


Dialogflow CX Hands-On Labs: Introduction

Task 1: Creating a New Agent

 Objective: Create an agent for the lab.

Steps:

Navigate to <https://dialogflow.cloud.google.com/cx>


Select your project and click 'Enable API' when prompted

Click 'Create Agent'

Select 'Build your own' and provide a name (e.g., DialogFlox CX Intro)

Select 'global' for the location, leave all other settings at their defaults, and click 'Create'

Task 2: Setting Up the Initial User Greeting

 Objective: Update the initial greeting and establish a route to the initial page.

Steps:

In the left menu, make sure 'Default Start Flow' is selected under 'Build' | 'Flows'

Click 'Start Page' and click on 'Default Welcome Intent'

Under 'Fulfillment' | 'Agent responses', delete all existing agent dialogue


Add a new agent dialogue value -> 'Hi! I need a few details to help you. Let's get started.'

Scroll down to 'Transition', choose 'Page', and select '+ new Page' from the dropdown

Name the new page 'CollectUserDetails'

Click Save.

Task 3: Adding Form Parameters to Collect Info

 Objective: Set up required parameters to collect user name and email with prompts.

Steps:

Select 'CollectUserDetails' under 'Build' | 'Pages'

In the 'Parameters' section, click the '+' sign to add a new parameter

For Parameter 1: name → Entity Type: @sys.person → Required: Checked → Prompt: 'What's your name?'


Click Save.

In the 'Parameters' section, click the '+' sign again to add a second parameter

For Parameter 2: email → Entity Type: @sys.email → Required: Checked → Prompt: 'Hi \$session.params.name! Please provide a valid email address'

Click Save.

Task 4: Route Configuration for Page Transitions

 Objective: Create a new page and route the user to it after collecting info.

Steps:

Under 'Build' | 'Pages', click the '+' sign to add a new page and name it 'ConfirmationPage'

Click the 3 dots next to 'ConfirmationPage' and select 'Edit'

In ConfirmationPage, edit the entry fulfillment message: 'Thanks! We've saved your details. Name: \$session.params.name and Email: \$session.params.email. You're all set.'


Click Save.

Go back to CollectUserDetails → Under 'Routes', click '+'.

Leave Intent empty → Add Condition: '\$page.params.status = "FINAL"' ('Match AT LEAST ONE rule') → Transition to: ConfirmationPage.

Click Save.

Task 5: Using Event Handlers (e.g., no-match)

 Objective: Handle when the user says something unexpected or the bot doesn't understand.

Steps:

On the 'CollectUserDetails' page, select the 'name' parameter

Under 'Reprompt event handlers', click 'Add event handler'

From the 'Event' dropdown, select 'No-input default'

Specify an agent response of 'Sorry – I'll need your name to proceed'

Click Save.

Click Save.

On the 'CollectUserDetails' page, select the 'email' parameter

Under 'Reprompt event handlers', click 'Add event handler'


From the 'Event' dropdown, select 'No-input default'

Specify an agent response of 'Sorry – I'll need a valid email to proceed'

Click Save.

Click Save.

Lab 5: Creating and Reusing Route Groups

 Objective: Create a reusable Route Group to handle common user intents like Help, Cancel, and Start Over.

Steps:

Click 'Manage' | 'Intents'

Create and save the following Intents: HelpIntent (using 'help', 'I need help' for training phrases), CancelIntent (using 'cancel', 'stop' for training phrases), and StartOverIntent (using 'start over', 'restart' for training phrases).

Under 'Manage', click 'Route Groups' → Click the 'Create new' button

Select 'Flow' for the 'Level' and 'Default Start Flow' for 'Flow' → Name it: 'CommonRoutes' → Click Save.


Add Route: HelpIntent → Fulfillment: You can say things like 'cancel', 'start over'.

Add Route: CancelIntent → Fulfillment: Okay, I've canceled your request. → Transition: Page | End Flow.

Add Route: StartOverIntent → Fulfillment: Sure, let's start over. → Transition: Page | CollectUserDetails.

Attach CommonRoutes to pages: CollectUserDetails and ConfirmationPage → Scroll to Route Groups → '+ Add Route Group' → Select CommonRoutes → Save. NOTE: You may have to click 'Add state handler' and click the checkbox next to 'Route Groups' to get that option to display.

Lab 6: Full Conversation Flow Test

 Objective: Test the complete flow with different inputs and observe behaviors.

Steps:

Click 'Test Agent'.

Try: Hi → My name is Sarah → sarah@example.com.

Check that prompts are played and transitions happen.

Try: cancel → Should exit the flow.

Try: help → Should provide help message.

Type random gibberish → Should trigger no-match message.

Try: invalid email → Should trigger standard reprompt (since we use the @sys.email type)

After going through the entire flow, what happens if you type 'start over' and then 'Hi'?