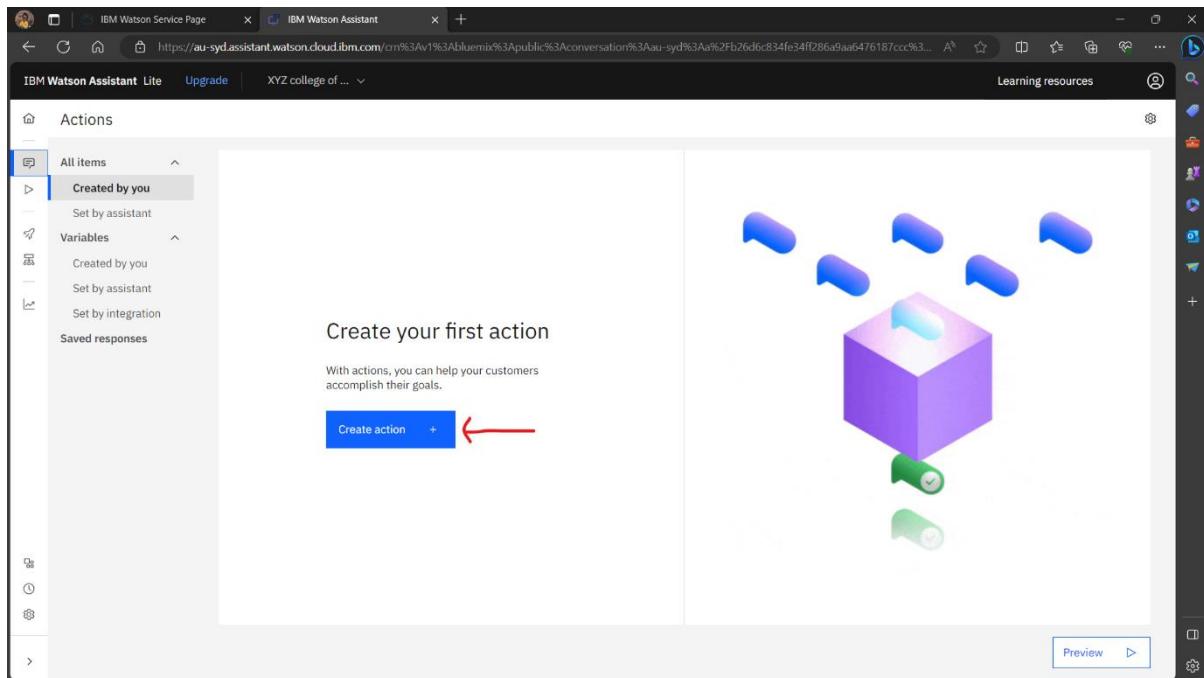
Step 8: Click on Create



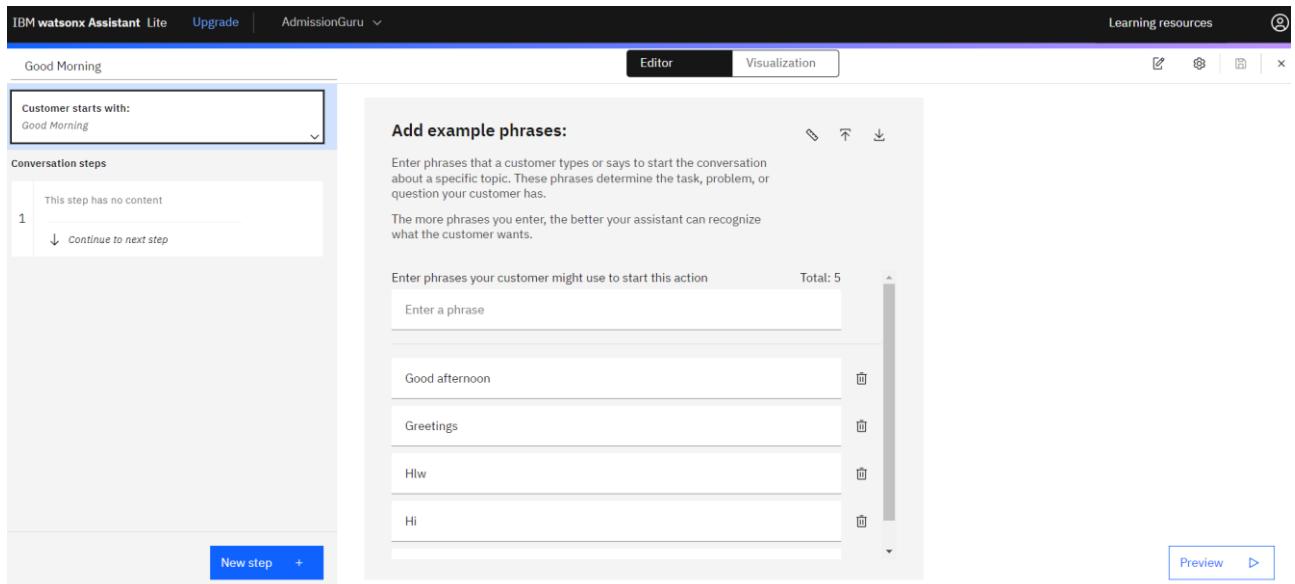
Step 9: On the left side of the page, you will find the action button. Click on it.



Step 10: Now, click on "Create Action".



Step 11: When setting up the initial action, consider the first greetings a user might use to interact with the chatbot, such as "Hi," "Hello," "Good morning," "Greetings," etc.



Step 11: Click on the "Conversation step bar" now.

The screenshot shows the IBM Watson Assistant interface in 'Editor' mode. At the top, there are tabs for 'Editor' and 'Visualization'. Below the tabs, the 'Customer starts with:' field contains the phrase 'Good Morning'. The 'Conversation steps' section is visible, showing a single step labeled '1' with the note 'This step has no content'. A red box highlights this step, and a large red arrow points upwards from it towards the 'Add example phrases' panel. The 'Add example phrases' panel contains sections for entering customer start phrases and action phrases. It also includes a 'Preview' button at the bottom right.

Step 12: Click on the "Step Bar for Conversation" and enter the assistant's response to the consumer's input.

The screenshot shows the IBM Watson Assistant interface in 'Editor' mode. The 'Customer starts with:' field contains 'Greetings'. The 'Conversation steps' section shows three steps: Step 1 (highlighted with a blue arrow) with the response 'hlw welcome to Admission Guru', Step 2 with the response 'what is your name', and Step 3 with the response 'hi [Name] welcome to collegewala how may i assist you today'. The 'Assistant says' section for Step 1 is expanded, showing the response 'hlw welcome to Admission Guru' and a 'Define customer response' dropdown. A blue arrow points to this 'Assistant says' section. The 'Preview' button is located at the bottom right.

