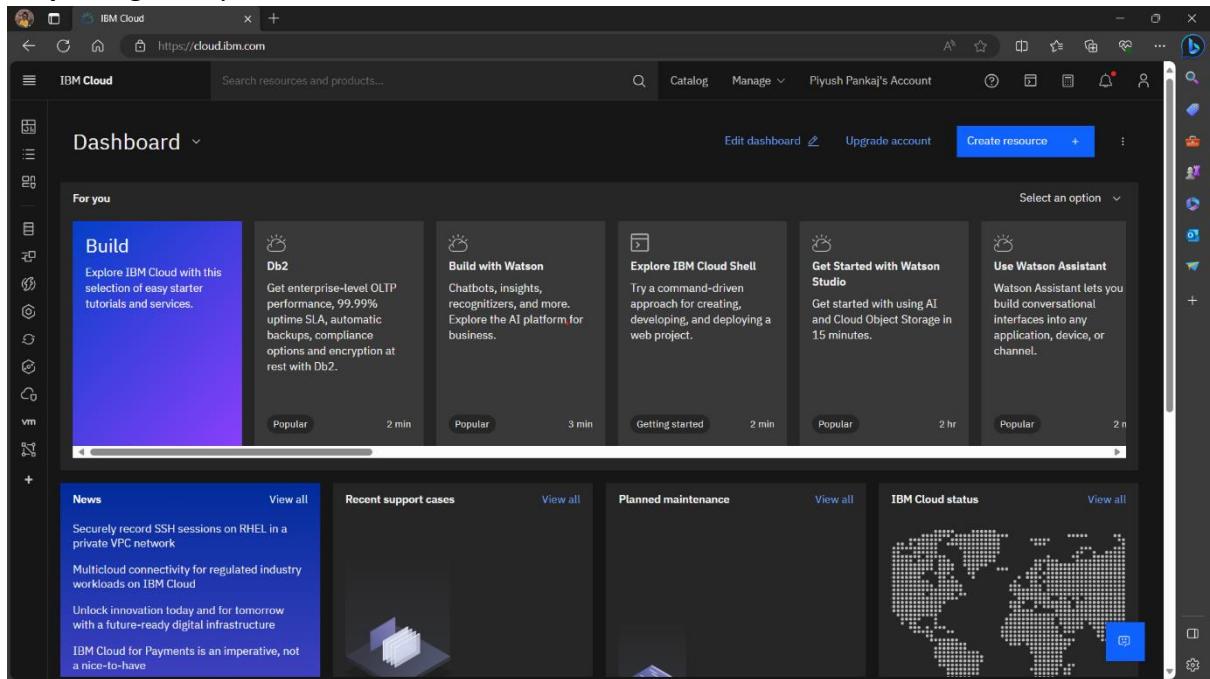
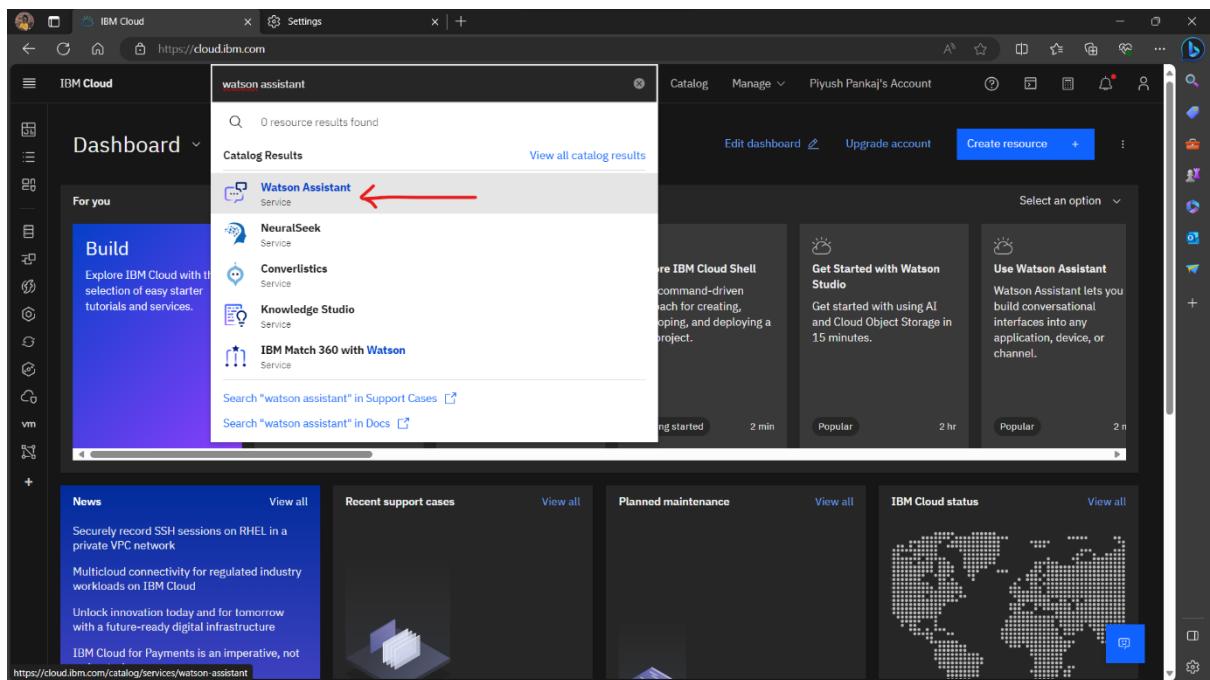


## Demo- Create Chatbot using IBM Watson Assistant

Step1: Log In to your IBM Cloud account.



Step2: Search for IBM Watson Assistant service.



### Step3: Select Lite Plan, Check the checkbox and Click on Create.

The screenshot shows the Watson Assistant creation interface in the IBM Cloud Catalog. On the left, there's a sidebar with service type (Service), provider (IBM), last updated (05/30/2023), and category (AI / Machine Learning). The main area has tabs for 'Create' and 'About'. Under 'Create', it asks for a location (Sydney) and a pricing plan (Lite). The 'Lite' plan is selected, showing features like up to 1,000 unique monthly active users (MAUs) and up to 10,000 messages per month. To the right, a summary panel shows the service name (Watson Assistant-xq) and resource group (Default). A large red arrow points from the 'Create' button at the bottom right towards the 'Create' button in the main content area.

### Step4: Click on "Launch Watson Assistant."

The screenshot shows the Watson Assistant resource details page. It displays the service name (Watson Assistant-xq), status (Active), and a 'Manage' section with options for Service credentials, Plan, and Connections. A red arrow points to the 'Launch Watson Assistant' button, which is highlighted in blue. To the right, a 'Plan' section shows the 'Lite' plan and an 'Upgrade' button. Below the main buttons, there's a 'Credentials' section with an API key and URL.

