



# Dialogflow for Gym Management

In this presentation, we'll explore the gym management Dialogflow agent architecture built using Google Dialogflow.

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# Introduction to Dialogflow

## 1 What is Dialogflow?

Dialogflow is a conversational design platform that helps you create chatbots and voice assistants for any platform like Google Assistant, Amazon Alexa, and more.

## 2 Why use Dialogflow for Gym Management?

In the world of fitness, gadgets like smartwatches and fitness trackers have already made their mark. With the help of the gym management Dialogflow bot, users can obtain some routines and advices.


## 3 Benefits of Gym Management Chatbot



The chatbot saves time and provides a personalized experience to customers.















# Intents in Dialogflow

Intents are the building blocks of a Dialogflow agent. They help you map user input to appropriate actions. We can create and manage Intents in Dialogflow, including training phrases, actions, and response messages.

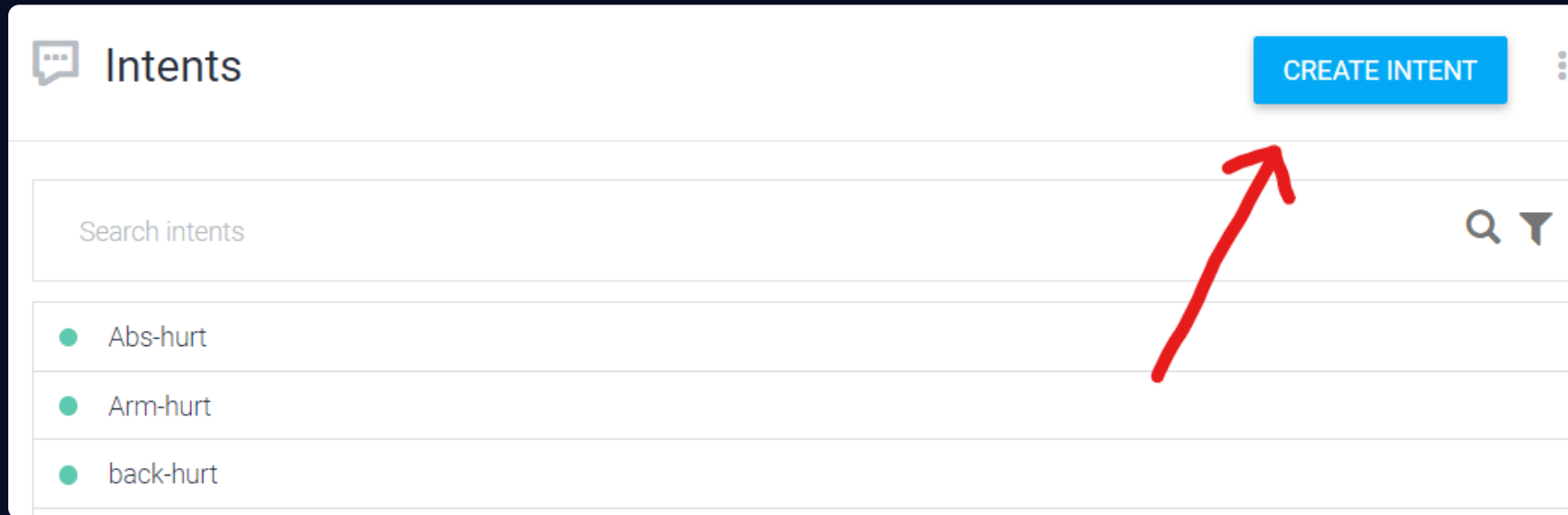
 Intents CREATE INTENT

 Abs-hurt
 Arm-hurt
 back-hurt
 Default Fallback Intent
 Default Welcome Intent
 Exercises for legs 
 Exersise for back 
 ↳ Exersise for back - more
 exersises for chest 

# How to Create an Intent in Dialogflow

Click on the "Create Intent" button.



# How to Create an Intent in Dialogflow

The following tab will appear with different sections. The most relevant are:

- Contexts: temporary storage units that hold information about the current state of a conversation.
- Training phrases: example inputs used to train the chatbot's understanding of user interactions, helping it generate appropriate responses.
- Responses: the chatbot's generated messages or actions that provide information or perform tasks based on user inputs.