Step 13: Click on the next step and ask for consumer name & define the customer response as free text

The screenshot shows the AI Assistant Editor interface. In the top navigation bar, 'Editor' is selected. The main area displays 'Step 2' with the condition 'Is taken without conditions'. Below this, the 'Assistant says' section contains the text 'what is your name' with a blue arrow pointing to it. The 'User enters free text' button is also highlighted with a blue arrow. The 'And then' section shows a continuation step. A 'Preview' button is visible in the bottom right corner.

Step 14: Click on the next step and set the variable for name as following

The screenshot shows the AI Assistant Editor interface. In the top navigation bar, 'Editor' is selected. The main area displays 'Step 3' with the condition 'Is taken without conditions'. Below this, the 'Assistant says' section contains the text 'For example: What size do you want to order?' with a red box around it, and a blue arrow pointing to it. The 'User enters free text' button is also highlighted with a blue arrow. The 'And then' section shows a continuation step. A 'Preview' button is visible in the bottom right corner.

The screenshot shows the IBM Watson Assistant Editor interface. On the left, the 'Conversation steps' panel displays three steps: 1. 'hiw welcome to Admission Guru', 2. 'what is your name' (with a 'Tr Free text' button), and 3. 'This step has no content' (with a 'Tr Free text' button). Step 3 also has a 'Continue to next step' button. On the right, the 'Step 3' configuration panel is open under the 'Editor' tab. It shows 'Is taken' set to 'without conditions'. In the 'Variable values' section, there is a 'Set new value' input field with a search bar containing 'name'. Below it are sections for 'Session variables', 'Integration variables', and 'Expression'. The 'Expression' section contains '+ New session variable' with a red box and a blue arrow pointing to it. At the bottom, there is a note: 'Please provide text for your assistant to prompt the customer to enter a response' followed by a text input field with 'User enters free text' and a 'Preview' button.

Step 14: Enter variable name as name and type as free text and apply

This screenshot shows the same IBM Watson Assistant Editor interface as the previous one, but with a modal dialog box overlaid on the 'Type' section of the 'Step 3' configuration. The dialog box has 'Name' set to 'name' and 'Variable ID' set to 'name'. In the 'Type' section, a dropdown menu is open, showing options: 'Currency', '% Percentage', 'Tr Free text' (which is highlighted with a blue arrow), and 'Confirmation'. Other options like 'Text' and 'Number' are visible but not selected. The dialog box also includes a 'Privacy' section with a checkbox for 'Protect data stored in this variable' and 'Cancel' and 'Apply' buttons at the bottom. A large blue arrow points from the 'Tr Free text' option in the dropdown to the 'Tr Free text' button in the 'Set new value' input field of the configuration panel.

Step 14: in the to option select Action step variable and select is as our ask question what is your name

The screenshot shows the AI Assistant configuration interface. On the left, there's a preview of a conversation step where the user asks "what is your name". On the right, the 'Variable values' section is open, specifically the 'To' dropdown for an 'Action step variables' entry. A red box highlights the 'Action step variables' option in the dropdown menu.

Step 14: now go to FX link and add assistant variable as Name and write following intent

The screenshot shows the AI Assistant configuration interface. The 'Assistant says' section contains the text "welcome to admission guru how may i assist u". A blue arrow points from the text "Name" in this section to the 'Assistant variables' dropdown in the 'Variable values' panel. A red box highlights the 'Assistant variables' option in the dropdown menu.

Step 13: Remember to click "save" and then close by clicking the "cross" icon.

The screenshot shows the IBM Watson Assistant Editor interface. On the left, there's a sidebar titled 'Greetings' with a 'Customer starts with:' section containing 'Greetings'. Below it is a 'Conversation steps' section with three steps:

- Step 1: 'hi welcome to Admission Guru' with a 'Continue to next step' button.
- Step 2: 'what is your name' with a 'T Free text' button and a 'Continue to next step' button.
- Step 3: A message box containing 'Name welcome to admission guru how may i assist u' with a 'T Free text' button and a 'Continue to next step' button.

In the center, the 'Editor' tab is selected. Under 'Variable values', there's a 'Set variable values' section with a 'Set' dropdown set to 'Name' and a 'To' dropdown set to '2. what is your name'. A red arrow labeled 'For Saving' points towards the top right corner of the editor window. In the bottom right corner of the editor, there's a 'Preview' button.

Step 14: Create a new action for questions that consumers may ask.

The screenshot shows the 'Actions' page in the IBM Watson Assistant interface. The left sidebar includes sections for 'All items', 'Created by you' (which is selected), 'Variables', 'Saved responses', and other filters like 'Set by assistant' and 'Set by integration'. The main area displays a table of actions:

Name	Last edited	Examples count	Steps count	Status
Good Morning	4 hours ago	5	1	Green checkmark

At the bottom of the table, there are buttons for 'Items per page' (set to 50), 'Showing 1-1 of 1 items', and '1 of 1 pages'. In the top right corner of the main area, there's a 'New action' button, which is highlighted with a red arrow. Other buttons in the top right include 'Learning resources', 'System is training...', and a gear icon.

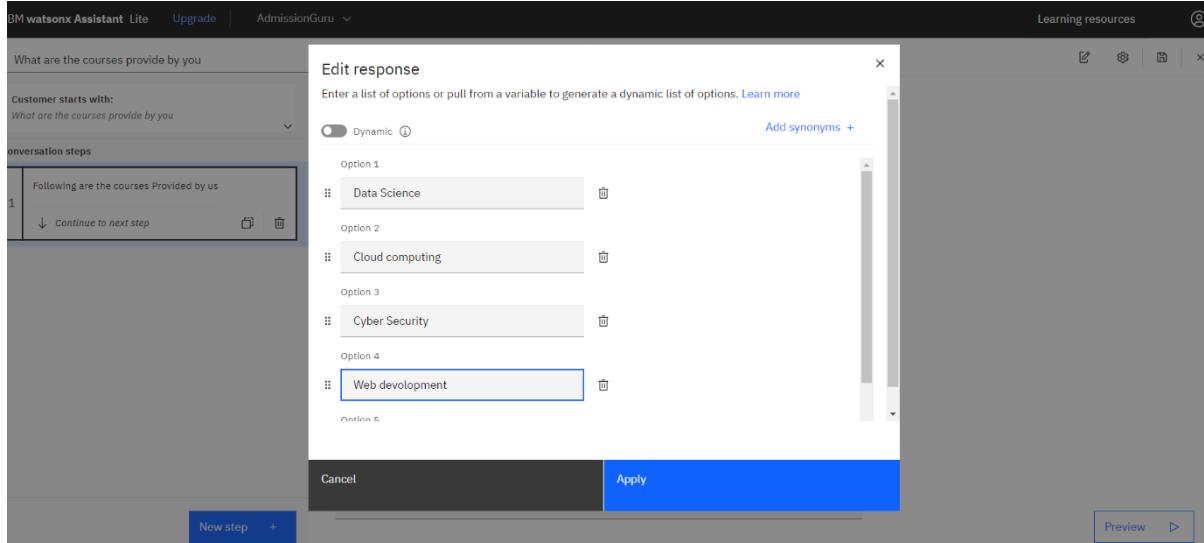
Step 15: Create a new action and add the consumer question, such as "Which courses are provided by you?" or "Give me a list of courses."