## Step5: Enter details about name and description for your assistant for easy identification later.

Welcome to watsonx Assistant

Create your first assistant

Assistant name: AdmissionGuru  
Your assistant name will be kept internally and not visible to your customers

Description (optional): AdmissionGuru is AI-powered chatbot designed to assist prospective students in navigating the complex college admission process

Assistant language: English (US)

This is the language your assistant will speak.

Next

## Step6: Choose "Other" as the plan, fill in the details accordingly, and click Next

Welcome to the new Watson Assistant

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?  
→ Other

No problem! Let's get you started with web chat.

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?  
→ Developer

Which statement describes your needs best?  
→ I want to provide confident answers to common questions

This is what your customers will experience

Watson Assistant

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.

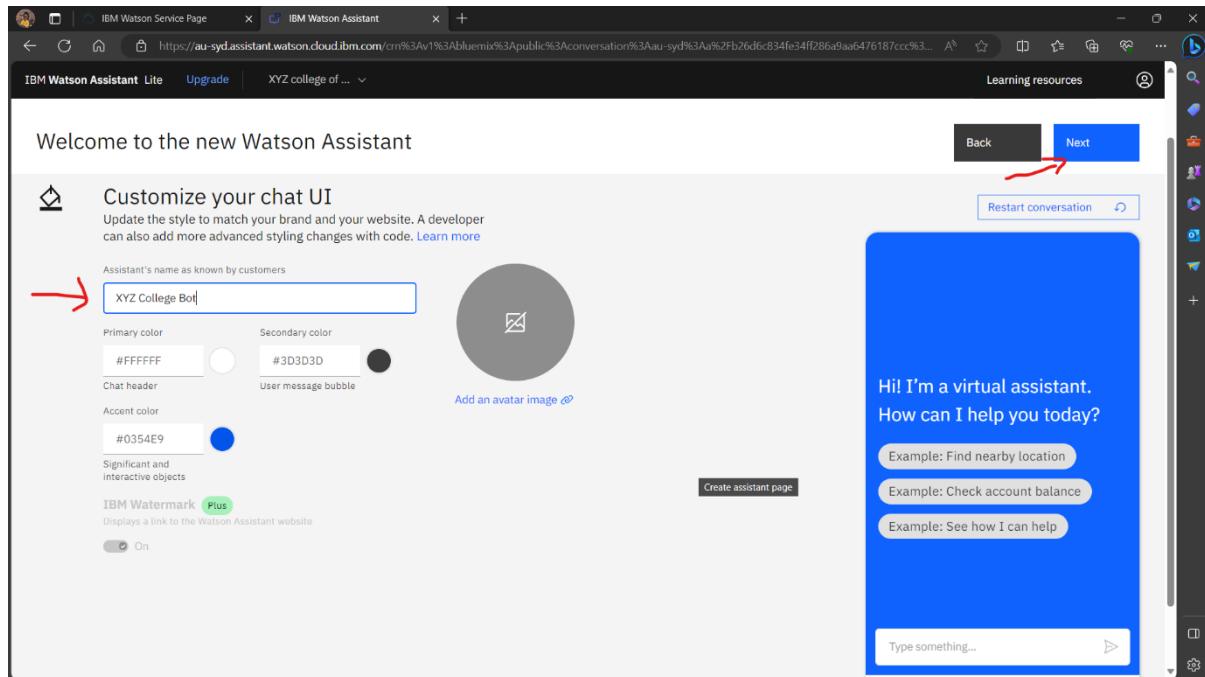
What size and color do you need?  
I'm looking for a size nine in white

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 prefer?  
I'll pick them up! Ship them to me, please!

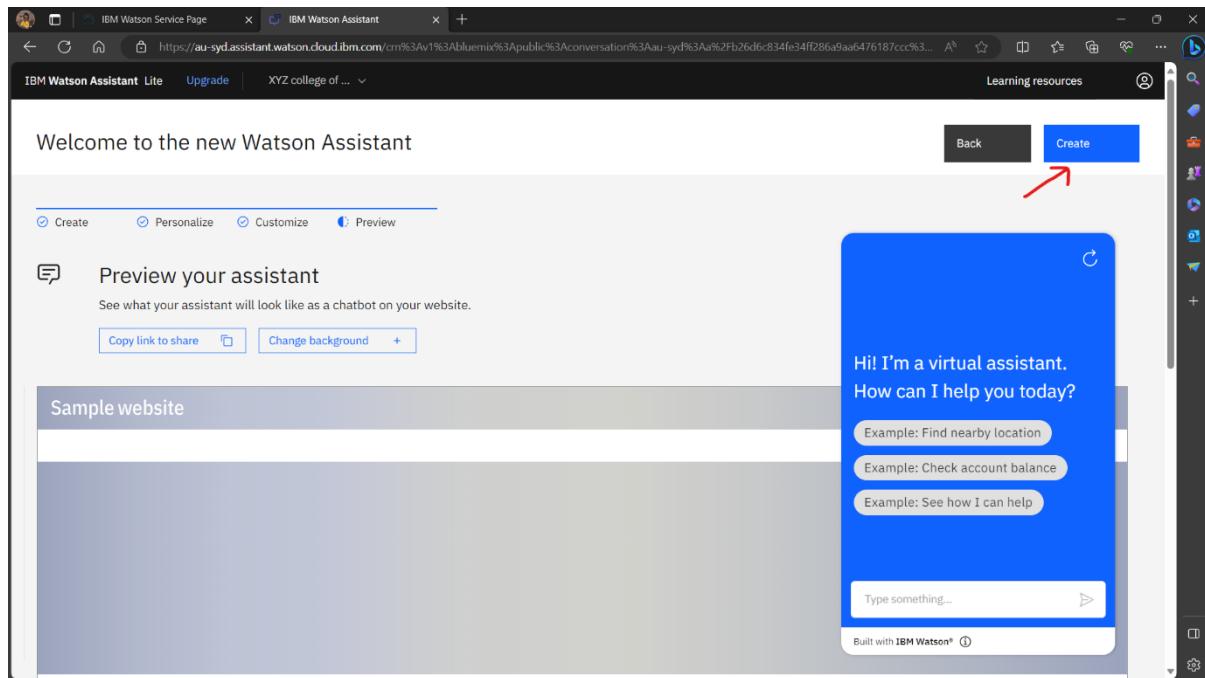
?

