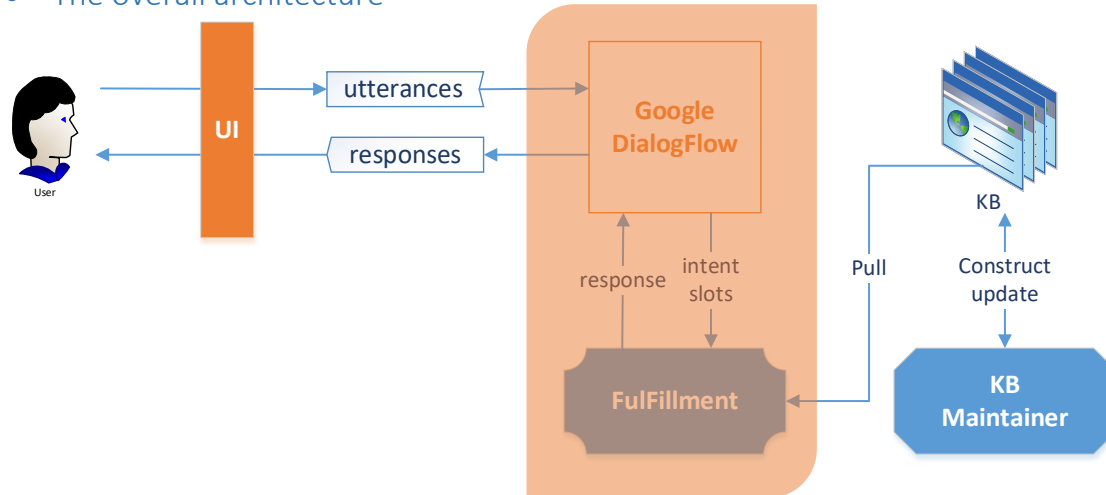


Cognitive System Day 1 Workshop

Overview

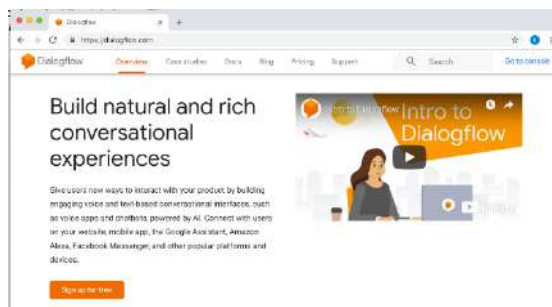
- The overall architecture



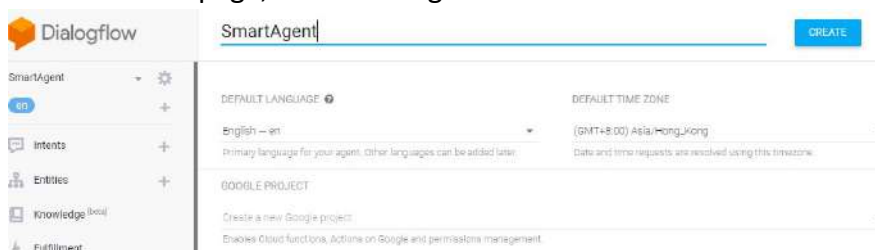
- Part 1, Create Agent in Dialogflow
- Part 2, Create Knowledge base from Q&A documents with default response
- Part 3, Create Knowledge base from plain documents with default response