The screenshot shows the IBM Watson Assistant Lite interface. In the top left, it says "IBM Watson Assistant Lite" and "Upgrade". In the top right, there are buttons for "Learning resources" and a user icon. The main area has tabs "Editor" and "Visualization". On the left, under "Customer starts with:", there is a dropdown menu set to "What are the courses provide by you". Below it, "Conversation steps" show a single step labeled "1" with the note "This step has no content" and a "Continue to next step" button. On the right, under "Add example phrases:", there is a text input field containing "courses" with a total of 5 entries. Other examples listed include "which courses are there", "course provided", "give me the list of courses", and "which course are there in the college". At the bottom right are "Preview" and "Next" buttons.

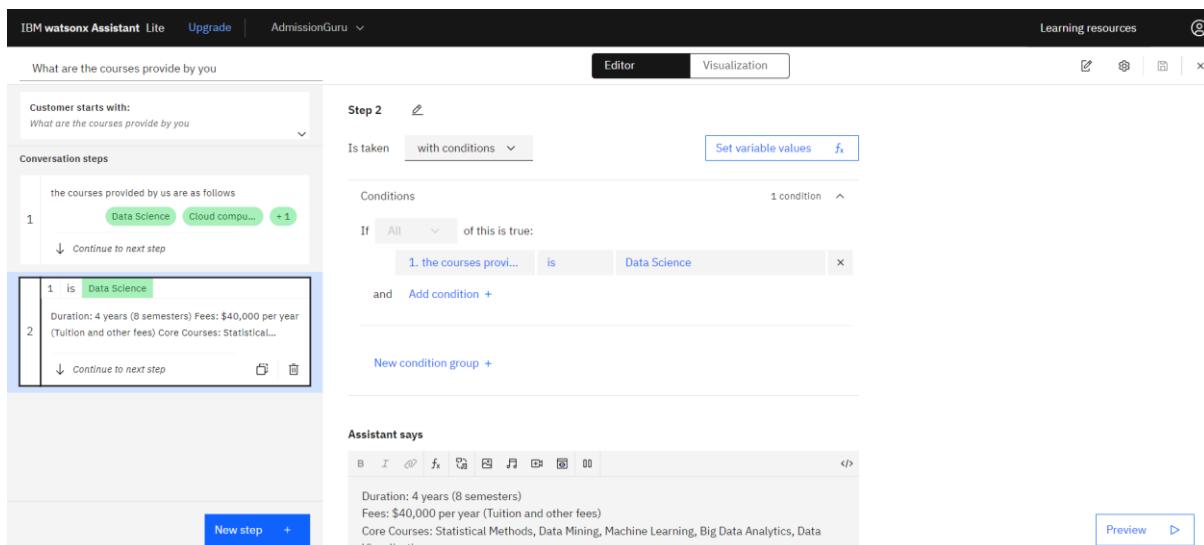
Step 16: Now write the response by providing some course options, defining customer response, and creating response choices and after that click on the option

The screenshot shows the IBM Watson Assistant Lite interface. The top navigation and tabs are the same as the previous screenshot. On the left, the "Customer starts with:" dropdown is still set to "What are the courses provide by you". Under "Conversation steps", the first step is now defined with the text "Following are the courses Provided by us" and a "Continue to next step" button. A large blue arrow points to this step. On the right, under "Step 1", the condition "Is taken" is set to "without conditions". The "Assistant says" section contains the text "Following are the courses Provided by us". Below it, "Define customer response" is shown with a dropdown menu. Under "And then", there is another "Continue to next step" button. At the bottom right are "Preview" and "Next" buttons.

Step 17: Now write all the courses in the option list and click apply



Step 18: To answer the consumer's question, create a new step and set the conditions based on the available options. Select the data science course provided by us in the conditions and repeat these steps for all the courses.



Step 19: Save the action, close the tab, and confidently look at the following preview. It's working fine up to this point.

The screenshot shows the IBM Watson Assistant Lite interface. On the left, there's a sidebar with 'Actions' and a list of items under 'Created by you': 'All items', 'Good Morning', and 'What are the courses provide by you'. The main area displays a table of actions with columns for Name, Last edited, and Examples count. A preview window on the right shows a conversation where the bot responds to 'Hello, and welcome to AdmissionGuru. How may I assist you today?' and lists 'Data Science', 'Cloud Computing', 'Cyber security', and 'Web development' as examples.

Step 20: Create a new action for enrollment in the course and include relevant questions in the new action. And save

The screenshot shows the IBM Watson Assistant Lite Editor. On the left, there's a list of conversation steps. A modal window titled 'New action' is open, asking 'What does your customer say to start this interaction?' with a text input field containing 'I want to enrol in this course'. At the bottom of the modal are 'Cancel' and 'Save' buttons. The 'Save' button is highlighted in blue.

Step 21: Provide the response to the question. This is a requirement for the course. Ask if the respondent matches the qualification. Provide two options: "yes" or "no."

The screenshot shows the IBM Watson Assistant Lite interface in 'Editor' mode. At the top, it says 'I want to enrol in this course'. Below this, under 'Customer starts with:', there is a dropdown menu set to 'I want to enrol in this course'. The 'Conversation steps' section contains one step labeled '1'. The message in step 1 is: 'Certainly! Below is the eligibility criteria for the chosen course. High school diploma or equivalent - Minimum...'. Below this message is a 'Continue to next step' button. To the right of the conversation steps, there is a 'Step 1' configuration panel with the condition 'Is taken' set to 'without conditions'. Under 'Assistant says', the response is: 'Certainly! Below is the eligibility criteria for the chosen course. High school diploma or equivalent

- Minimum GPA of 3.0 (on a 4.0 scale)
- SAT or ACT scores (optional for some applicants)
- Personal statement
- Letters of recommendation

'. There are 'Set variable values' and 'Switch to JSON editor' buttons. Below the main area, there is a 'Define customer response' section and a 'Preview' button.

Step 22: Once the user responds with "Yes," ask for their contact number while providing the necessary conditions and options and assistance will say give me your contact number with the defined response

The screenshot shows the IBM Watson Assistant Lite interface in 'Editor' mode. At the top, it says 'I want to enrol in this course'. Below this, under 'Customer starts with:', there is a dropdown menu set to 'I want to enrol in this course'. The 'Conversation steps' section contains two steps: '1' and '2'. Step 1 has a message: 'Certainly! Below is the eligibility criteria for the chosen course. High school diploma or equivalent - Minimum...'. It includes a 'Confirmation' button and a 'Continue to next step' button. Step 2 has a message: '1 is Yes plz tell me your contact number' with a 'Number' button. Below this message is a 'Continue to next step' button. To the right of the conversation steps, there is a 'Step 2' configuration panel with the condition 'Is taken' set to 'with conditions'. Under 'Conditions', there is a section titled 'If All of this is true:' with a single condition: '1. Certainly! Below i... is Yes'. Below this, there is a 'New condition group +' button. Under 'Assistant says', the response is: 'plz tell me your contact number'. There are 'Set variable values' and 'Switch to JSON editor' buttons. Below the main area, there is a 'Preview' button.