Back Next

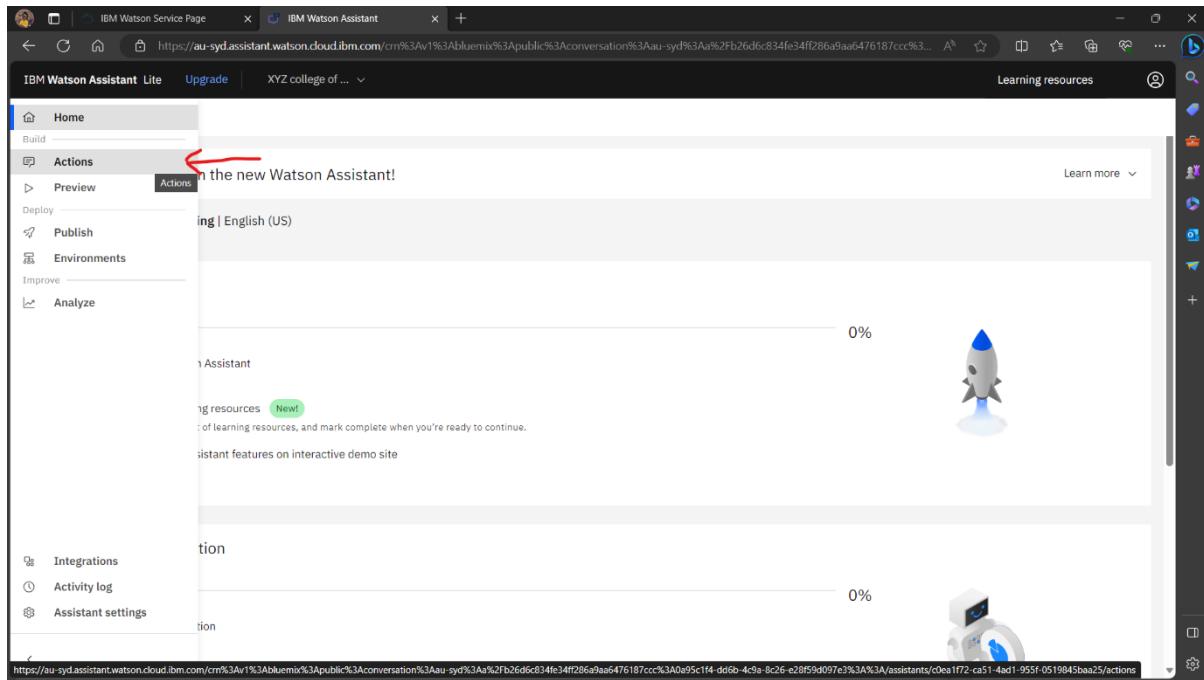
**Step7: Enter the name of your chatbot. Choose the primary and secondary response colours and add an image if desired.**



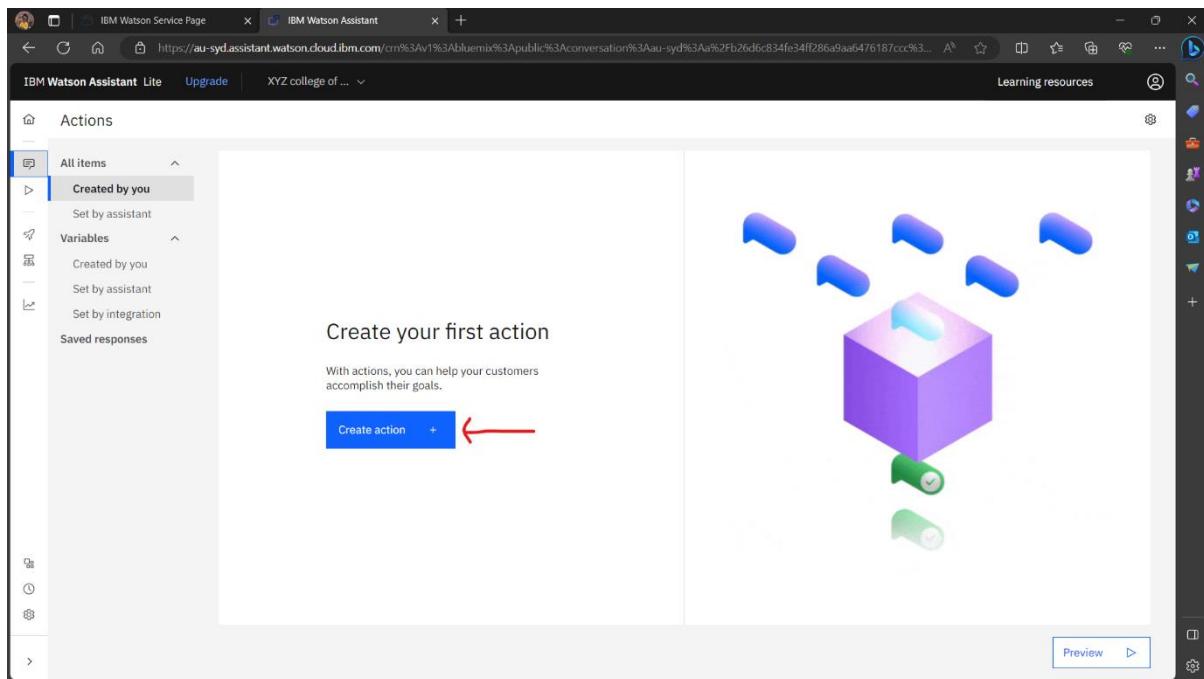
**Step8: Click on Create**



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



**Step10: Now, click on "Create Action".**



**Step11: 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.**

The screenshot shows the IBM Watson Assistant Lite interface. At the top, there are navigation links for 'IBM Watsonx Assistant Lite', 'Upgrade', 'AdmissionGuru', 'Learning resources', and a help icon. Below the header, the text 'Good Morning' is entered into the 'Customer starts with:' field. To the right, the 'Editor' tab is selected, showing the 'Add example phrases:' section. This section includes a note about entering phrases that start a conversation, a counter for total phrases (5), and a list of entered phrases: 'Good afternoon', 'Greetings', 'Hlw', and 'Hi'. A red arrow points from the text 'Step11a: Click on the "Conversation step bar" now.' to the 'Conversation steps' section, specifically highlighting the first step which has no content.

**Step11a: Click on the "Conversation step bar" now.**

This screenshot is identical to the one above, showing the IBM Watson Assistant Lite interface. The 'Customer starts with:' field contains 'Good Morning', and the 'Conversation steps' section shows a single step labeled '1' with the note 'This step has no content'. A large red arrow points upwards from the bottom of the page towards this step, indicating where the user should click.

**Step12: 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 Lite Editor interface. At the top, it says "IBM Watson Assistant Lite" and "Collegewala". Below that is a toolbar with "Editor" and "Visualization" tabs, and icons for saving, deleting, and previewing. The main area is titled "Step 1". It shows a "Customer starts with:" section containing "Greetings" and a "Conversation steps" section with three steps:

- Step 1: "hiw welcome to Admission Guru" (with a "Continue to next step" button)
- Step 2: "what is your name" (with a "Tr Free text" button)
- Step 3: "hi **Name** welcome to collegewala how may i assist you today" (with a "Tr Free text" button)

Below the steps, there's an "Assistant says" section with the text "hiw welcome to Admission Guru" and a "Define customer response" dropdown. Under "And then", there's a "Continue to next step" button. A blue arrow points from the text "Assistant says" to the "hiw welcome to Admission Guru" message.

