Exercise 1: Create a skill for your chatbot

This lab is all about intents, but in order to work with them, we'll need to create a dialog skill which will contain said intents (along with entities and the dialog itself).

Although it's possible to create elaborate chatbots that use multiple skills, it is common to have just one skill per chatbot. In other words, for now, you can simply think of your dialog skill as your chatbot.

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1. From the *Skills* page of your Watson Assistant instance, **click on the *Create new* button**. (If you didn't bookmark your instance in the previous lab, you can find it within your dashboard.)

2. Here you'll be able to **add a *Dialog Skill*** as shown in the image below. You'll be offered to enter a *Name* and an optional *Description*. Enter Flower Shop Skill or whatever you prefer for the name. For the description, feel free to add A skill for a flower shop chain. or something similar.

Create Dialog Skill

Create a new skill, start building a skill using the customer care sample, or import an existing skill.

Create skill   Use sample skill   Import skill

Name
Name your skill, for example **Account application** or **Personal banking**.

Flower Shop Skill

Description (optional)

A skill for a flower shop chain.

Language

English (US)   ▾

[Create dialog skill]

You'll also notice that the UI offers you to create a sample customer service skill from the *Use sample skill* tab and even import skills from JSON files from the *Import skill* tab. You can ignore both for now.

3. We'll create the chatbot in English, but which other languages are also supported? Find out from this window.

4. Ensuring English (U.S.) is selected, **click on the *Create* button to generate the empty skill** for your chatbot.

5. **Practice going back and forth between the Skills page and the skill you just created** (e.g., Flower Shop Skill).

NOTE: At any time, you can add new skills from the *Skills* tab of your Watson Assistant instance. Clicking on the three vertical dots within a skill will allow you to delete, rename, duplicate or export to the JSON file format a given skill, as shown in the image below.

IBM Watson Assistant

Home   **Skills**   Assistants

Skills

Develop powerful, natural language understanding for your Assistants. Leverage detailed improve conversational flow and customer engagement.

[Create new]

Flower Shop Skill   ⋮
TYPE: Dialog — English (US)
CREATED: UPD
Mar 7 2019, 12:02 -08:00   Mar 7

View API Details
Download JSON
Duplicate
Rename
Delete

Exercise 2: Create, train, and test intents

Upon creation of the skill, you'll find yourself on the *Intents* section of your skill. Here you can add intents in several ways. 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 *Add 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?

2. **Define a #greetings intent**. You can leave the description blank 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 crazy, 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.

← | #greetings

Intent name

#greetings

Description

Add a description to this intent

Add user examples

good evening

[Add example]   [☼ Show recommendations]   ⓘ

☐ **User examples (4)** ▼

☐ good morning ✏

☐ hello ✏

☐ hey ✏

4.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, and appreciate it. For #goodbyes, you might want to use good bye, bye, see you, c ya, and talk to you soon.

At this point, you'll have the most basic chitchat 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 intentionally 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.

⊗

Information   ✕
Intent correction submitted. Model will
be updated.

Try   ✕

Watson is training   ⟳

◉

aloha
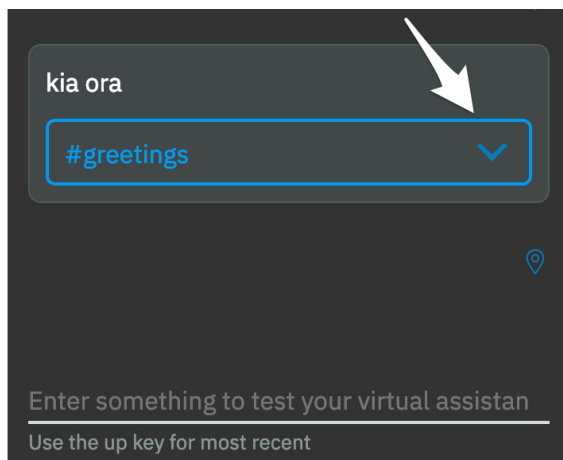
#greetings   ⌄

◉

hola

#greetings   ⌄

◉

You can click on that intent name in the *Intents* section of your skill to verify that the example was indeed added automatically for you. 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 dljkasdlsa 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** (not the whole intent).

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.

Mark as completed