Step 23: After getting the contact number write the response as our admission executive will call you within 24 hours and save it

The screenshot shows the IBM Watson Assistant interface. On the left, a sidebar titled 'Customer starts with:' contains the text 'I want to enrol in this course'. Below this, 'Conversation steps' are listed:

1. Confirmation: 'Certainly! Below is the eligibility criteria for the chosen course. High school diploma or equivalent ...' with a 'Continue to next step' button.
2. Response: 'plz tell me your contact number' with a 'Number' button and a 'Continue to next step' button.
3. Confirmation: 'Our admissions executive will promptly call you within 24 hours.' with a 'New step +' button.

In the center, 'Step 3' is selected under 'Is taken' with 'with conditions'. A condition is defined: 'If All of this is true: 2. plz tell me your c... is defined'. The 'Assistant says' section contains the response: 'Our admissions executive will promptly call you within 24 hours.'

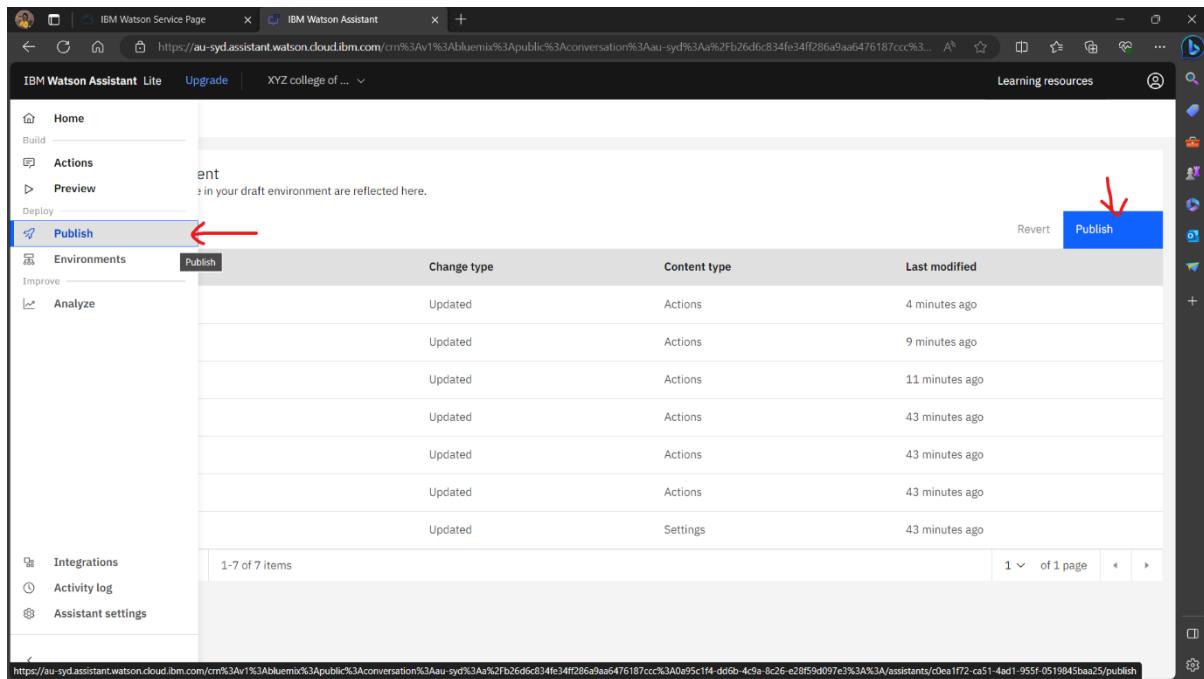
Step 24: Now we need to preview it once, and our chatbot will be ready for deployment.

- When we are done with adding all the actions and various steps then we can see a final preview of our chatbot.
- In the final preview we can check whether our chatbot is working properly/ giving correct responses to the questions or not.

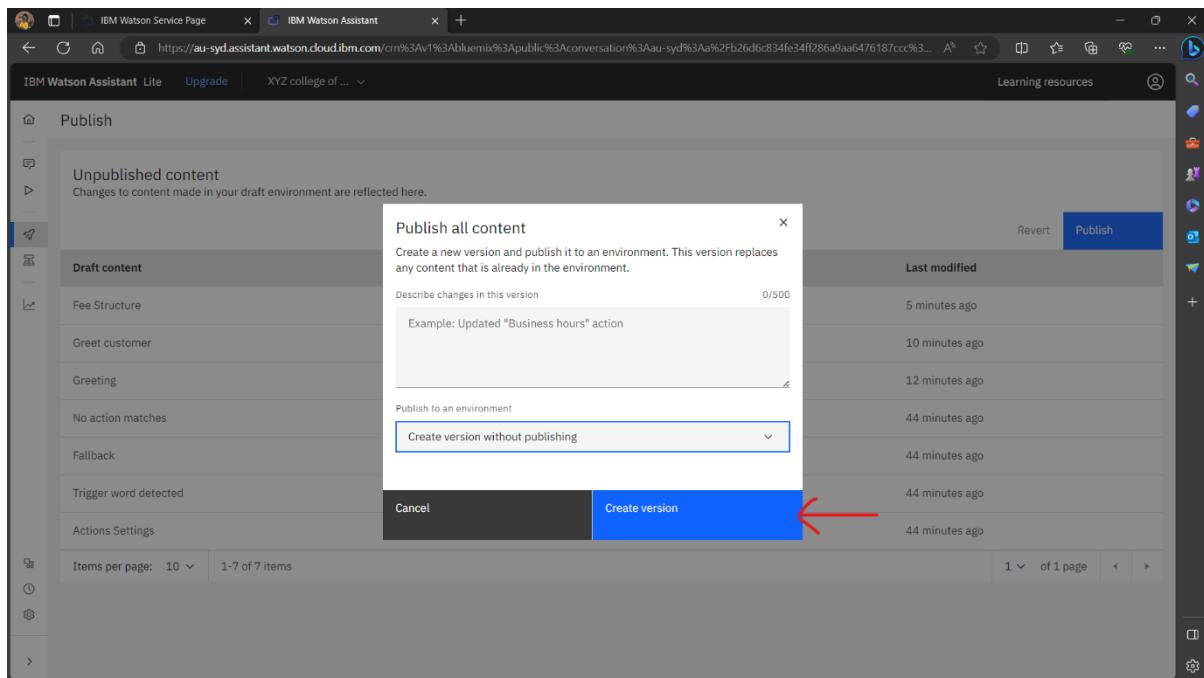
The screenshot shows the 'IBM Watson Assistant Lite' interface. The left sidebar has 'Actions' selected, with 'Preview' highlighted. The main area displays a preview of the chatbot's interface. A red arrow points to the 'Preview' tab in the sidebar. The preview window shows a blue greeting card with the text: 'Hi! I'm a virtual assistant. How can I help you today?'. Below the card is a message input field with the placeholder 'Type something...' and a red arrow pointing to it. The bottom right corner of the preview window shows the text 'Built with IBM Watson®'.

