## Lab - Create an Agent for Renting a Car

- In an incognito browser, navigate to <a href="https://app.pluralsight.com">https://app.pluralsight.com</a>
- Log in using the email and password provided to you
- In the upper left, make sure that "Skills" is selected there is a dropdown that you can click to change if needed
- Click "Hands-on" and under "Cloud Sandboxes" click "Get Started"
- You may see an error: "There was a problem loading your playgrounds"; you can safely ignore
- Under "Google Cloud Sandbox", click "Open Sandbox"
- Click the "Start Sandbox" button
- Right-click the "Open Sandbox" button and open the link in a new tab
- Email address should be populated already in the Sign In window; if not, you can copy from the sandbox details screen
- Click "Next"
- For password, copy/paste the password provided to you in the sandbox details screen
- Click "Next"
- If presented with the welcome message, click the "I understand" button
- In the "Welcome" dialog, make sure "United States" is selected under Country and click the checkbox next to "I agree"; click "Agree and Continue"
- From the same incognito session, in a separate tab, navigate to <a href="https://dialogflow.cloud.google.com/cx">https://dialogflow.cloud.google.com/cx</a>
- In the "Select Project" dialog, click "All"
- Choose the project with the name starting with "playground"
- You should be prompted with a dialog asking you if you want to enable the "DialogFlow API"; click "Enable API"
- Click the "Create agent" button
- Click "Build your own"

- For "Display name", enter "Car rental", select "global" for the "Location", leave all other settings at the defaults, and click "Create"
- Modify the default start page
  - Click on "Start Page"
  - Click "Default Welcome intent"
  - o Scroll down to "Agent responses" under "Fulfillment"
  - In "Agent dialogue", add a new welcome message: "Welcome to the Rental Car Robot! How can I assist you today?"
  - Delete all other entries under "Agent dialogue"
  - Click "Save" and then click "Test Agent"
  - Enter "Hello"; you should be presented with the appropriate welcome message
  - Close the "Simulator"
- Click "Manage" | "Intents" | "+ Create"
- Use a meaningful name for the intent e.g., "main.car\_rental"
- Under training phrases, enter each of the following:
  - I want to rent a car.
  - o Can I book a car for next weekend?
  - I need a rental car.
  - I want to reserve a car.
  - o I need a car for the weekend, can you help me?
  - Can I rent a vehicle for my road trip?
  - o I'm looking for a car rental service near me.
  - I want to book a luxury car for a special occasion.
  - Can you reserve a car for me next Friday?
  - o I need a car for business travel, what do you have?
  - Is it possible to rent an SUV for a family trip?

- o I'd like to hire a car for a few days.
- What's the process for booking a rental car?
- Can I get a convertible for my vacation?
- o I need a rental car with unlimited mileage.
- Do you have electric cars available for rent?
- o I'd like to rent a car in Columbus for dropoff in Hilton Head
- Notice annotations applied automatically by DialogFlow
- Click "Save"
- Navigate back to "Build" and click on "Start Page"
- Click the + next to "Routes"
- Under "Intent", select your "main.car\_rental" intent
- Under "Fulfillment", select "Agent responses", and click "+ Add dialogue response"
- Click "Agent dialogue" and add the following: "Great I can help you with your car rentail. Let's get some details."
- Under "Transition", select "Page" and "+ new Page" from the dropdown; for "Page name", enter "Get Rental Details"
- Click "Save"
- Click "Test Agent" and enter "Hello"
- Try different variations of an initial request to rent a car to see how the agent reponds; you can reset the conversation in the Simulator by closing it and clicking "Test Agent" again
- Close the Simulator when finished testing
- Click on the "Get Rental Details" page and click the + next to "Parameters"
- Add a parameter for pickup location:
  - For name enter "pickup\_location"
  - For "Entity type" use "@sys.geo-city"
  - Ensure that "Required" is checked

- Under "Initial prompt fulfillment", click "Agent responses" and "+ Add dialogue response"
- Enter "Where would you like to pick up the car?"
- Click "Save"
- Add a parameter for rental date:
  - For name enter "rental\_date"
  - For "Entity type" use "@sys.date"
  - Ensure that "Required" is checked
  - Under "Initial prompt fulfillment", click "Agent responses" and "+ Add dialogue response"
  - o Enter "Great! When do you need the car?"
  - Click "Save"
- Add a parameter for type of car:
  - For name enter "car\_type"
  - o For "Entity type" use "@sys.any"
  - Ensure that "Required" is checked
  - Under "Initial prompt fulfillment", click "Agent responses" and "+ Add dialogue response"
  - Enter "What type of car would you like to rent (e.g., sedan, SUV, convertible)?"
  - o Click "Save"
- Add a parameter for return date:
  - o For name enter "return\_date"
  - o For "Entity type" use "@sys.date"
  - Ensure that "Required" is checked
  - Under "Initial prompt fulfillment", click "Agent responses" and "+ Add dialogue response"

- o Enter "When will you be returning the rental?"
- o Click "Save"
- Within the "Get Rental Details" page, click the + next to "Routes"
- Under "Condition", make sure "Match AT LEAST ONE rule (OR)" is selected
- In the "Parameter" area under "Condition":
  - o Enter "\$page.params.status" for the parameter name
  - Select "=" from the Operand
  - o For Value, enter "FINAL" (including the double quotes)
- Under "Fulfillment", click "Agent responses" and "+ Add dialogue response"
- Enter "Thank you for providing your information. Let me check on the availability of rentals that match your request."
- Scroll down to the bottom under "Transition" and select "Page"
- Select "+ new Page" from the dropdown and enter "Confirm Details" for the page name
- Click "Save"
- Click on the "Confirm Details" page and click "Edit Fulfillment" under "Entry fulfillment"
- Under "Agent responses", click "+ Add dialogue response" and enter the following for the response:

This is to confirm that you would like to rent car type \$session.params.car\_type to be picked up on \$session.params.rental\_date in \$session.params.pickup\_location, and you will be returning the car on \$session.params.return\_date. Do I have all of that correct?

- Click "Save"
- In your "Confirm Details" page, click the + next to "Routes"
- Under "Intent", click "+ new Intent"
  - o Enter "confirmed.yes" for name
  - For training phrases, enter several variations of "yes" (e.g., yes, yep, you got it, etc.)

- Click "Save"
- Under "Fulfillment", click "Agent responses", and "+ Add dialogue response"
- Enter "Awesome-sauce! You are all set with a rental!"
- Add a new route
- Under "Intent", click "+ new Intent"
  - Enter "confirmed.no" for name
  - For training phrases, enter several variations of "no" (e.g., no, not correct, incorrect, etc.)
  - Click "Save"
- From the "Route" definition section, scroll down to "Transition", click "Page", and choose "Get Rental Details" for the page
- Scroll up to "Parameter presets" and add the following parameters:
  - pickup\_location (for value, use null)
  - rental\_date (for value, use null)
  - car\_type (for value, use null)
  - return\_date (for value, use null)
  - o This will reset the invalid parameter values for reentry by the user
- You can optionally add an agent response associated to the "no" route (e.g., something like "I'm sorry - let's try that again...")
- Click "Save"
- Click "Test Agent" and try out different variations of interaction with the agent
- Try the "yes" and the "no" path
- If you have time left over, try experimenting with adding additional steps or modifying the configuration of your agent