• Intent name SAVE ⋮

Contexts ? ▼

Events ? ▼

Training phrases ? ▼

⚠ Template phrases are deprecated and will be ignored in training time. More details [here](#).

When a user says something similar to a training phrase, Dialogflow matches it to the intent. You don't have to create an exhaustive list. Dialogflow will fill out the list with similar expressions. To extract parameter values, use [annotations](#) with available [system](#) or [custom](#) entity types.

Action and parameters ▼

Responses ? ▼

Fulfillment ? ▼

# How to Create an Intent in Dialogflow

We have to add some Training phrases. In this way, the chatbot will understand which section of the questions it is in (in this case in "Exercises for legs").

● Exercises for legs

SAVE

Training phrases ?

Search training phrases 🔍 ^

⚠️ Template phrases are deprecated and will be ignored in training time. More details [here](#).

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” Add user expression

” legs day

” exercises for legs in the gym

” i want to do legs but i dont know a routine

” routine for legs

” tell me a routine for legs in the gym



# How to Create an Intent in Dialogflow

Finally we have to add the correct answers that chatbot will response based on user inputs.

Responses ?

^

DEFAULT +

Text Response

1

Sure! Here's a list of some of the best leg exercises for building muscle according to Bodybuilding.com :

- Barbell Back Squat
- Barbell Front Squat
- Olympic Lifts: Snatch and Power Clean
- Deadlift
- Split Squat
- Hack Squat
- Lunge
- Leg Press
- Romanian Deadlift
- Leg Curl

You can also try this 45-minute leg workout routine from Muscle & Fitness ?:

1. Deadlift - 3 sets of 8-10 reps with 90 seconds rest in between sets.
2. Front Squat - 3 sets of 8-10 reps with 90 seconds rest in between sets.
3. Dumbbell Lunge - 3 sets of 8-10 reps with 90 seconds rest in between sets.
4. Barbell Hip Thrust - 3 sets of 8-10 reps with 90 seconds rest in between sets.
5. Standing Calf Raise - 3 sets of 8-10 reps with 90 seconds rest in between sets.

Remember to warm up completely before starting your workout and increase the weight by 20lbs in each set. You can also alternate your sequence of exercises every 2-4 weeks to prevent latency.

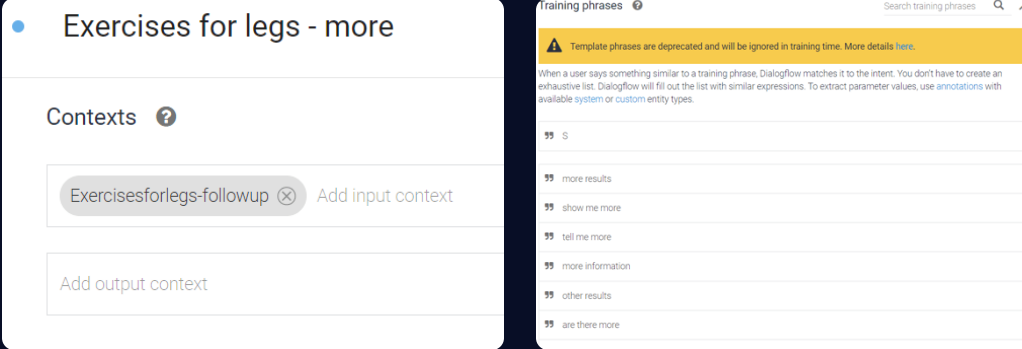
2

Sure! Here's a sample leg routine that you can try. It includes exercises targeting different muscle groups in your legs:

Warm-up:

# How to Create an Intent in Dialogflow

Optionally, you can add contexts for each intent. As an example, you can add intents of more. In this way, if the user does not like the answer obtained, he can get another alternative answering for example "more results"



The image shows two screenshots from the Dialogflow console. The left screenshot shows the 'Contexts' section for an intent named 'Exercises for legs - more'. It has a context 'Exercisesforlegs-followup' with a close button and a text 'Add input context'. Below it is a text box 'Add output context'. The right screenshot shows the 'Training phrases' section for the same intent. It has a search bar and a warning message: 'Template phrases are deprecated and will be ignored in training time. More details here.' Below the warning is a list of training phrases: 'S', 'more results', 'show me more', 'tell me more', 'more information', 'other results', and 'are there more'.