Step 25: Publish Chatbot

1. After checking the performance and the ability to give responses to the questions, when we get satisfied then finally, we will publish our chatbot.

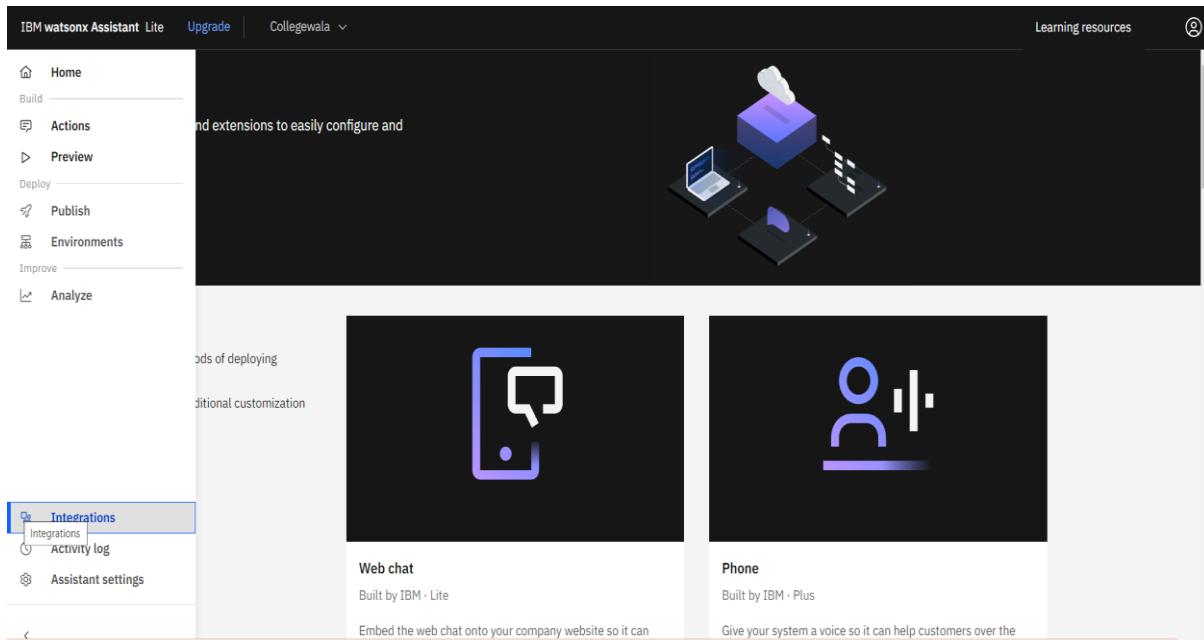


Step 26: Click confidently on "Create Version."

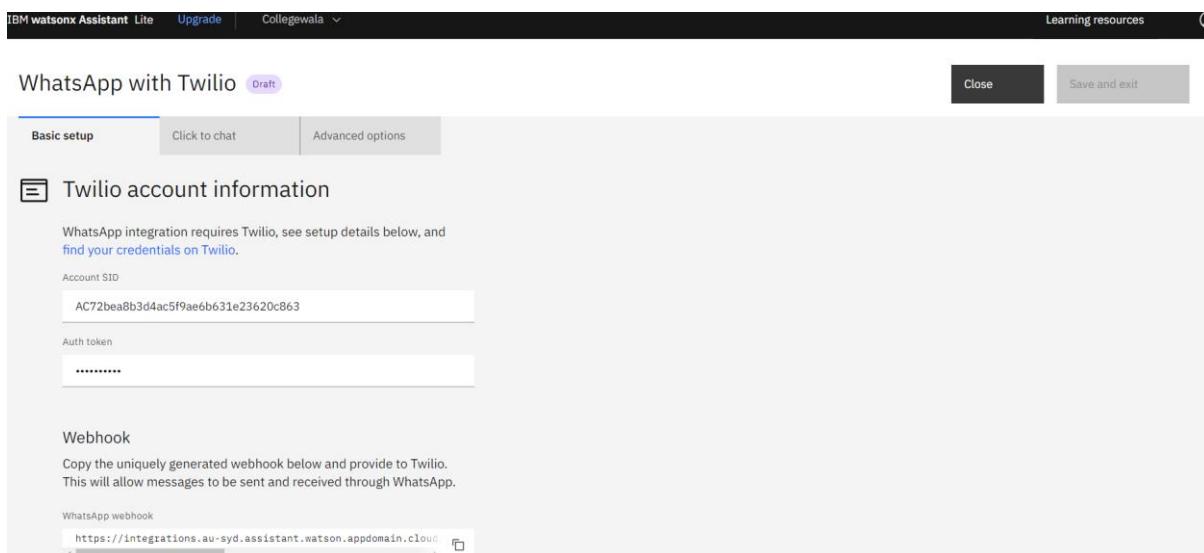


Step 27: Channel Integration

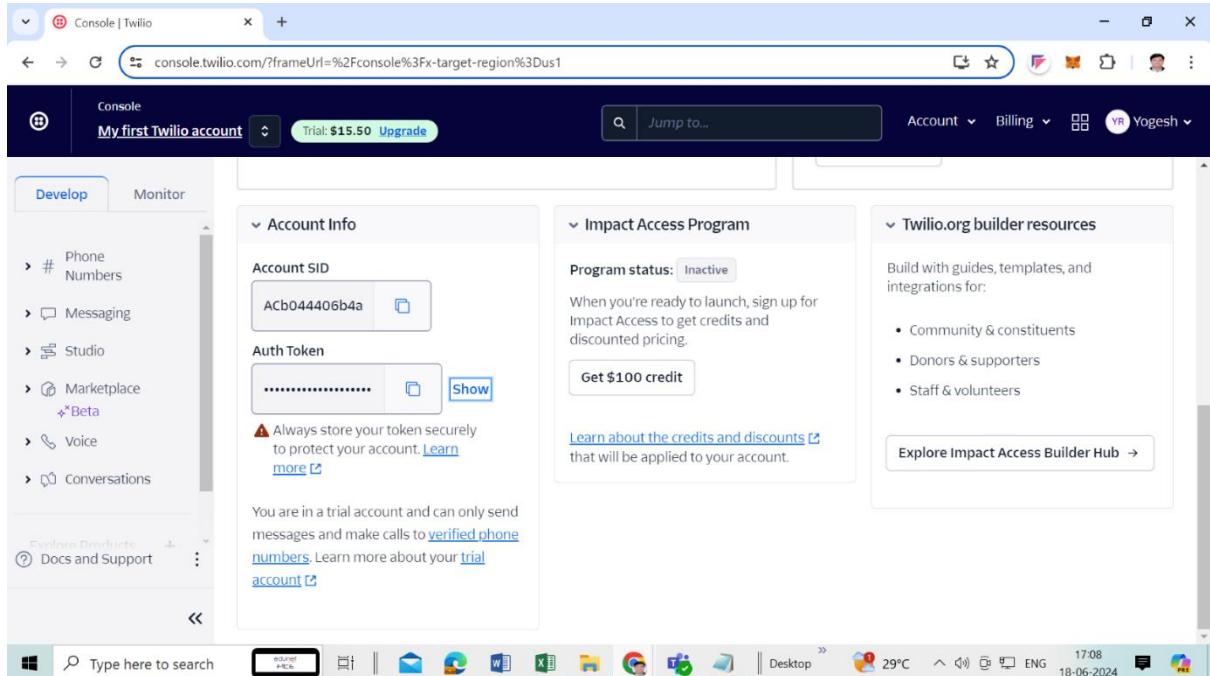
To make your chatbot more accessible, it's important to integrate it with various channels like websites, mobile apps, and messaging platforms. IBM Watson Assistant enables multiple integrations, and now we need to integrate our chatbot with Twilio for WhatsApp.



