

Lab 2: Create Intents

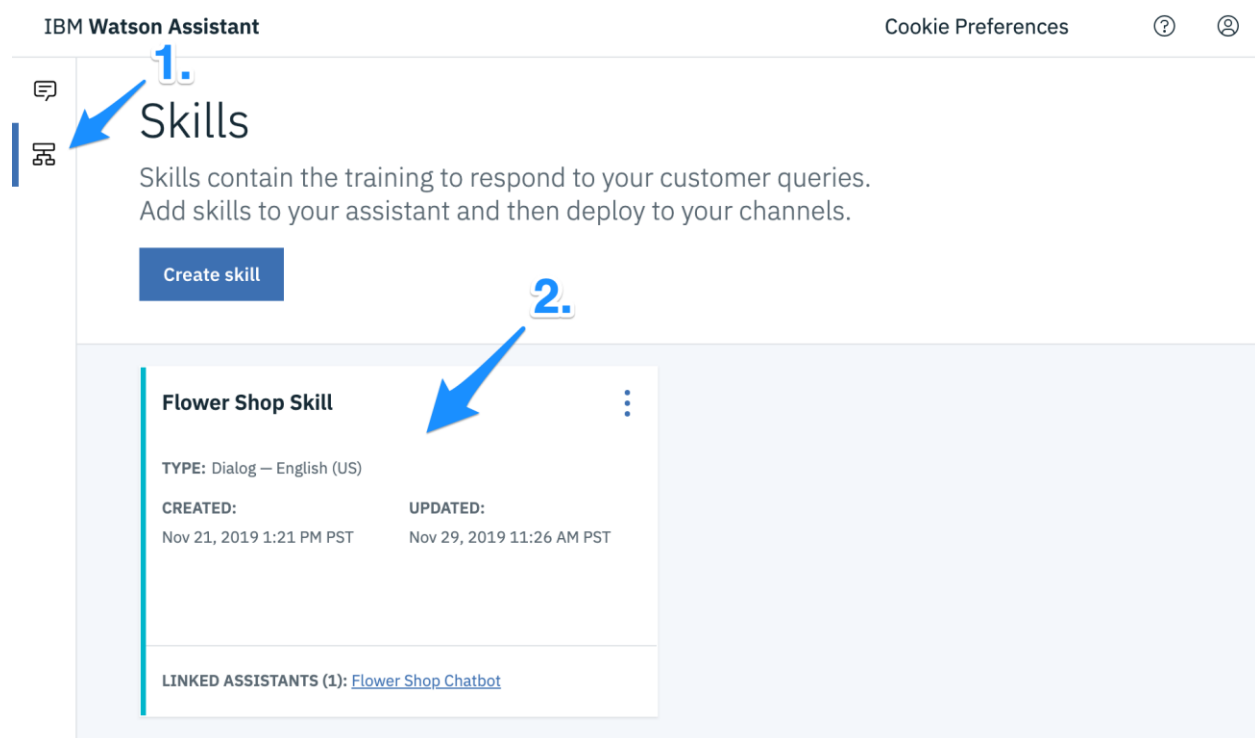
Now that we have an Assistant and its dialog skill, we are ready to start creating our chatbot. We'll start off with intents.

Exercise 1: Enter your Flower Shop Skill

In order to add intents, we'll need to access our *Flower Shop Skill*. There are a couple of ways to do that:

