

Details of Alexa Demo GITEX 2018

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Basic setup

Follow any online tutorial to build a simple Alexa skill. After that, you should have an aws developer account (<https://developer.amazon.com/>) and cloud account. Developer account allows you to define the Alexa intent model. Like the utterance “I want to book a hotel” will be detected as “booking_hotel” intent. Then these intents will be passing to an application for business logic. And most likely we will run our business application as a function at aws Lambda.

Code

Both Alexa model and python application are in the following location.

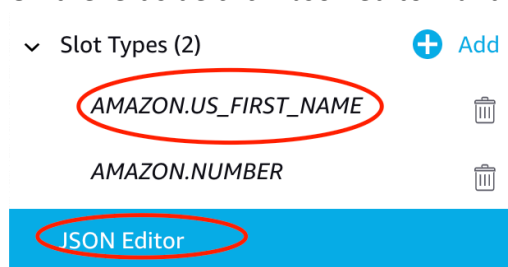
<https://github.com/dashjim/gitex-alexa.git>

Be aware that there are two branches and the latest code is NOT in master branch, it is in the **beyond_bank** branch as follow.

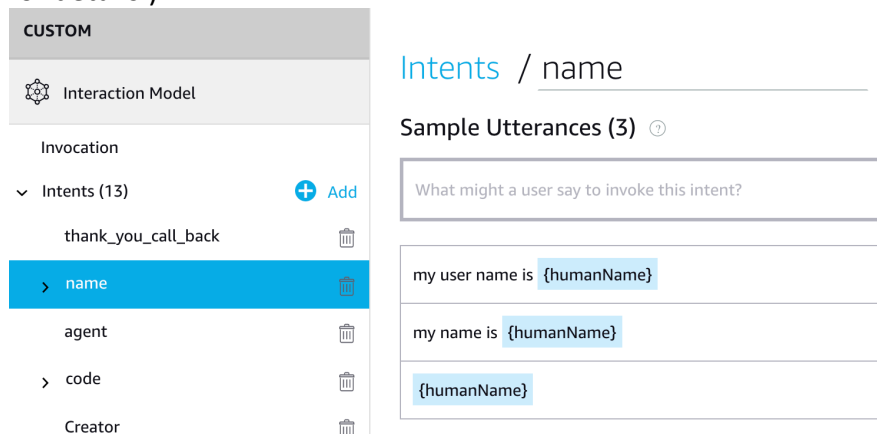
<https://github.com/dashjim/gitex-alexa/tree/beyond-bank>

How to set up these code

1. Set up the model
 - a. Login aws developer account and goes to the skills
 - b. On the left side click “Json editor” and past the “model.json” and save it



- c.
 - d. If you want to **add a new user**, you need to add it by clicking the “AMAZON.US_FIRST_NAME” and add your user name there. These detected names will be passing to our Python function later. (Check the “name” intent for details.)



- e.
 - f. Make sure to **save and build model** to make it take effect.

- g. You should be able to **verify** the model now at the Echo device.
2. Set up the Python code
 - a. Name “alexapy.py”
 - b. Past it to the online lambda code editor
 - c. And with the following configuration

Function code [Info](#)

Code entry type Edit code inline ▼	Runtime Python 3.6 ▼	Handler Info alexa.lambda_handler
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d.

About the alexapy.py

To **add a user**, you need to check two places in the code with word “Peter” and change it accordingly.