**Step13: Click on the next step and ask for consumer name & define the customer response as free text**

The screenshot shows the IBM Watson Assistant Lite Editor interface, similar to the previous one but for Step 2. The "Customer starts with:" section contains "Greetings". The "Conversation steps" section has three steps:

- Step 1: "hiw welcome to Admission Guru" (with a "Continue to next step" button)
- Step 2: "what is your name" (with a "Tr Free text" button)
- Step 3: "hi **Name** welcome to collegewala how may i assist you today" (with a "Tr Free text" button)

Below the steps, there's an "Assistant says" section with the text "what is your name". Under "And then", there's a "User enters free text" button and a "Continue to next step" button. Two blue arrows point from the text "what is your name" to the "User enters free text" button.

## Step14: Click on the next step and set the variable for name as following

The screenshot shows the IBM Watson Assistant interface in the 'Editor' mode. On the left, the conversation steps are listed: 1. 'hiw welcome to Admission Guru', 2. 'what is your name', and 3. 'This step has no content'. Step 3 is currently selected. In the 'Step 3' configuration panel, the 'Is taken' dropdown is set to 'without conditions'. A blue arrow points to the 'Set variable values' button, which is highlighted in blue. Below it, the 'Assistant says' section contains the text 'For example: What size do you want to order?'. The 'And then' section shows 'Continue to next step'.

This screenshot shows the 'Set variable values' dialog box open over the main interface. The 'Name' field is populated with 'name'. The 'Type' dropdown menu is open, showing options like 'currency', '% Percentage', 'Tr Free text', and 'Confirmation'. A blue arrow points to the 'Tr Free text' option. The 'As' section below the type dropdown lists 'Session variables', 'Integration variables', and 'Expression'. The 'Expression' section is expanded, showing '+ New session variable'. The 'User enters free text' response is visible at the bottom.

## Step15: Enter variable name as name and type as free text and apply

This screenshot shows the variable configuration dialog box applied. The 'Name' field now contains 'name' and the 'Type' field is set to 'Tr Free text'. The 'Apply' button at the bottom right of the dialog is highlighted in blue. The background interface shows the same conversation steps and configuration as the previous screenshots.

**Step16: In the To option select Action step variable and select is as our ask question what is your name**

The screenshot shows the Admision Guru Editor interface. On the left, the 'Conversation steps' panel displays three steps: 1. 'hiw welcome to Admission Guru' (with a 'Continue to next step' button), 2. 'what is your name' (with a 'Tr Free text' button), and 3. 'This step has no content' (with a 'Tr Free text' button). On the right, the 'Variable values' section is open under the 'Set' tab. The 'To' dropdown is set to 'Tr Name'. A red box highlights the 'Action step variables' option in the dropdown menu, which is described as 'For example: What size do you want to order?'. Below this, there is a text input field with placeholder text 'Please provide text for your assistant to prompt the customer to enter a response' and a button labeled 'User enters free text'. At the bottom right of the editor is a 'Preview' button.

**Step17: Now go to fx icon and add assistant variable as Name and write following intent**

The screenshot shows the Admision Guru Editor interface. The 'Conversation steps' panel is identical to the previous screenshot. The 'Variable values' section now shows a 'Set' dropdown with 'Tr Name' selected and a 'To' dropdown with '2. what is your name' selected. A blue arrow points from the 'To' dropdown to the 'Assistant says' section. The 'Assistant says' section contains the text 'Tr Name welcome to admission guru how may i assist u'. A red box highlights the 'fx' icon in the toolbar above the text area. Below the text area, a dropdown menu is open, showing options: 'Action step variables' (selected), 'Session variables', 'Assistant variables', and 'Integration variables'. The 'free text' option is also visible in this menu. At the bottom right of the editor is a 'Preview' button.

**Step18: 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 'Conversation steps' panel with three steps: 1. 'hw welcome to Admission Guru', 2. 'what is your name', and 3. 'Name welcome to admission guru how may i assist u'. Step 3 is currently selected. In the center, there's a 'Variable values' section where a variable 'Tr Name' is set to '2. what is your name'. A red box highlights the 'Set new value' button. To the right, there's an 'Assistant says' section with a rich text editor containing the message 'Tr Name welcome to admission guru how may i assist u'. A red box highlights the 'free text' button in the editor toolbar. Below the editor, there are 'Edit response' and 'Edit validation' buttons. At the bottom right, there's a 'Preview' button. Red arrows on the right side of the screen point towards the top right corner and the 'Set new value' button.

**Step19: Create a new action for questions that consumers may ask.**

The screenshot shows the 'Actions' page in the IBM Watson Assistant interface. On the left, there's a sidebar with categories: 'All items', 'Created by you' (which is selected), 'Variables', 'Created by you', 'Set by assistant', 'Saved responses', and some icons. The main area shows a table of actions under 'Created by you /'. The table has columns: 'Name', 'Last edited', 'Examples count', 'Steps count', and 'Status'. One action named 'Good Morning' is listed, with details: 'Last edited 4 hours ago', 'Examples count 5', 'Steps count 1', and 'Status green checkmark'. At the bottom of the table, it says 'Showing 1–1 of 1 items'. At the bottom right, there's a 'Preview' button. Red arrows on the right side of the screen point towards the top right corner and the 'New action' button.

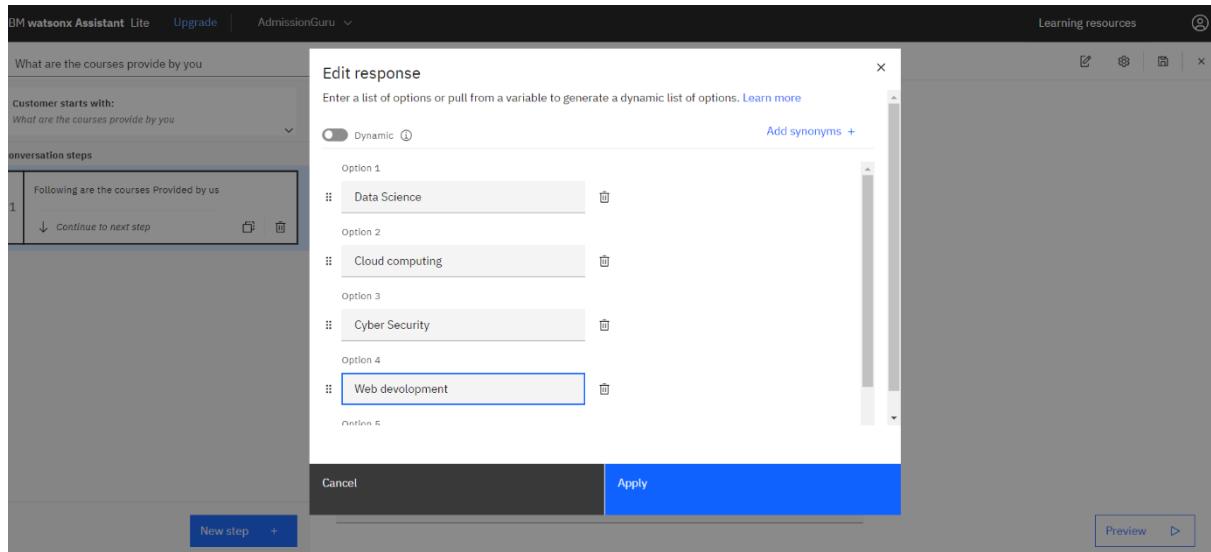
**Step20: Create a new action and add the consumer question, such as "Which courses are provided by you?" or "Give me a list of courses."**