Method 1

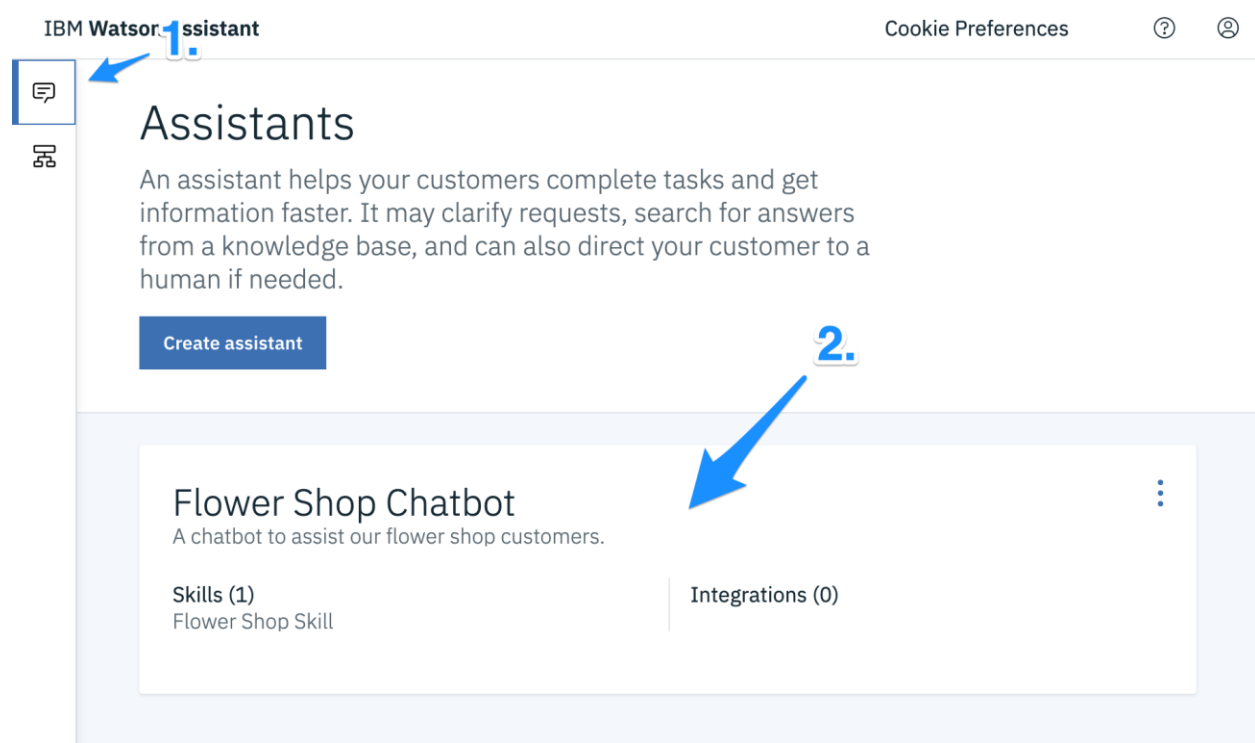
From the *Skills* tab of your Watson Assistant instance click on the tile for your skill.



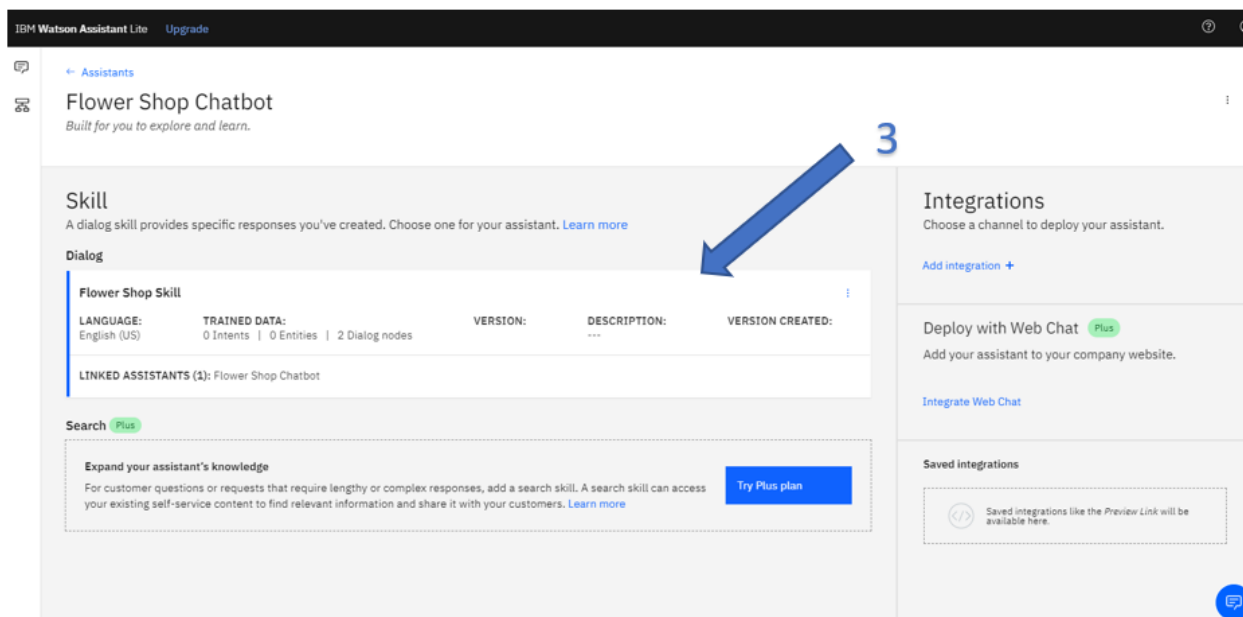
Method 2

From the *Assistants* tab of your Watson Assistant instance, click on your chatbot tile.