Part 1

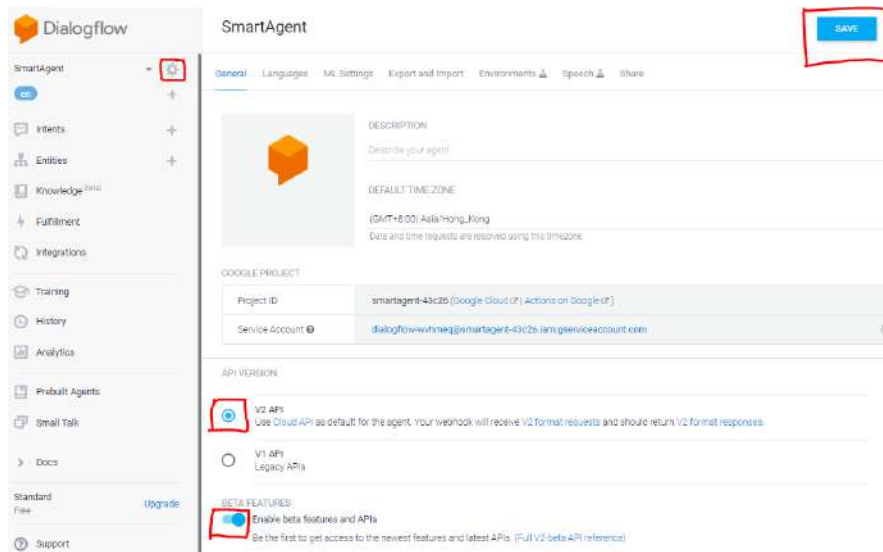
1. Login to [DialogFlow](https://dialogflow.com) using your Google account by clicking the “Sign up for free” button.



2. In the console page, Create an Agent

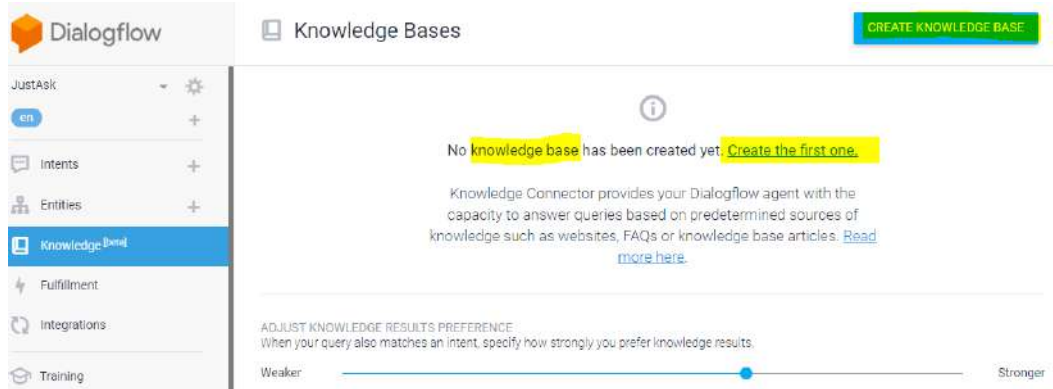


3. Setup the Agent by selecting V2 API and Enable beta features for KB

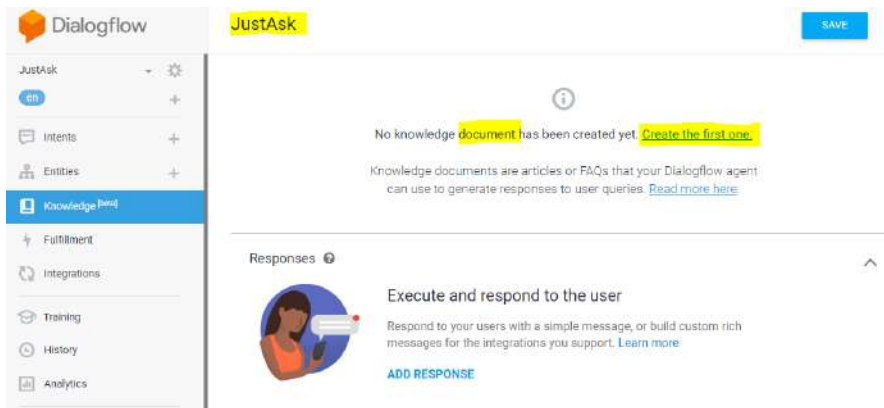


Part 2

1. Click the “Knowledge” tab and create the first KB with a name for example “FAQKB”
Move the slider towards “Stronger” to make the “FAQKB” more sensitive.