The screenshot shows the IBM Watson Assistant Lite interface. At the top, there are tabs for 'IBM Watsonx Assistant Lite' (selected), 'Upgrade', 'AdmissionGuru', 'Learning resources', and a user icon. Below the tabs, the main area has a header 'What are the courses provide by you'. A sidebar on the left is titled 'Customer starts with:' and contains the phrase 'What are the courses provide by you'. The main workspace is titled 'Add example phrases:' and contains instructions: '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.' It also states 'The more phrases you enter, the better your assistant can recognize what the customer wants.' A text input field shows 'courses' as the first entry, with a total of 5 entries. Below the input field, there are four additional entries: 'which courses are there', 'course provided', 'give me the list of courses', and 'which course are there in the college'. A 'Preview' button is located at the bottom right.

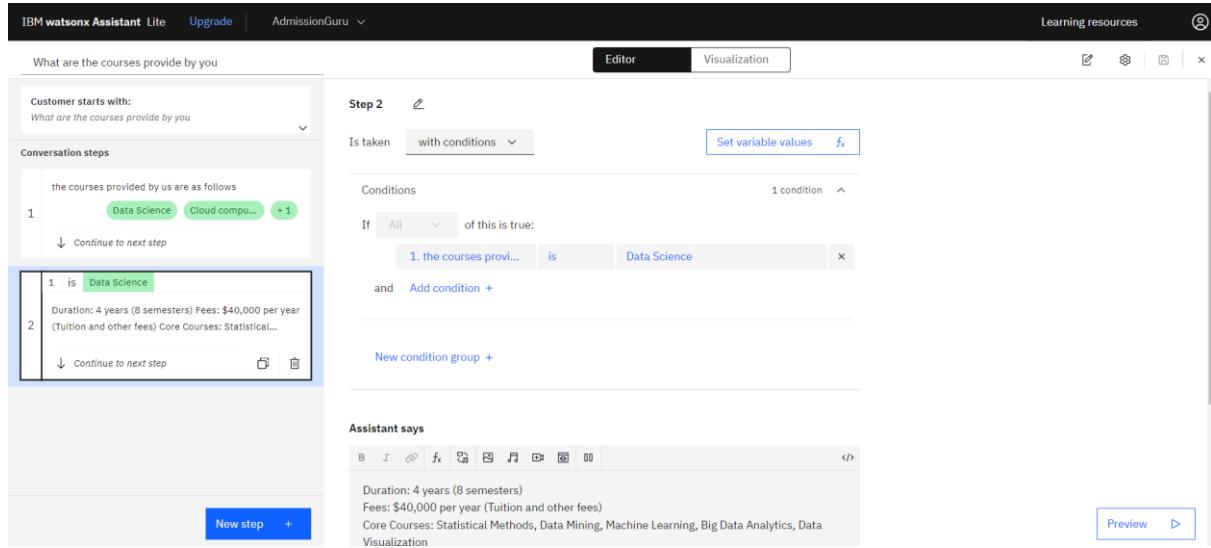
**Step21: Now write the response by providing some course options, defining customer response, and creating response choices and after that click on the option**

The screenshot shows the IBM Watson Assistant Lite interface. At the top, there are tabs for 'IBM Watsonx Assistant Lite' (selected), 'Upgrade', 'AdmissionGuru', 'Learning resources', and a user icon. Below the tabs, the main area has a header 'What are the courses provide by you'. A sidebar on the left is titled 'Customer starts with:' and contains the phrase 'What are the courses provide by you'. The main workspace shows a step configuration: 'Step 1' with 'Is taken' set to 'without conditions'. An 'Assistant says' section contains the text 'Following are the courses Provided by us'. A large blue arrow points from the previous screenshot to this section. Below the text, there is a 'Define customer response' dropdown. The 'And then' section contains a 'Continue to next step' button. A 'Preview' button is located at the bottom right.

## Step22: Now write all the courses in the option list and click apply



## Step23: 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.



**Step24: 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' selected. Under 'Created by you', there are two items: 'Good Morning' (last edited 15 hours ago, 5 examples) and 'What are the courses provide by you' (last edited 4 minutes ago, 6 examples). The main area shows a preview of a conversation. A message from 'You' says 'Hello, and welcome to AdmissionGuru. How may I assist you today?'. A message from 'AdmissionGuru' says 'There are no additional steps for this action. Add a new step or end the action.' Below that, another message from 'You' says 'What are the courses provide by you' and 'The courses provided by us are as follows'. A list of categories follows: Data Science, Cloud Computing, Cyber security, and Web development. At the bottom right of the preview window, there's a note: 'Use the up arrow for prior messages'.

**Step25: 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, under 'Customer starts with:', there's a text input field containing 'Example: I want to pay my credit card bill.'. Below it, 'Conversation steps' show a single step labeled 'This step has no content' with a 'Continue to next step' button. In the center, a modal window titled 'Add example phrases:' is open. It asks 'What does your customer say to start this interaction?' and contains a text input field with '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. The top right of the editor has tabs for 'Editor' and 'Visualization', and the top right corner of the window has a 'Learning resources' link.

**Step26: 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 the 'Editor' mode. At the top, there's a header with 'IBM Watsonx Assistant Lite' and 'Upgrade' buttons, followed by 'AdmissionGuru' and 'Learning resources'. Below the header, the main workspace displays a conversation step labeled 'Step 1'. The 'Customer starts with:' field contains the message 'I want to enrol in this course'. The 'Is taken' dropdown is set to 'without conditions'. The 'Assistant says' section contains the text: 'Certainly! Below is the eligibility criteria for the chosen course. High school diploma or equivalent - Minimum...'. Below this, there's a list of requirements: 'Minimum GPA of 3.0 (on a 4.0 scale)', 'SAT or ACT scores (optional for some applicants)', 'Personal statement', and 'Letters of recommendation'. A 'Set variable values' button is visible next to the 'Assistant says' text. A 'New step +' button is located at the bottom left of the workspace.