Lab 2: Create Intents

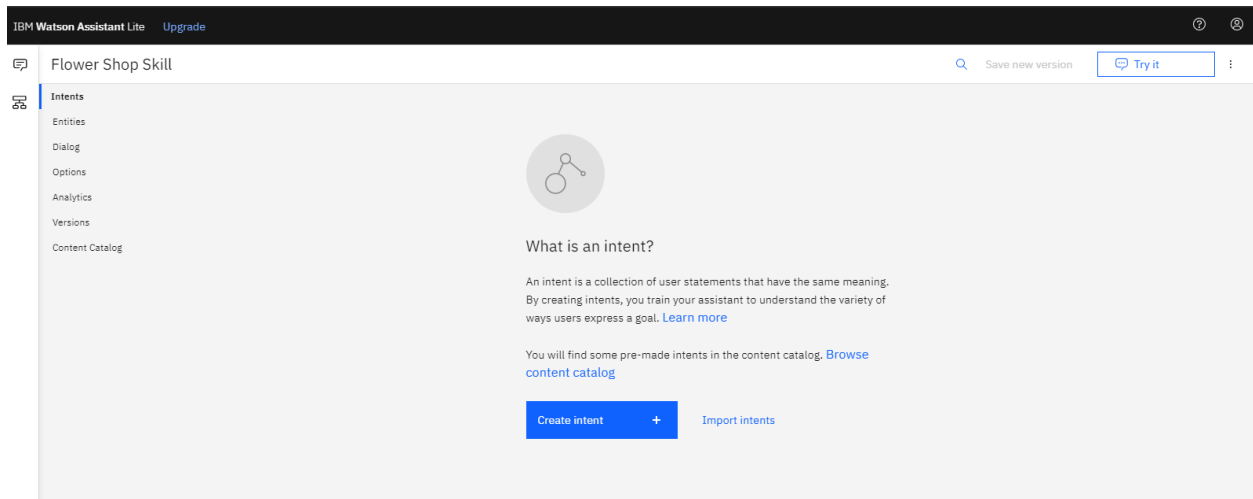


You'll find yourself in the *Flower Shop Chatbot* assistant. From here, click on its skill tile.



Either method will get you inside of your skill (as shown in the image below), where you'll be able to create intents, entities, and much more.

Lab 2: Create Intents



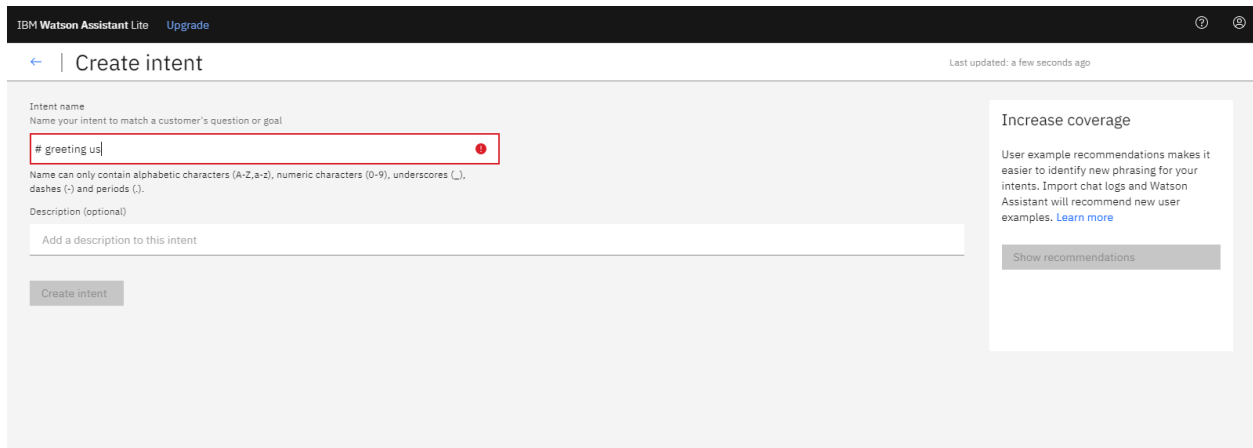
By the way, if you don't know how to get back to the Watson Assistant interface, you simply have to visit your dashboard (available at cloud.ibm.com), click on *Services*, and launch your Watson Assistant instance again.

Exercise 2: Create, train, and test intents

Now that we are inside the *Intents* section of our skill, we can add intents in a few ways. Namely, we can add them manually, import them from a CSV file, or import them from a pre-made content catalog which includes industry-specific intents.