I will try to explain there:

- (Need to change if adding users) Customer_numbers holds the mapping to get the phone number from user name.

```

4 session_store = {}
3 phone_number_store = {}
2 user_name_store = {}
1 customer_number_for_SMS = "971505592712"
19 customer_numbers = {"Sara": "971505592712", "Peter": "971561086668"}
1 SMS_BODY_PIN = '[1234] This is the verification code from Beyond Bank.'
2 SMS_BODY_VIDEO = 'Change me - I am a video sms body.'
3

```

- (Need to change if adding users) When alexa intent model passing the intent to us, the user name is included and we need to extract it.

```

7 def extract_user_name(intent):
6     if 'slots' in intent:
5         slots = intent['slots']
4         for key, val in slots.items():
3             if val.get('value'):
2                 if 'Sara' in (val.get('value')) or 'sara' in (val.get('value')):
1                     return 'Sara'
282                elif 'Peter' in (val.get('value')) or 'peter' in (val.get('value')):
1                     return 'Peter'
2     return "no_name"
3

```

- (NO Need to change for adding users) When sending SMS to verify the user, we will first check if the name is in our dictionary or not, if not, then we will ask user to give us there name again. If we know the user then we will send SMS.

```

11     elif intent_name == "name":
10         if session_store.get(sid_) is None:
9             session_store[sid_] = ["enter skill and get user name."]
8         else:
7             session_store[sid_].append("enter skill and get user name.")
6
5         cust_name = extract_user_name(intent)
4         if cust_name not in customer_numbers:
3             return get_user_name_response()
2         user_name_store[sid_] = cust_name
1         session_store[sid_].append(cust_name)
389         requestSMS(customer_numbers[cust_name], SMS_BODY_PIN)
1         return get_response_for_name(intent, session)
2

```

- (NO Need to change for adding users) At the end of Alexa flow, Alexa will send the user name to ED.

```

1
161 def r(sid, number="0", user_name="no_name"):
1     conn = http.client.HTTPConnection("94.207.38.203")
2     # json.dumps(phone_number_store[sid])
3     payload = "-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"family\"\r\n\r\n \
4         \"GitexAlexa\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"type\" \" \
5         \"\r\n\r\nRestCallEd\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; \" \
6         \" name=\"version\"\r\n\r\n1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: \" \
7         \"form-data; name=\"eventBody\"\r\n\r\n{\"intent\":\"carLoan\", \"lastConversation\":\" \
8         + json.dumps(session_store[sid]) + \"\", \"phoneNumber\":\"\" + number + \"\", \"UserName\":\"\" + user_name + \"\"} \" \
9         \"\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"\" \

```

I have added two users, so please also use the following command to take a look at what is required for adding new user Venky and Kuntal. The code is in new git branch “venky-kuntal”

git diff 34147e7~ 34147e7

ED Flow

ED flow also needs some change if we want to add a new user.

In lab environment, you should see a flow named AlexaTriggerCallbackNoAnnouncement under “United Arabic Kingdom” folder and in the deployed flows you should see an alexa flow at version “26”. This flow is quite simple. And the user name, phone and other config are all defined in the **Attributes**, you need to add new properties accordingly, and add a new branch, just like the existing branches for Sara and Peter.

<div> <div>+ Create Instance</div> <div>⚙ Undeploy Workflow</div> <div>Attributes</div> </div>		
<input type="checkbox"/>	Workflow Name	Version
<input type="checkbox"/>	NetherlandsOceanaVoiceAssist_DD	7
<input type="checkbox"/>	NetherlandsOceanaVoiceAssist_DD	6
<input type="checkbox"/>	NetherlandsOceanaVoiceAssist_DD	5
<input type="checkbox"/>	NetherlandsOceanaVoiceAssist_DD	4
<input type="checkbox"/>	NetherlandsOceanaVoiceAssist_DD	3
<input type="checkbox"/>	NetherlandsOceanaVoiceAssist_DD	2
<input type="checkbox"/>	NetherlandsOceanaVoiceAssist_DD	1
<input checked="" type="checkbox"/>	AlexaTriggerCallbackNoAnnouncement	26

Click the Attributes to change the phone number.

Workflow Attributes	
Name	Value
agentName	Beyond_Bank
agentNumberPeter	19711112
agentNumberSara	19711111
customerNumberPeter	29711018
customerNumberSara	29711019
Showing 1 to 9 of 9 rows	
Close	

Current ED flow will send SMS to different numbers according to their name.