Exercises for legs - more

Contexts ?

Exercisesforlegs-followup (X) Add input context

Add output context

Training phrases

Search training phrases

⚠ Template phrases are deprecated and will be ignored in training time. More details [here](#).

When a user says something similar to a training phrase, Dialogflow matches it to the intent. You don't have to create an exhaustive list. Dialogflow will fill out the list with similar expressions. To extract parameter values, use [annotations](#) with available [system](#) or [custom](#) entity types.

S

more results

show me more

tell me more

more information

other results

are there more

Text Response

1 Certainly! Here's an alternative leg routine for you:

Warm-up:

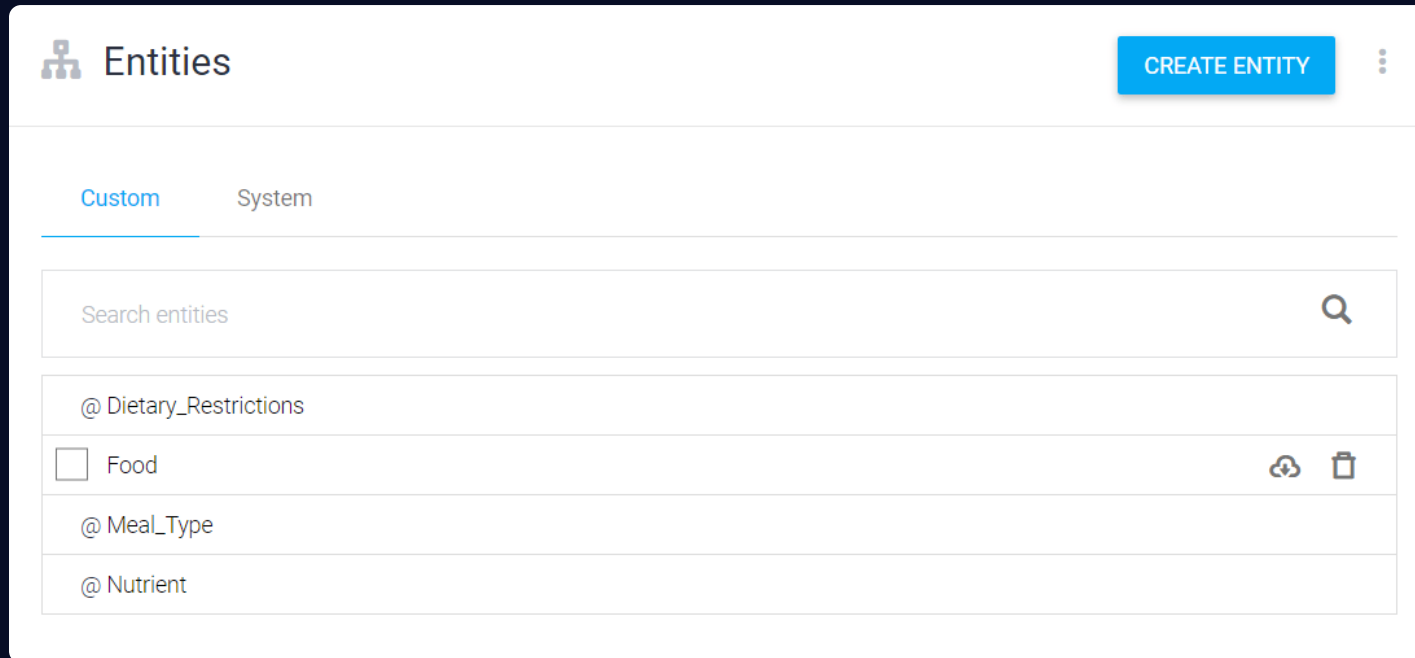
1. Jumping Jacks: 2 sets of 15 reps
  - Stand with your feet together and arms by your sides.
  - Jump up, spreading your legs wider than hip-width apart while raising your arms overhead.
  - Jump again, returning to the starting position with your feet together and arms by your sides.
2. Bodyweight Squats: 2 sets of 15 reps
  - Stand with your feet shoulder-width apart, toes slightly turned out.
  - Lower your body by bending at the knees and hips, keeping your chest lifted and weight in your heels.
  - Return to the starting position by pushing through your heels and extending your knees and hips.

