

**COMP3320 Lab 5**  
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**Question 1: (15 marks)**

The Dialogflow has the machine learning (NLP) ability to understand simple sentence. You do not need an exact match of the training phrase in order to get the desired response. Have a look at the default training phrases of the welcome intent. Try to think of a different greeting phrase (different from all default training phrases) such that the chatbot can reply you with the default welcome response. Capture the simulator screen as the answer of question 1.

The screenshot shows the Dialogflow simulator interface. At the top, there is a blue header with the word "Agent". Below this, there is a section labeled "USER SAYS" with the text "Good morning!". To the right of this section is a blue link that says "COPY CURL". Below the user input, there is a section labeled "DEFAULT RESPONSE" with a dropdown arrow. The response text is "Greetings! How can I assist?". Below this, there is a section labeled "INTENT" with the text "Default Welcome Intent". Below that, there is a section labeled "ACTION" with the text "input.welcome". Below that, there is a section labeled "SENTIMENT" with the text "Query Score: 0.9". At the bottom, there is a button labeled "DIAGNOSTIC INFO".

**Question 2: (40 marks)**

Observe the pattern of the training phrases of the welcome intent. Try to think of a greeting sentence that cannot be captured by the welcome intent. The system will then capture it by the default fallback intent.

- Capture the simulator screen as the answer of question 2.
- Briefly explain why it cannot be captured by the welcome intent.
- What should you do to solve this problem?


2a.

Agent

USER SAYS

COPY CURL

How have you been?

 DEFAULT RESPONSE

▼

I missed that, say that again?

CONTEXTS

RESET CONTEXTS

\_\_system\_counters\_\_

INTENT

Default Fallback Intent

ACTION

input.unknown

SENTIMENT

Query Score: 0.0

2b. The greeting sentence cannot be matched by the welcome intent because the agent does not recognize the end-user expression, which is “How have you been?”. This is because the expression inputted by the user is not similar to any of the training phrases in the default welcome intent. What an intent does is to detect expressions inputted by the users, and return a corresponding reply when the intent can catch the input.

In this case, the default fallback intent is matched and the agent returns one of the default replies in the fallback intent.

2c. We have to add more training phrases so the default welcome intent can match more end-user expressions. The Training phrases list is a list of end-user expressions that the end-user might type to the chatbot. Dialogflow will match the end-user expression to an intent if the expression resembles one of the training phrases.

To use the previous example, training phrases like "How have you been doing recently?" or "How are you doing?" could be used so that the agent can recognize similar expressions e.g., "How have you been"? In conclusion, during development and testing, many different expressions have to be used to invoke the intent, and continually update the custom values and training phrases to make sure we've covered all potential phrasings.

### Question 3: (15 marks)

Capture the simulator screen as the answer of question 3

● get-agent-name

SAVE

Events ?

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.

” Add user expression

” Tell me your name

” Do you have a name?

” What is your name?

Try it now

Agent

USER SAYS [COPY CURL](#)

What's your name?

🗨 DEFAULT RESPONSE

My name is BOT3035604439!

CONTEXTS [RESET CONTEXTS](#)

\_\_system\_counters\_\_

INTENT

get-agent-name

ACTION

Not available

SENTIMENT

Query Score: 0.0

#### Question 4: (15 marks)

In the simulator, enter: I know how to code in py.

Capture the simulator screen as the answer of question 4.

You should see that Dialogflow correctly extracted py for the language-programming parameter, identified it as the Python entity, and inserted the value in the response.

Agent

USER SAYS

COPY CURL

I know how to code in py.

DEFAULT RESPONSE

Python is an excellent programming language.

INTENT

set-language

ACTION

Not available

PARAMETER

VALUE

language-programming Python

language

SENTIMENT

Query Score: 0.0

DIAGNOSTIC INFO

### Question 5: (15 marks)

Enter “I know Cantonese” in the simulator, then answer the question “How long have you known Cantonese” with “for 20 years”.

Notice that the language parameter value is retrieved from the context. Capture the simulator screen as the answer of question 5.

 DEFAULT RESPONSE ▼

I can't believe you've known Cantonese for 2 decade!

CONTEXTS

[RESET CONTEXTS](#)

set-language-followup

INTENT

set-language - custom

ACTION

set-language.set-language-custom

PARAMETER

VALUE

date-time

duration

{ "unit": "decade", "amount": 2 }

SENTIMENT

Query Score: 0.1

DIAGNOSTIC INFO