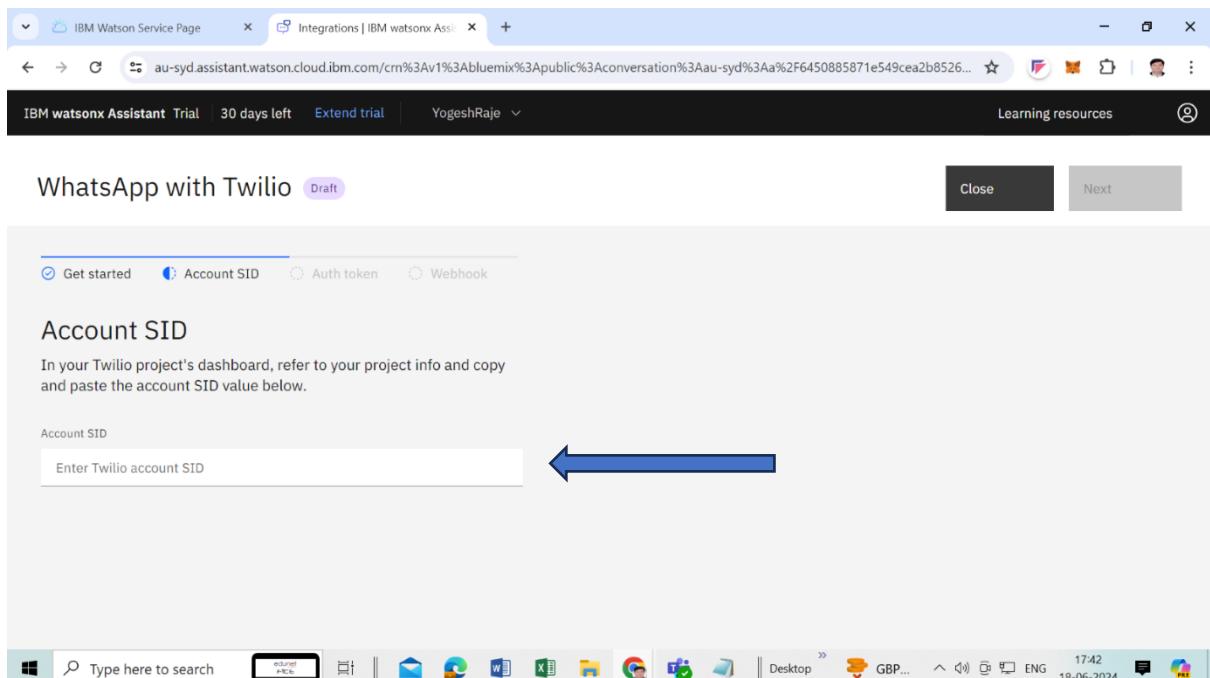
Step 28: go to the integration and select Twilio

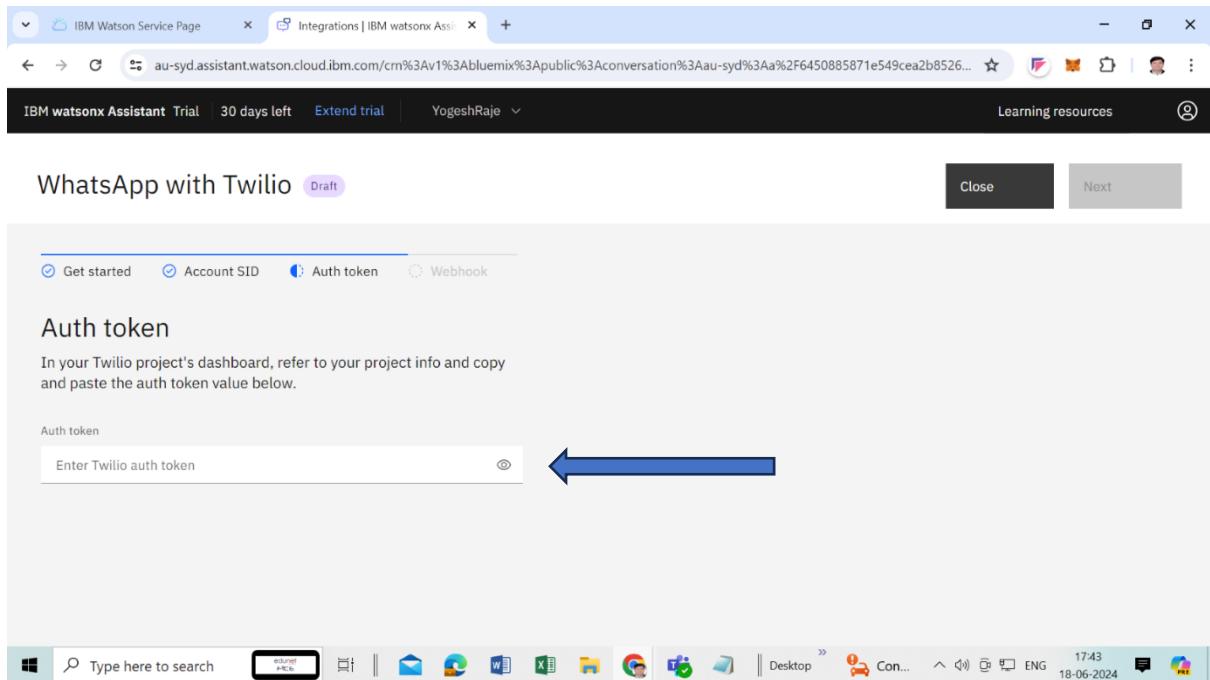


Step 28: Open a new tab and create or set up your Twilio account.