**Step27: 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 the 'Editor' mode. The workspace displays a conversation step labeled 'Step 2'. The 'Customer starts with:' field contains the message 'I want to enrol in this course'. The 'Is taken' dropdown is set to 'with conditions'. The 'Conditions' section shows a single condition: 'If All of this is true: 1. Certainly! Below i... is Yes'. Below this, there's a 'New condition group +' button. The 'Assistant says' section contains the message 'plz tell me your contact number'. A 'Set variable values' button is visible next to the 'Assistant says' text. A 'New step +' button is located at the bottom left of the workspace.

## **Step28: 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 Editor interface. On the left, there's a sidebar with 'Customer starts with:' and 'Conversation steps'. The main area shows a conversation flow with three steps:

- Step 1:** Confirmation (text: "I want to enrol in this course").
- Step 2:** Input (text: "plz tell me your contact number") and Output (text: "Our admissions executive will promptly call you within 24 hours."). This step has a green status bar indicating it's defined.
- Step 3:** Confirmation (text: "Our admissions executive will promptly call you within 24 hours.") with a condition "If All of this is true: 2. plz tell me your c... is defined".

The 'Assistant says' section contains the same output text as the steps. A 'Preview' button is visible at the bottom right.

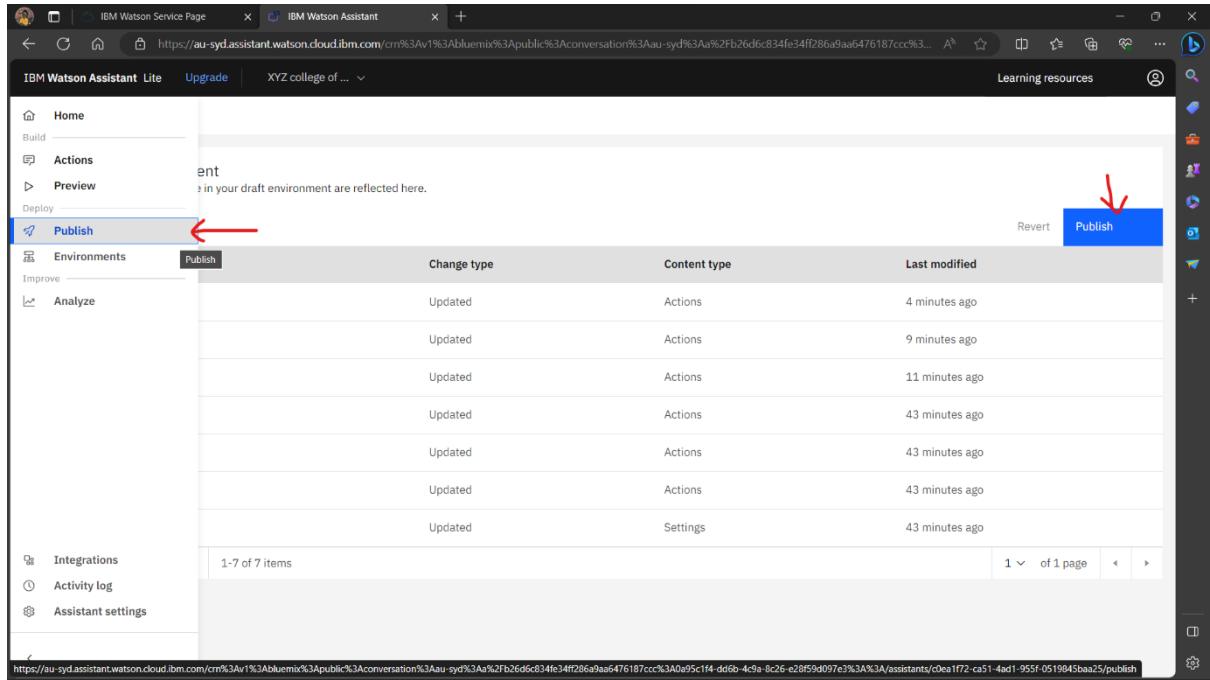
## **Step29: Now we need to preview it once, and our chatbot will be ready for deployment.**

- 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 preview interface. The sidebar on the left lists 'Actions' with 'Preview' selected. The main area displays a simulated chat window. The window shows a greeting message: "Hi! I'm a virtual assistant. How can I help you today?". Below the message are three buttons: "Greeting", "Fee Structure", and "Example: See how I can help". At the bottom of the window is a text input field with the placeholder "Type something...". A red arrow points to the 'Preview' button in the sidebar. Another red arrow points to the simulated chat window. A third red arrow points to the text input field.

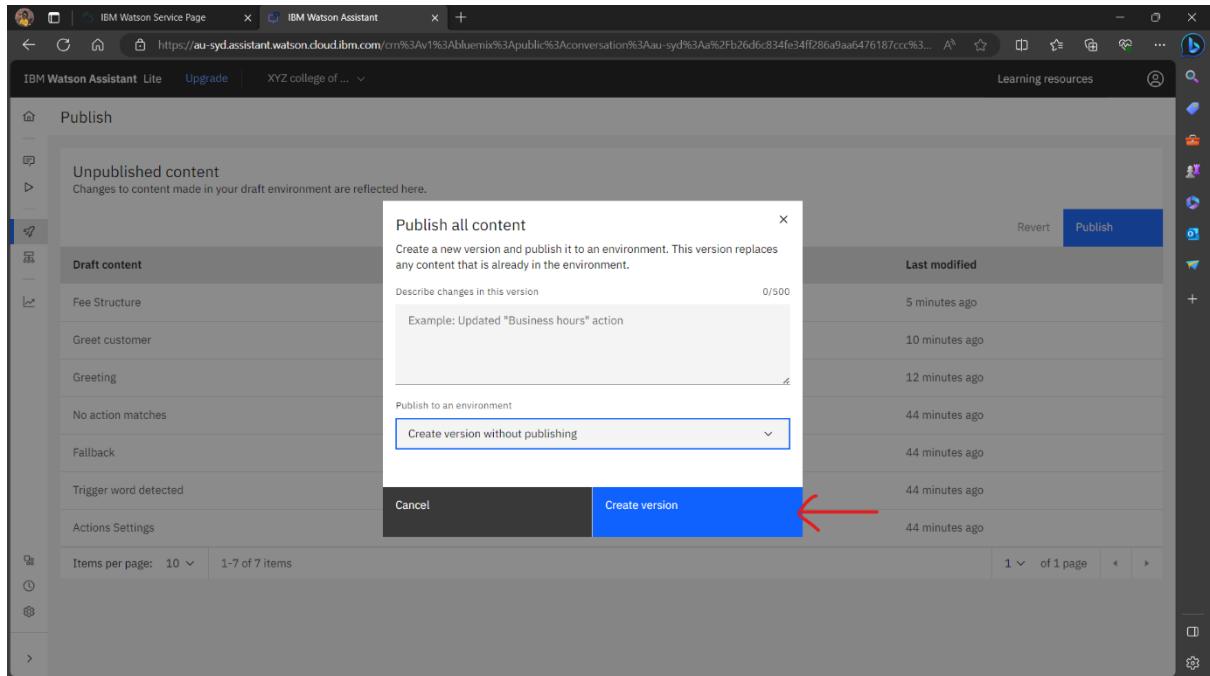
## Step30: Publish Chatbot

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.