2. Create the document from DBS FAQ URL. Select “FAQ” and “html” as the type and copy the URL <https://www.dbs.com.sg/personal/cards/cards-faqs.page#> into the slot



Create New Document

Document Name *
DBSFAQ

Knowledge Type *
FAQ

Mime Type *
text/html

DATA SOURCE

☐ File on Cloud Storage:
gs://bucket-name/object-name

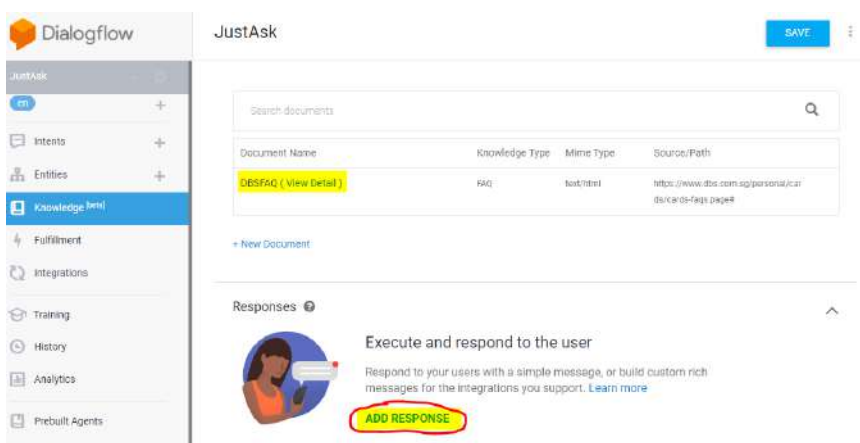
☒ URL
<http://www.example.com/faq>
<https://www.dbs.com.sg/personal/cards/cards-faqs.page#>

☐ Upload file from your computer

[SELECT FILE](#)

[CREATE](#)

3. Add Response: Add the first answer provided by DialogAI as default response. You can view the questions logged in KB by clicking the “**View Details**”



Dialogflow JustAsk SAVE

Search documents

Document Name	Knowledge Type	Mime Type	Source/Path
DBSFAQ (View Detail)	FAQ	text/html	https://www.dbs.com.sg/personal/cards/cards-faq-page#

+ New Document

Responses ⓘ

DEFAULT +

Text response

- Knowledge Answer(1)
- Enter a text response variant

- Try out the questions on the right hand panel. Noted that the questions may not be exactly the same in the webpage. The Fulfillment should be able to handle this situation. The Intent was detected by the DialogFlow automatically.

DBSFAQ SAVE

Search question answer entries

1 OF 8

Question	Status
Question: How do I earn points? Answer: You earn 1 DBS Point for every S\$5 retail purchase charged to your DBS Credit Card. Points are calculated on each transaction and rounded down to the nearest whole number.	ENABLED
Question: How long do I get interest-free on purchases? Answer: You will have 20 interest-free days to make payment before your next Statement of Account is	ENABLED

how to earn points

See how it works in Google Assistant.

Agent

USER SAYS: How to earn points COPY CURL

DEFAULT RESPONSE: You earn 1 DBS Point for every S\$5 retail purchase charged to your DBS Credit Card. Points are calculated on each transaction and rounded down to the nearest whole number.

INTENT: Knowledge:KnowledgeBase.MTA0MjU1NjA0NT...

Part 3

1. Download and run the python script from Google Drive
<https://drive.google.com/file/d/1V0r5ASU5wtrQGaUle7RI9oKjrJGiBG-C/view?usp=sharing>

It **crawls** the descriptions of companies providing Airport System solution from [AIRPORT Tech](#) .

The output is the text file "[Air Traffic Control Solutions.txt](#)", will be used as textual knowledge.

2. Create a new document within the KB "JustAsk" and select the "KB Article" with "plain text". Upload the "[Air Traffic Control Solutions.txt](#)" obtained from step 1.

The first screenshot shows the Dialogflow 'Knowledge Bases' page. The 'JustAsk' knowledge base is selected. Below the search bar, there is a section titled 'ADJUST KNOWLEDGE RESULTS PREFERENCE' with a slider ranging from 'Weaker' to 'Stronger'. The second screenshot shows the 'JustAsk' knowledge base configuration page. The 'Knowledge (beta)' tab is selected. A table lists documents, with one entry 'DBSFAQ (View Detail)' having a 'Knowledge Type' of 'FAQ' and a 'Mime Type' of 'text/html'. A red box highlights the '+ New Document' button below the table.