In this exercise, we'll focus on the most common way. That is, manually adding intents.

1. From the *Intents* section of your dialog skill, **click on the *Create intent* button**. Here you'll be able to define an *Intent name* and a *Description*. What happens if you try to call the intent `#greeting us` with a space in the name?



Lab 2: Create Intents

That's right! We can't use spaces in intent names. So, we either need to use a single word for our intent or add underscore characters to separate multiple words when these are necessary to express what our intent is all about. In our case, we can get away with just calling the intent #greetings. Let's do that.

2. **Define a #greetings intent.** You can leave the description blank, as the name is descriptive enough, and then **click the *Create intent* button.**

3. You'll be prompted to create some user examples to train Watson on the concept of greetings. **Enter hello then click *Add example*.** Repeat the process for other greeting examples such as:

- Hi
- Hey
- good morning
- good afternoon

and so on. Make sure you add one example at the time.

You don't need to go overboard, especially on such a simple intent, but you should always **include at least 5 examples**. Ideally more, particularly for more complex intents.

If you make a typo in one or two of your examples, don't worry. Keep the typos, as your users are likely to do the same mistakes, so this ends up training Watson on a more realistic input set. When you are done, you can **click the back-arrow icon at the top** to go back to your list of intents.

Lab 2: Create Intents

[<](#) | #greetings

Intent name
#greetings

Description
Add a description to this intent

Add user examples
good evening

[Add example](#) [Show recommendations](#) [i](#)

☐ **User examples (4)** ▼

☐ good morning ✎

☐ hello ✎

4. Once you click on the back-arrow icon, you'll be sent back to the *Intents* section where a list of your intents is shown. Right now, it's just #greetings so let's add more.

IBM Watson Assistant Lite Upgrade

Flower Shop Skill

Intents

<input type="checkbox"/>	Intents (1) ↑	Description	Modified T1	Examples T1
<input type="checkbox"/>	#greetings		a few seconds ago	5

Create intent +

Lab 2: Create Intents

By using the *Create intent* button, repeat the process to **add the #thank_you and #goodbyes intents** with at least 5 appropriate examples each.

For #thank_you, you might use examples such as:

- thank you
- thanks
- thx
- cheers
- appreciate it

For #goodbyes, you might want to use:

- good bye
- bye
- see you
- c ya
- talk to you soon

At this point, you'll have the most basic chit chat intents a chatbot needs to have. The more the merrier, of course, but this will do for now.

5. To test our intents, **click on the Try it button** in the top right. A chat panel will appear where you can try user input and see how Watson analyses it and how our chatbot responds. We haven't provided responses yet (we'll do so in the module on *Dialog*) but we can still use it to test the classification of our intents. If you see a *Watson is training* message, please wait for Watson to finish training on your intent examples.

6. Go ahead and **try some greetings, thank you, and goodbye messages** in the panel. Feel free to try both examples you provided and expressions that you haven't provided as examples. For instance, try *hola* and *aloha*. Though specific to certain languages, they are common enough internationally to be recognized as greetings by Watson.

Now, **try it with *kia ora***, a common greeting in New Zealand, but not a globally adopted one. Chances are Watson will categorize it as *Irrelevant*. If Watson miscategorized one example, as it arguably did in this example, feel free to click on the V symbol next to the detected intent to **assign a different intent to it**. This will add your utterance (e.g., *kia ora*) as an example for the intent you picked (e.g., #greetings), further training Watson.

The image below shows the message we receive when we make an intent correction directly from the *Try it out* panel. The word *model* is used to refer to the fact that Watson will use our correction to further train its Machine Learning model.

Lab 2: Create Intents

Try

Information

Intent correction submitted. Model will be updated.