The screenshot shows the IBM Watson Assistant Lite interface. The left sidebar has sections for Home, Actions, Preview, Deploy, Publish (which is highlighted with a red arrow), Environments, and Analyze. The main content area displays a table of changes made in the draft environment, with a 'Publish' button at the top right. A red arrow points to this 'Publish' button. The URL in the browser is https://au-syd.assistant.watson.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Aconversation%3Aau-syd%3Aa%2Fb26d6c834fe34ff286a9aa6476187ccc%3... .

## Step31: Click confidently on "Create Version."



The screenshot shows the 'Publish' dialog box. It includes sections for 'Unpublished content' (changes to content made in the draft environment), 'Draft content' (Fee Structure, Greet customer, Greeting, No action matches, Fallback, Trigger word detected, Actions Settings), and a 'Publish all content' section where users can create a new version and publish it to an environment. A dropdown menu under 'Publish to an environment' shows 'Create version without publishing' (which is highlighted with a blue background and a red arrow). Other options in the dropdown include 'Create version' and 'Revert'. The URL in the browser is https://au-syd.assistant.watson.cloud.ibm.com/crm%3Av1%3Abluemix%3Apublic%3Aconversation%3Aau-syd%3Aa%2Fb26d6c834fe34ff286a9aa6476187ccc%3... .

## Step32: 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.

The screenshot shows the IBM Watson Assistant Lite interface. The left sidebar has tabs for Home, Build, Actions, Preview, Publish, Environments, Improve, and Analyze. The 'Integrations' tab is currently selected. The main area displays two integration options: 'Web chat' (Built by IBM - Lite) and 'Phone' (Built by IBM - Plus). Each option has a brief description and a small icon. The top right corner has a 'Learning resources' link and a help icon.

## Step33: go to the integration and select Twilio

The screenshot shows the 'WhatsApp with Twilio' integration setup page. At the top, it says 'WhatsApp with Twilio Draft'. Below that are tabs for 'Basic setup' (which is selected), 'Click to chat', and 'Advanced options'. On the right are 'Close' and 'Save and exit' buttons. The main section is titled 'Twilio account information' and contains fields for 'Account SID' (AC72bea8b3d4ac5f9ae6b631e23620c863) and 'Auth token' (redacted). Below this is a 'Webhook' section with a text input field containing the URL 'https://integrations.au-syd.assistant.watson.appdomain.cloud'. The bottom right corner has a 'Learn more' button.

### Step34: Open a new tab and create or set up your Twilio account.

The screenshot shows the Twilio Console interface. The left sidebar has tabs for 'Develop' and 'Monitor'. Under 'Develop', there are links for Phone Numbers, Messaging, Studio, Marketplace (Beta), Voice, and Conversations. The main content area is titled 'Account Info' and displays the Account SID (ACb044406b4a) and Auth Token (XXXXXXXXXX). It also includes a note about always storing the token securely and a link to learn more. Below this, it states that the account is in trial mode and can only send messages and make calls to verified phone numbers. The right sidebar features sections for 'Impact Access Program' (Program status: Inactive) and 'Twilio.org builder resources' (Community & constituents, Donors & supporters, Staff & volunteers), along with a link to explore the Impact Access Builder Hub.

### Step35: now copy the SID & Auth token from Twilio and paste it on the IBM cloud here

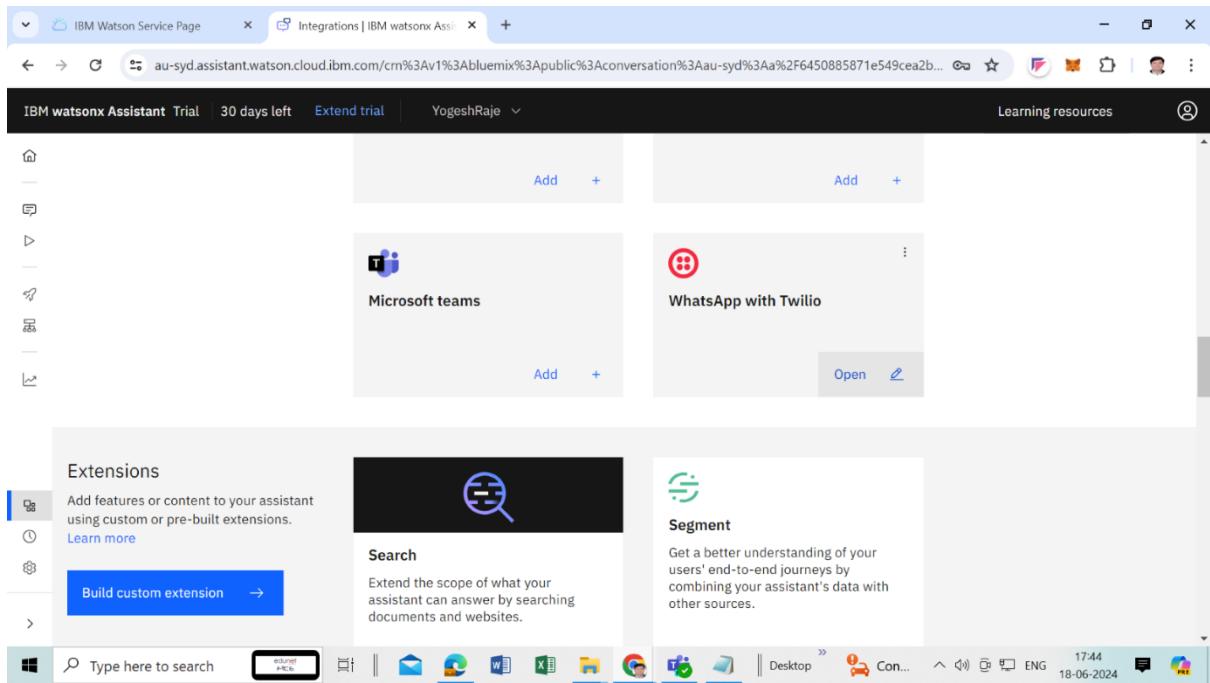
The screenshot shows the IBM Watson Assistant Service Page. The top navigation bar includes links for 'IBM Watson Assistant Trial' (30 days left), 'Extend trial', and 'YogeshRaje'. The main content area is titled 'WhatsApp with Twilio' (Draft). It has a 'Get started' button and a 'Next' button. Below this, there is a section for 'Account SID' with a note to refer to the Twilio project info and copy/paste the account SID value. A large blue arrow points to the 'Enter Twilio account SID' input field, which contains the placeholder text 'Enter Twilio account SID'.