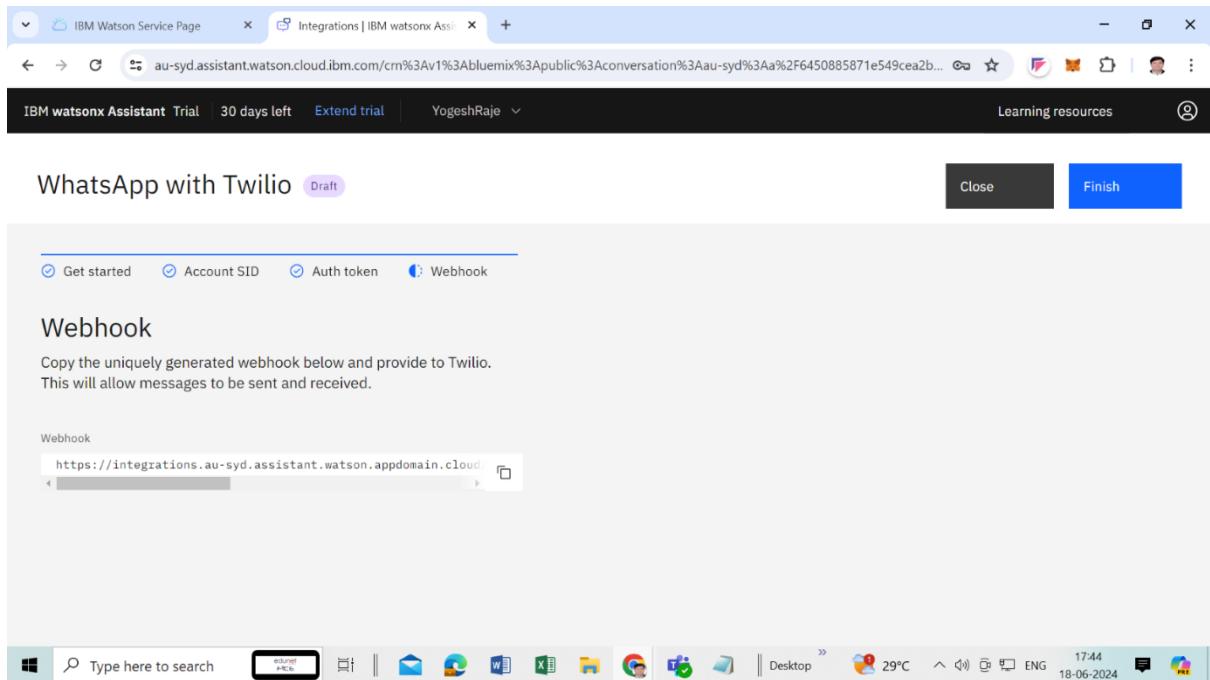


Step 29: now copy the SID & Auth token from Twilio and paste it on the IBM cloud here

