Lex

-Lex is a AWS service Which provide a conversational interface to applications using voice and text

Create an account in AWS. Then choose Amazon LEX from the services.

1)create a new bot

https://tutorials.botsfloor.com/say-hello-to-your-own-amazon-lex-chat-bot-9f22e7a0f9b0

Select custom bot→ give the details and create the bot→ create an alias name

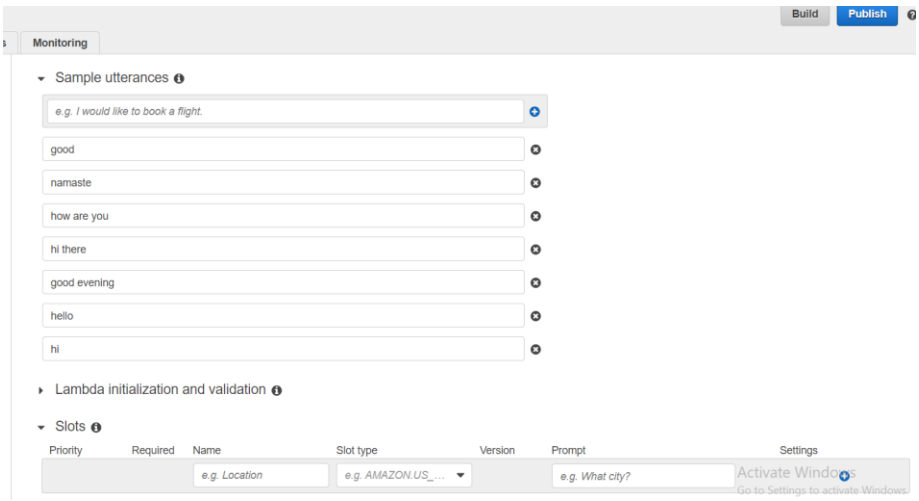
2)create intent

A chatbot is a collection of responses for certain messages which is stored in intents

Click create intent→ name the intent→ Add sample utterances

3)Sample Utterances

Utterances are the phrases that you want this intent to reply to.



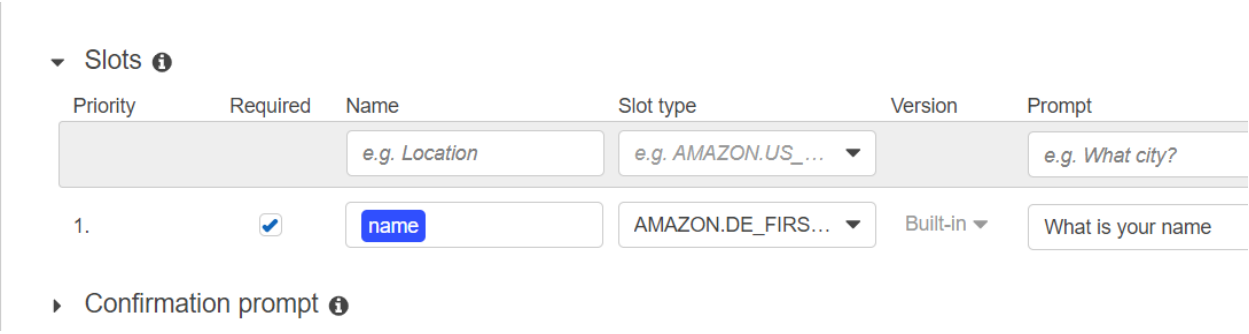
4)Slots

In Lex, variables are stored in **Slots** that contain the following:

- property name
- slot type
- prompt.

There are a few different ways to create new slots and I'll discuss a few methods below.In the **Slots** section, add the following information to create a new slot.

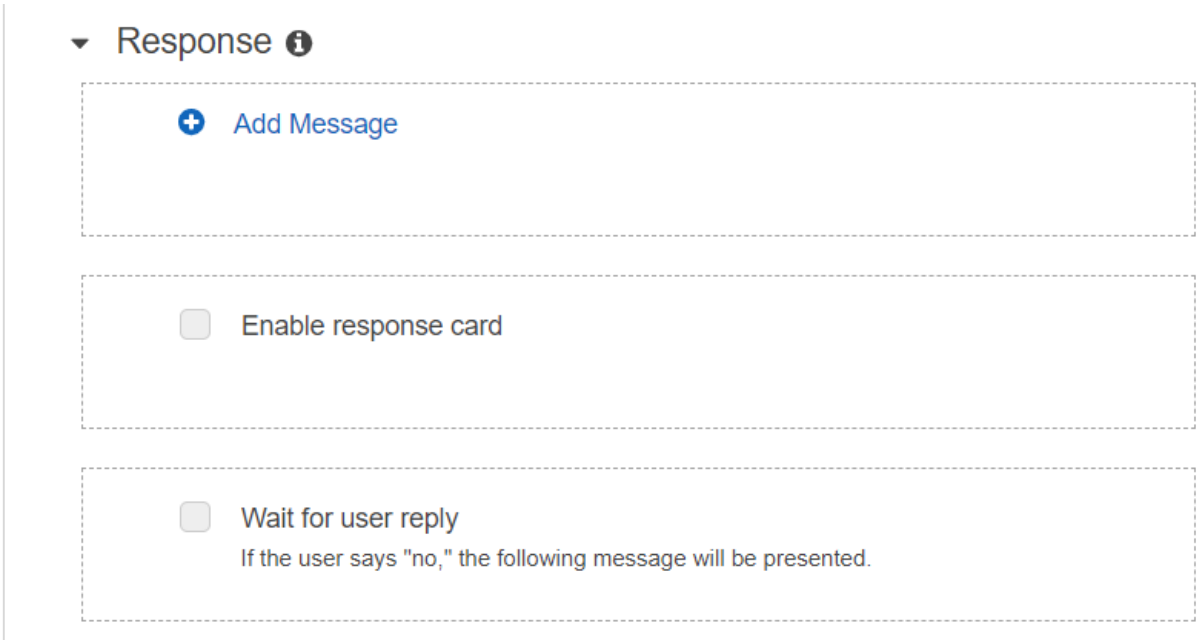
- Name: "Name"
- Slot type: "AMAZON.GB_FIRST_NAME"
- Prompt: "Hi there, what's your name?"