Document Name	Knowledge Type	Mime Type	Source/Path
DBSFAQ (View Detail)	FAQ	text/html	https://www.dbs.com.sg/personal/cards/cards-faq-page#

+ New Document

Create New Document

Document Name *

Air Traffic Solution

Knowledge Type *

Extractive Question Answering

Mime Type *

text/plain

DATA SOURCE

☐ File on Cloud Storage

gs://bucket-name/object-name

☐ URL

http://www.example.com/faq

☒ Upload file from your computer

SELECT FILE

Air Traffic Control Solutions.txt ✕

CREATE

Document Name *

Air Traffic Solution

Knowledge Type *

Extractive Question Answering

Mime Type *

text/plain

DATA SOURCE

☐ File on Cloud Storage

gs://bucket-name/object-name

○ URL

<http://www.example.com/faq>


 Upload file from your computer

SELECT FILE

Air Traffic Control Solutions.txt ✕

CREATE

3. Till now, there should be two pieces of docs under the KB of *JustAsk*. Double check the default response from *KnowledgeAnswer* has been specified and save the KB



Dialogflow

SAVE

Agent-QA ▾ ⚙️

en +

Intents +

Entities +

Knowledge [Beta]

Fulfillment

Integrations

Training

Validation

History

Analytics

Prebuilt Agents

JustAsk

Document Name	Knowledge Type	Mime Type	Source/Path
Air Traffic Solution	EXTRACTIVE_QA	text/plain	File uploaded
DBS (View Detail)	FAQ	text/html	https://www.dbs.com.sg/personal/cards/cards-faqs.page#

[+ New Document](#)

Responses ⓘ

[DEFAULT](#) +

Text Response ⓘ 🗑️

1 SKnowledge Answer[1]

Agent-QA

en

Intents

Entity

 Knowledge ^(beta)

⚡ Fulfillment

 integrations Training☒ Validation

History

Analytics

 Default Agents

JustAsk

SAVE

Document Name	Knowledge Type	Mime Type	Source/Path
Air Traffic Solution	EXTRACTIVE_QA	text/plain	File uploaded
DBS (View Detail)	FAQ	text/html	https://www.dbs.com.sg/personal/cards/cards-faq#page#

+ New Document

Responses ?

DEFAULT +

Text Response

```
1 $Knowledge.Answer[1]
```

4. Try it out with some questions related to the Air Traffic Control Solutions.txt

Try it now

Try it now

See how it works in Google Assistant.

See how it works in Google Assistant.

Agent

Agent

USER SAYS

how does 247GT work

COPY

CURL

USER SAYS

what is 2N

COPY

CURL

DEFAULT RESPONSE

247GT 247GT delivers cost-efficient aircraft ground support equipment (GSE) and services for international airports and aviation GSE markets. Ground support equipment for the aviation industry 247GT supplies a wide range of ground support equipment for aircrafts such as de-icers, loaders, wheel chocks and connection products. The company provides additional tools to support aviation operations, including: Translators and loaders The FOD

DEFAULT RESPONSE

2N NetSpeaker The 2N NetSpeaker is an IP system used for broadcasting audio streams from a PC in a LAN/WAN network. The 2N NetSpeaker can stream music or other audio, schedule adverts and broadcast pre-recorded or live announcements using a microphone. To create a broadcasting system with 2N NetSpeaker, users simply connect the product to a speaker or amplifier. User-friendly airport speaker system The 2N NetSpeaker's universal infrastructure means

Moreover

- When the agent is not able to detect the intent or match the intent with the KB, it falls back to the unknown intent. By clicking the “Default Fallback Intent”, Text response can be specified to deal with this situation better.

Default Fallback Intent

SAVE

how is the weather

See how it works in Google Assistant.

Agent

USER SAYS

how is the weather

COPY

CURL

DEFAULT RESPONSE

I didn't get that. Can you repeat?

Sorry, I am able to answer questions about DBS banking and Air Traffic solution topics. Could you try it out?

INTENT

Default Fallback Intent

ACTION

Input.unknown

Text response

1

Sorry, I am able to answer questions about DBS banking and Air Traffic solution topics. Could you try it out?