Watson is training

aloha

#greetings

hola

#greetings

kia ora

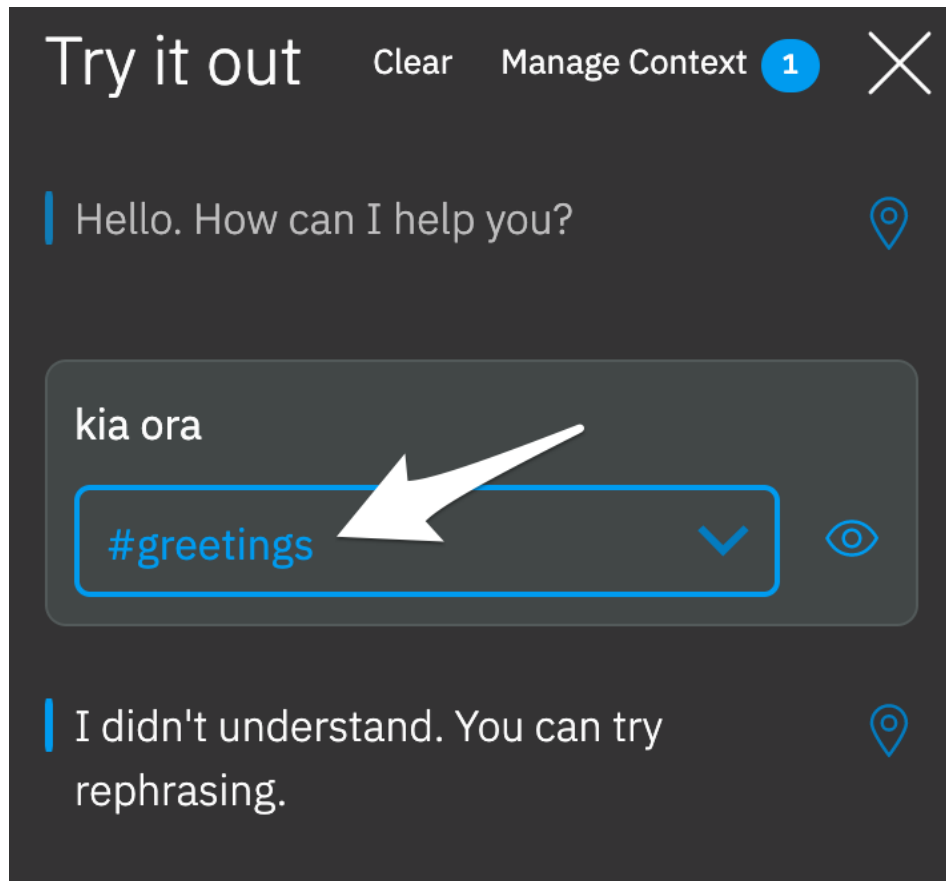
#greetings

Enter something to test your virtual assistant

Use the up key for most recent

Lab 2: Create Intents

You can click on that intent name (e.g., #greetings) in the *Intents* section of your skill to verify that the example was indeed added automatically for you. Once done training, if you test the same utterance again, Watson will correctly recognize the right intent this time.



In the *Try it out* panel, **what happens if you try a nonsensical input?** Randomly smash on the keyboard if you have to. Personally, I produced the beautiful, cat-walking-on-the-keyboard string `dljkasdl sa dasldj alskdkas ld`. Create your own masterpiece. 😊

Watson will always try its hardest to match the user input to an existing intent, even if it's not a perfect match. But if its confidence level in the best matching intent is very low (below 20%), it will treat the input as *Irrelevant*, as it is likely not relevant to any of our intents.

In the module on the *Dialog* (i.e., Module 4), we'll find out how to deal with situations in which the user enters a question that is irrelevant or outside the scope of our chatbot.

To conclude this exercise, click on an existing intent of your choice in *Intents*, and **add one more example** to it. Then, select the checkmark next to it, and you'll be given the option to delete it (or even move it to a different intent).

Go ahead and **delete that example** as shown in the figure below.

Lab 2: Create Intents

The screenshot shows the IBM Watson Assistant interface for configuring the '#greetings' intent. The page has a dark header with 'IBM Watson Assistant Lite' and an 'Upgrade' button. Below the header, there's a breadcrumb trail with a back arrow and '#greetings'. A 'Last updated: a few seconds ago' status is shown. A 'Try it' button is in the top right. The main content area has a 'Add a description to this intent' field. Below that, a 'User example' section prompts the user to add unique examples. A text input field contains 'Type a user example here, e.g. I want to pay my credit card bill'. An 'Add example' button is below the input. A table of 'User examples (6)' is shown, with a '1' and an arrow pointing to the 'wassup' example. The table has columns for the example text and the time it was added. A 'Show recommendations' button is in the top right of the examples section. A '2' and an arrow point to this button. At the bottom, there's a pagination bar showing 'Showing 1-6 of 6 examples' and '1 of 1 pages'.

User examples (6) ↑		Added ↑↓
<input type="checkbox"/>	Good afternoon	a few seconds ago
<input type="checkbox"/>	Good Evening	a few seconds ago
<input type="checkbox"/>	Good morning	a few seconds ago
<input type="checkbox"/>	Hello	a few seconds ago
<input type="checkbox"/>	Hi	a few seconds ago
<input checked="" type="checkbox"/>	wassup	a few seconds ago

In the future, for more complex intents, you'll be able to add examples that originate from your real customers' conversations with your virtual assistant (or your human customer care team) to better train Watson on your business-specific intents.