The smart bit about Amazon Lex is that it uses Natural Language Understanding (NLU) to work out what the user is trying to say.

5)Response

No we need to reply to this message. Click the "Add Message" button in the response box. This creates a new message box for us to fill in.



In here you can type in whatever you want the bot to respond. You can enter multiple answers so the user can get varied and more natural responses.

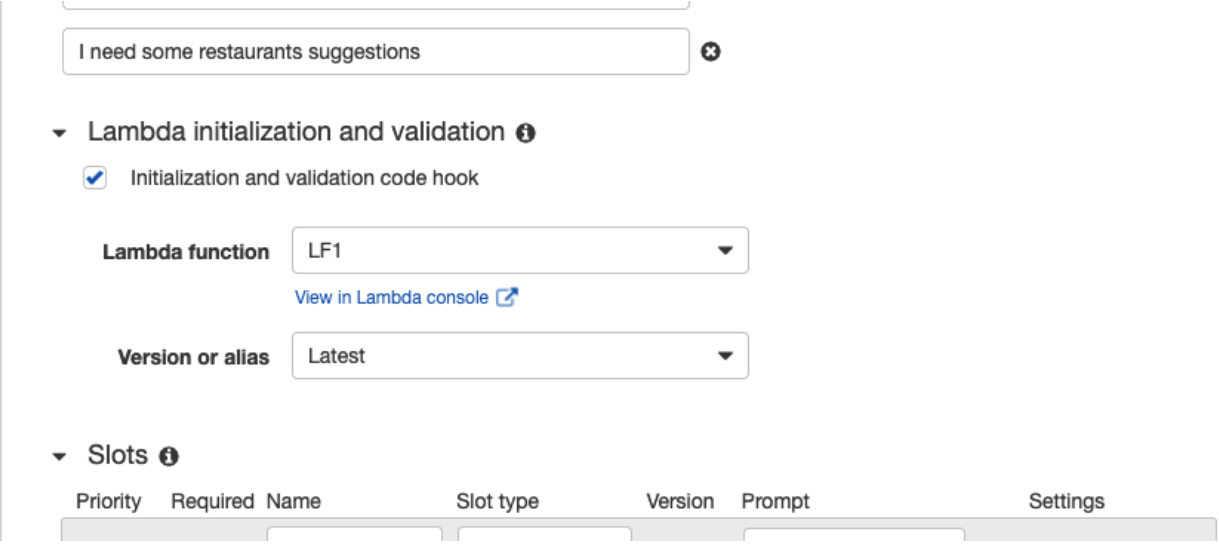
Lex input json format

https://medium.com/velotio-perspectives/amazon-lex-aws-lambda-beyond-hello-world-1403c1825e72

Changed the invocation source to fulfillment codehook for invoking lambda LF1 to push message to sqs

- **invocationSource:** Its value directs the reason for invoking the Lambda function. It can have the following two values:
- DialogCodeHook: This value directs the Lambda function to initialize the validation of user's data input. If the intent is not clear, Amazon Lex can't invoke the Lambda function.
- FulfillmentCodeHook: This value is set to fulfill the intent. If the intent is configured to invoke a Lambda function as a fulfillment code hook, Amazon Lex sets the invocationSource to this value only after it has all the slot data to fulfill the intent.

6)LEX integration with Lambda LF1



Choose the corresponding lambda

Thing to remember :The variable name should be same in both lex and lambda.Else null value will return in sqs.

Now click the save intent and then we can build and test intent.

7)Building and Testing the Bot

To get your new chatbot working we first need to build it. This allows Lex to take your sample utterances and put them all together. Click the “Build” button on the top right of the page (and click on “Build” once again if a pop-up is displayed). It can take a few minutes to finish building the bot so be patient.

When it’s finished you get a new area on the right called *Test Bot (latest)*. This is where you can try chatting to your newly created bot and test it out. Try asking your new bot it’s name.