The screenshot shows the 'WhatsApp with Twilio' configuration page in the IBM Watson Assistant trial interface. The top navigation bar includes 'IBM Watson Service Page', 'Integrations | IBM Watsonx Assistant', and a trial status '30 days left'. The main content area is titled 'Auth token' with a sub-instruction: 'In your Twilio project's dashboard, refer to your project info and copy and paste the auth token value below.' A text input field labeled 'Enter Twilio auth token' contains a placeholder. A blue arrow points from the right towards this input field. The bottom navigation bar has 'Close' and 'Next' buttons.

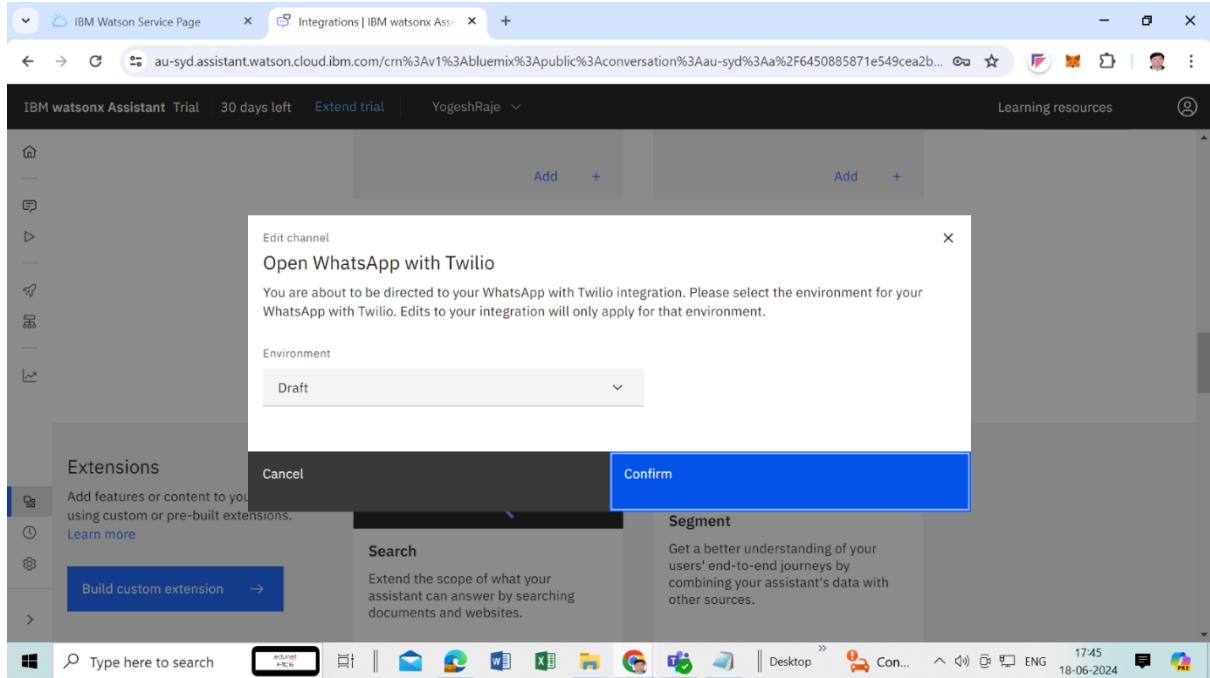
### Step36: Click on the Finish

The screenshot shows the 'WhatsApp with Twilio' configuration page in the IBM Watson Assistant trial interface. The top navigation bar includes 'IBM Watson Service Page', 'Integrations | IBM Watsonx Assistant', and a trial status '30 days left'. The main content area is titled 'Webhook' with a sub-instruction: 'Copy the uniquely generated webhook below and provide to Twilio. This will allow messages to be sent and received.' A text input field displays a webhook URL: 'https://integrations.au-syd.assistant.watson.appdomain.cloud'. A blue arrow points from the right towards the 'Finish' button. The bottom navigation bar has 'Close' and 'Finish' buttons, with 'Finish' being highlighted in blue.

### Step37: Again open the Whatsapp with twilio



### Step38: Again open WhatsApp with Twilio



### Step39: Fill in the details

The screenshot shows the IBM Watson Assistant Trial interface. The main title is "WhatsApp with Twilio" with a "Draft" status. Below it, there are three tabs: "Basic setup" (disabled), "Click to chat" (selected), and "Advanced options". The "Click to chat" tab contains the following fields:

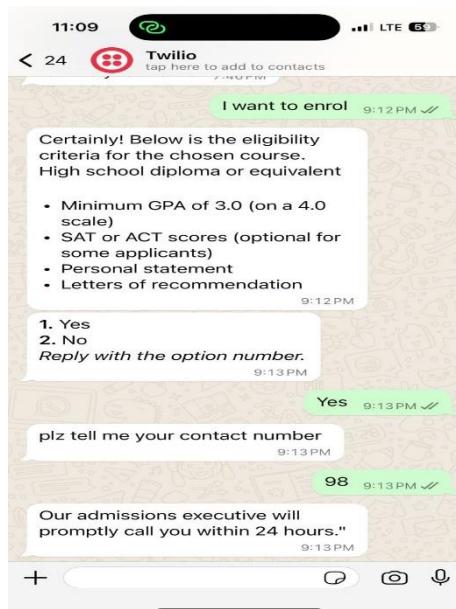
- Company phone number (optional):** 555-555-5555
- Pre-filled message (Optional):** For example: Hi, I need help with an order.

At the bottom, there is an "Embed link" section with a toolbar and a system tray at the very bottom showing the date and time as 18-06-2024.

### Step40: Go to Twilio, select the "Develop" option, choose "Messaging," and test by sending a WhatsApp message.

The screenshot shows the Twilio Messaging console under the "Develop" tab. The left sidebar has a "Messaging" section selected. The main area is titled "Connect to WhatsApp Sandbox" and provides instructions to connect by scanning a QR code or sending a message to the phone number +1 415 523 8886. A large QR code is displayed on the right.

**Step41: Scan the QR code & send the Join < Sandbox name> then u will get your chatbot working on the WhatsApp**



**Congratulations! You successfully created Chatbot using IBM Watson.**