Main Routine:

1. Barbell Squats: 3 sets of 8-10 reps
  - Stand with your feet shoulder-width apart and the barbell resting on your upper back.
  - Lower your body by bending at the knees and hips, keeping your chest lifted and weight in your heels.
  - Return to the starting position by pushing through your heels and extending your knees and hips.

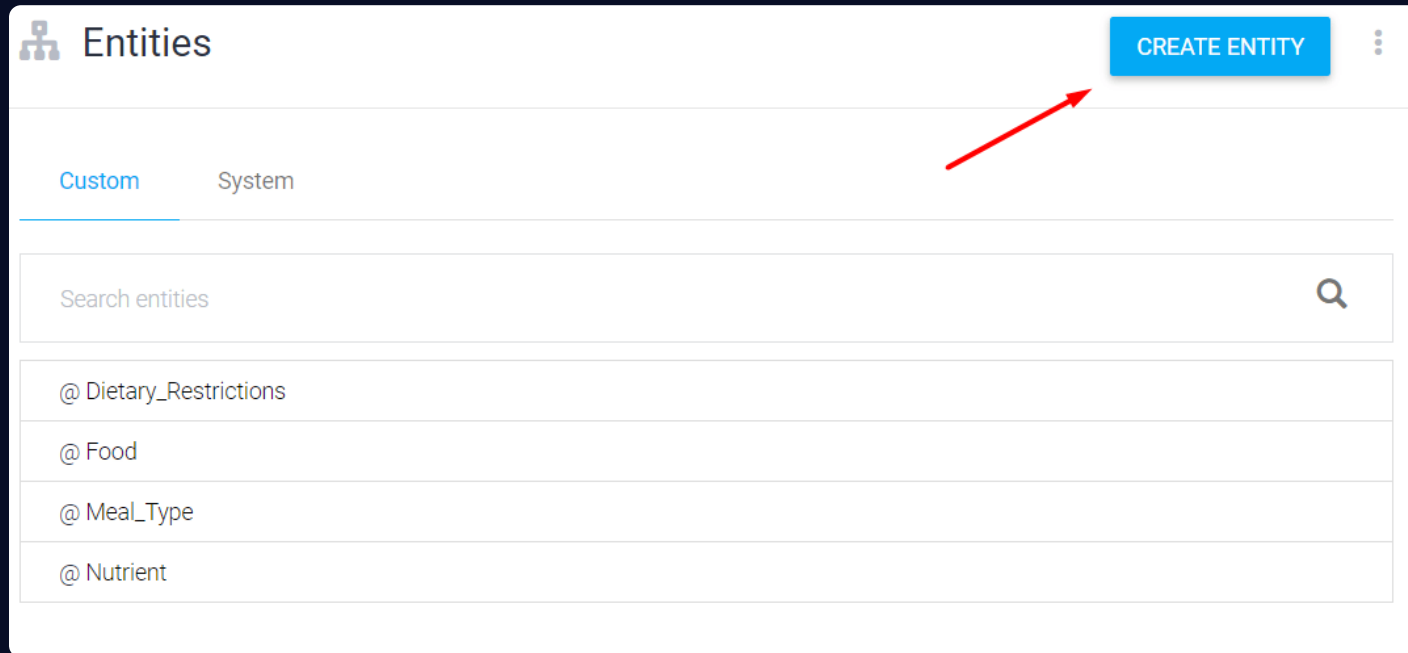
# Working with Entities in Dialogflow

Entities are a powerful tool in Dialogflow used to extract information from user input and provide dynamic responses. In this card, we will explore how to create and manage entities in Dialogflow. We will also cover best practices for defining entity types and integrating them into your agent.



# How to Create an Entity in Dialogflow

Click on the "Create Entity" button.








# How to Create an Entity in Dialogflow

Assign a name to the entity and select a category. The category will determine what type of information is expected to be contained in the entity.