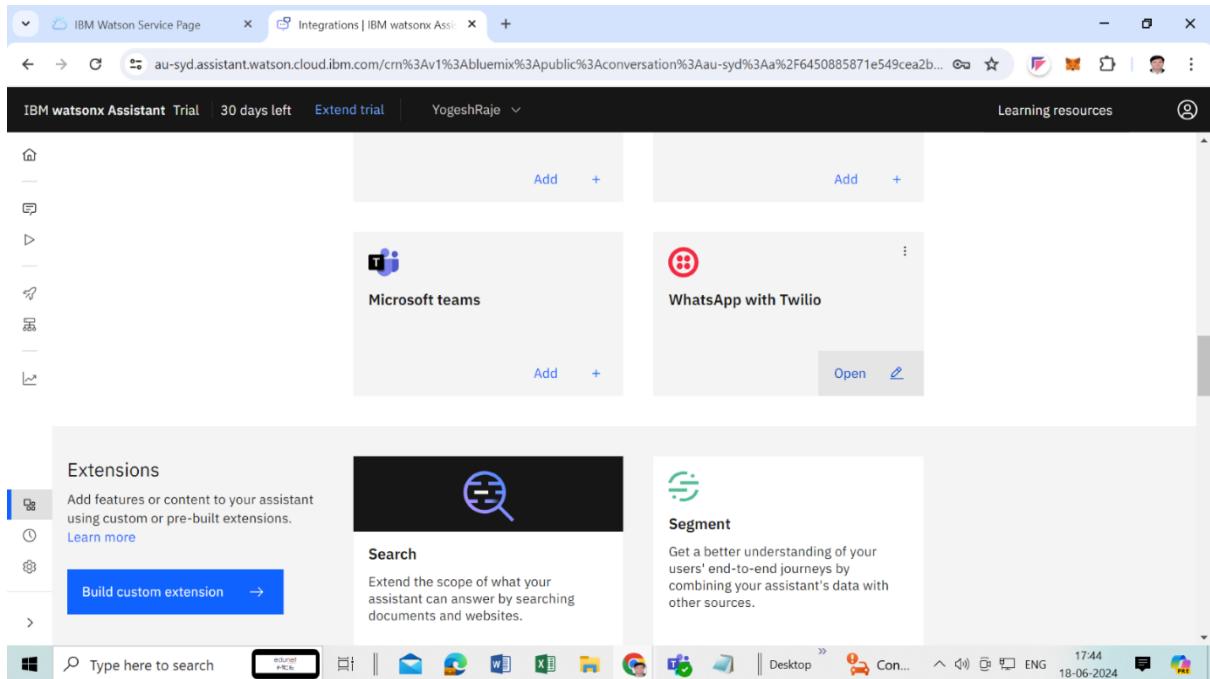




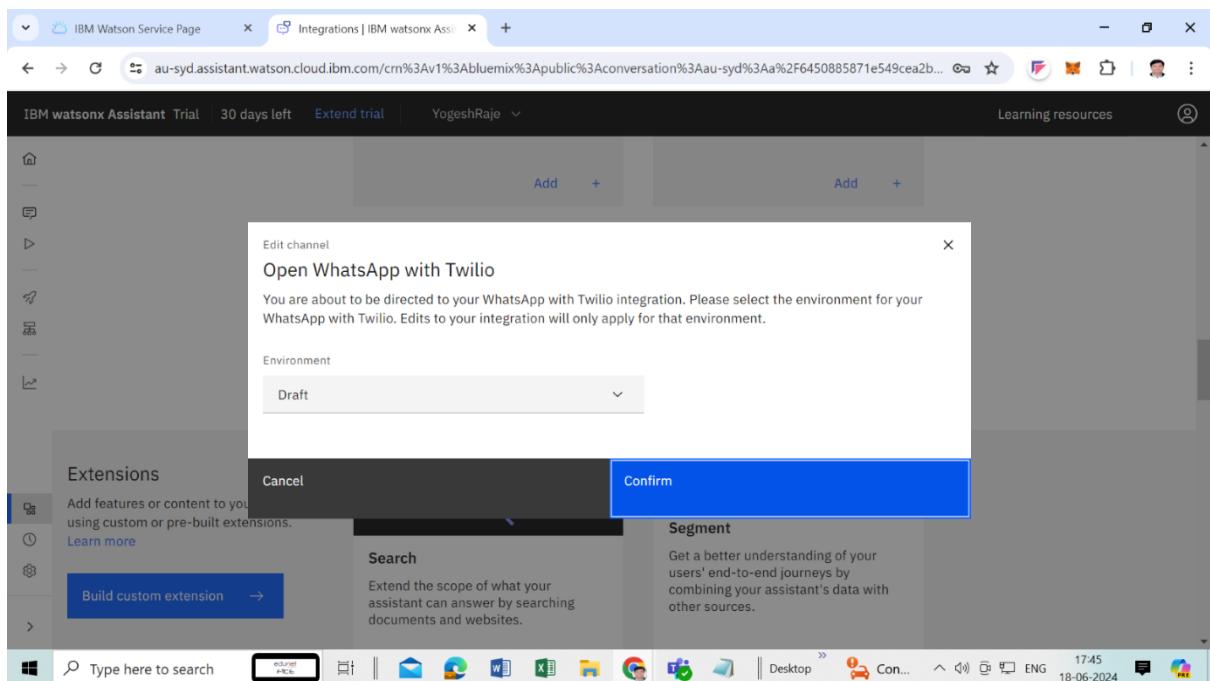
Step 29: Click on the Finish



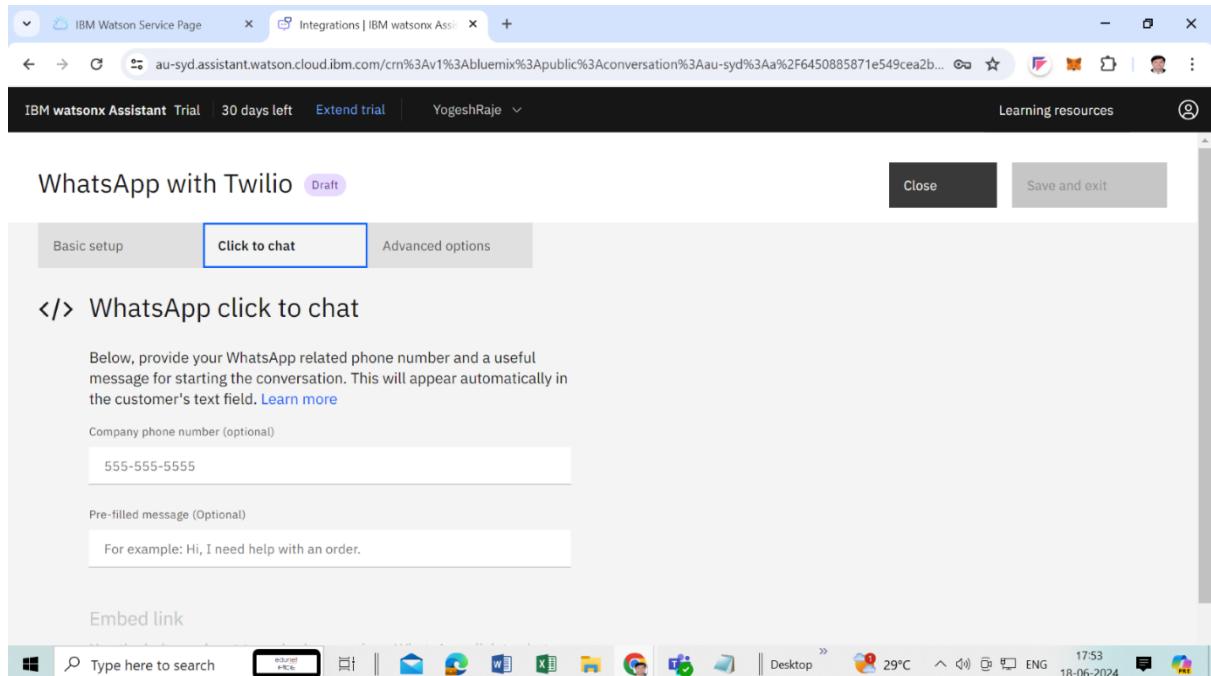
Step 30: again open the Whatsapp with twilio



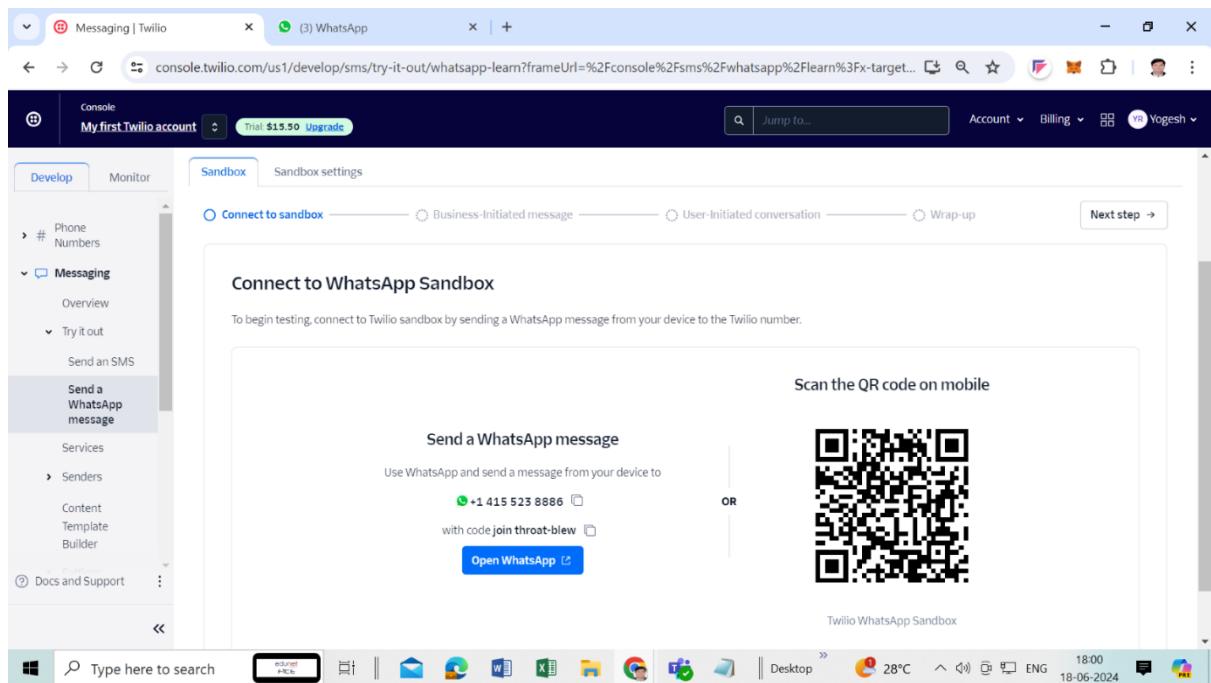
Step 30: again open WhatsApp with Twilio



Step 31: fill in the details



Step 31: Go to Twilio, select the "Develop" option, choose "Messaging," and test by sending a WhatsApp message.



Step 31: Scan the QR code & send the Join < Sandbox name> then u will get your chatbot working on the WhatsApp