Dietary\_Restrictions

SAVE

☒ Define synonyms  ☐ Regexp entity  ☐ Allow automated expansion ☒ Fuzzy matching 




# How to Create an Entity in Dialogflow

Add values to the entity. The values are examples of what the user might say so that Dialogflow can recognize and extract information from them.

vegan	vegan, plant-based, no animal product, veganism
vegetarian	vegetarian, veggie, meat-free, lacto-ovo vegetarian
gluten-free	gluten-free, celiac, wheat free, gluten intolerance
dairy-free	dairy-free, lactose-free, non-dairy, no milk, no cheese
nut allergies	nut allergies, allergic to nuts, nut-free
<a href="#">Click here to edit entry</a>	

# How to Create an Entity in Dialogflow

Optionally, you can add synonyms for each value. Synonyms are other words that a user might use to refer to a specific value.

☒ Define synonyms  ☐ Regexp entity  ☐ Allow automated expansion ☒ Fuzzy matching 

vegan	vegan, plant-based, no animal product, veganism
vegetarian	vegetarian, veggie, meat-free, lacto-ovo vegetarian
gluten-free	gluten-free, celiac, wheat free, gluten intolerance
dairy-free	dairy-free, lactose-free, non-dairy, no milk, no cheese
nut allergies	nut allergies, allergic to nuts, nut-free

Click here to edit entry




# How to Create an Entity in Dialogflow

Save the entity.

Now that you've created an entity, you can add it to your intents and use it to extract information from user inputs.

## Dietary\_Restrictions

SAVE

☒ Define synonyms  ☐ Regexp entity  ☐ Allow automated expansion ☒ Fuzzy matching 

vegan	vegan, plant-based, no animal product, veganism
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<a href="#">Click here to edit entry</a>	

+ Add a row

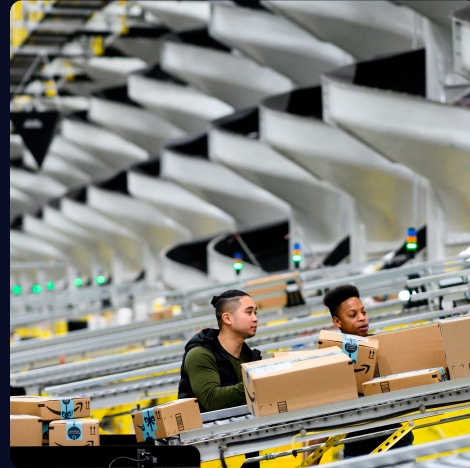


# Enabling Webhook Fulfillment



## Why Webhook Fulfillment?

Webhook fulfillment enables external services to retrieve and analyze a user's inputs, perform operations, and deliver responses directly to Dialogflow.



## How to Set up Webhook Fulfillment?

Create a webhook code\* and enter the URL in the Fulfillment section on the console.



## Test Fulfillment

Ensure that the webhook is correctly connected and working by using the "Test" feature to test the chatbot's intent and parameters.

# Testing the Gym Dialogflow Agent

## How to Test the Gym Bot

Users can test their agents in the console with a simple text editor and by simulating messenger apps. Therefore, they can experiment with various conversation scenarios.

Try it now

Agent

USER SAYS

COPY CURL

My back aches

DEFAULT RESPONSE

Seek professional guidance: It's advisable to consult a healthcare professional, such as a doctor or physical therapist, to assess your condition and provide appropriate recommendations. Maintain good posture: Make a conscious effort to keep a correct posture while sitting, standing, and lifting to minimize strain on your back. Incorporate regular exercise: Engage in activities that strengthen the muscles in your back, like swimming, yoga, or walking, to enhance flexibility and support your spine. Utilize heat or cold therapy: Apply a heating pad or enjoy a warm bath to help relax tense muscles, or use an ice pack wrapped in a towel to reduce inflammation and alleviate pain. Take regular breaks and stretch: If you have a sedentary job or perform repetitive tasks, make sure to take frequent breaks to stretch your back and relieve any accumulated tension. Please remember that these suggestions are provided for informational purposes only, and it's always advisable to seek personalized advice from a healthcare professional.



# Conclusion and Future Improvements

## 1 What Did We Learn?

We learned how to build a chatbot for gym enthusiasts using Dialogflow, create intents, training phrases, enable webhook fulfillment, and test our chatbot.

## 2 Why the Gym Chatbot?

The Chatbot allows gym-goers to sustain their fitness regime without the additional overhead and take their fitness routine to new heights with the help of technology.