

Agenda: Create lambda function used for Lex bot validation and fulfilment

We need to do following:

1. Create a lambda function that can fulfil Lex responses
2. Create Lex chat bot

Reference docs:

You can open these docs for further information

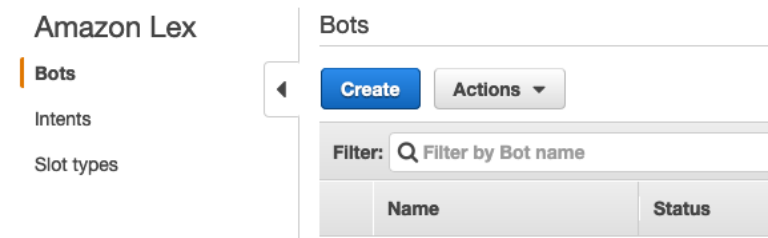
Create an Amazon Lex Bot (Console) - <https://docs.aws.amazon.com/lex/latest/dg/gs-bp-create-bot.html>

Create a Lambda Function (Console) - <https://docs.aws.amazon.com/lex/latest/dg/gs-bp-create-lambda-function.html>

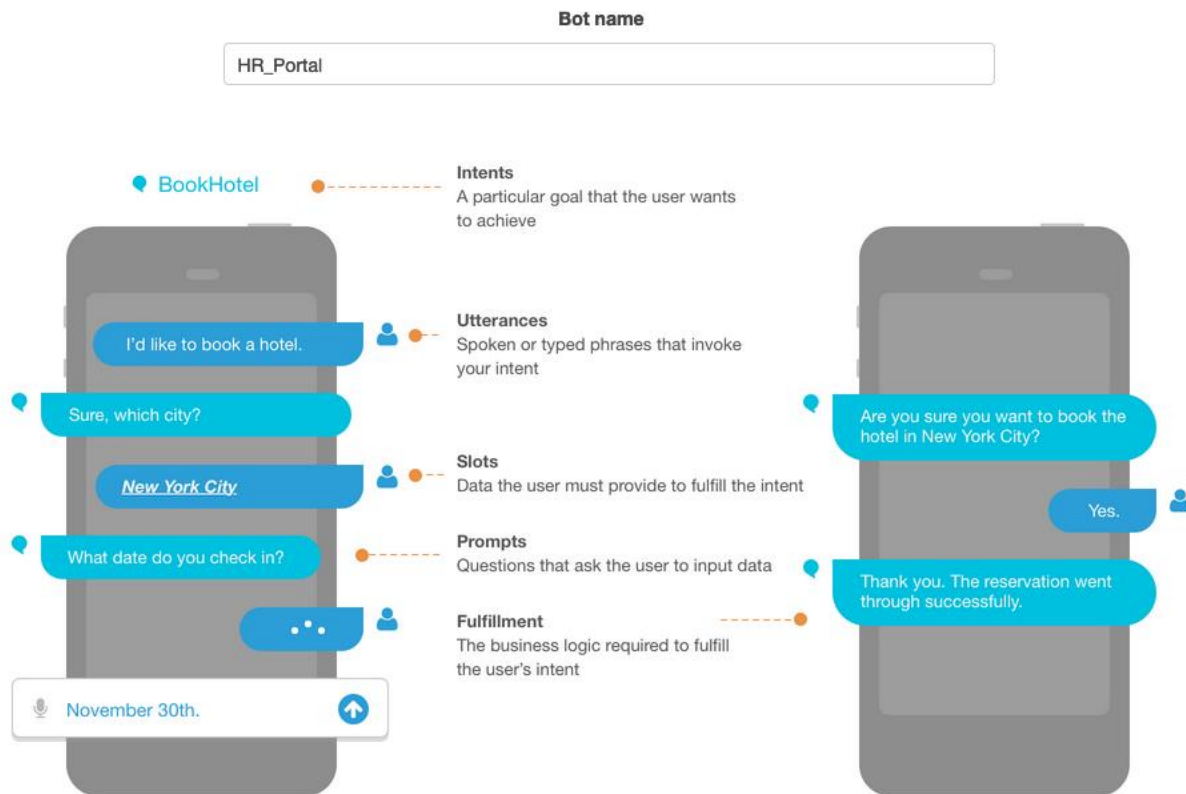
Steps:

Navigate to Lex

1. Create a new chatbot



2. Enter the bot name HR_Portal



IAM role [AWSServiceRoleForLexBots](#)
Automatically created on your behalf



COPPA Please indicate if your use of this bot is subject to the [Children's Online Privacy Protection Act \(COPPA\)](#). [Learn more](#)

☐ Yes ☒ No

3. Create intent

Create intent ✕

Give a unique name for the new intent

DoSomething

Previous
Add

4. Create

1. Utterances
2. Slots
3. Fulfillment Lambda

DoSomething Latest ▾

▼ Sample utterances ⓘ

+

✕

✕

▶ Lambda initialization and validation ⓘ

▼ Slots ⓘ

Priority	Required	Name	Slot type	Version	Prompt	Settings
		<input type="text" value="e.g. Location"/>	<input type="text" value="e.g. AMAZON.US_..."/>		<input type="text" value="e.g. What city?"/>	+
1.	<input checked="" type="checkbox"/>	<input type="text" value="Name"/>	<input type="text" value="AMAZON.US_FIRS..."/>	Built-in ▾	<input type="text" value="who is this?"/>	⚙️ ✕

▶ Confirmation prompt ⓘ

▼ Fulfillment ⓘ

☒ AWS Lambda function
 ☐ Return parameters to client

Lambda function

[View in Lambda console](#)

Version or alias

4. Create a new lambda function with 2.7 python as Runtime language and Create new role

Basic information

Function name
Enter a name that describes the purpose of your function.

Use only letters, numbers, hyphens, or underscores with no spaces.

Runtime ⓘ
Choose the language to use to write your function.

Permissions ⓘ
Lambda will create an execution role with permission to upload logs to Amazon CloudWatch Logs. You can configure and modify permissions further when you add triggers.

▼ Choose or create an execution role

Execution role
Choose a role that defines the permissions of your function. To create a custom role, go to the [IAM console](#).

☐ Create a new role with basic Lambda permissions
☐ Use an existing role
☒ Create a new role from AWS policy templates

ⓘ Role creation might take a few minutes. The new role will be scoped to the current function. To use it with other functions, you can modify it in the IAM console.

Role name
Enter a name for your new role.

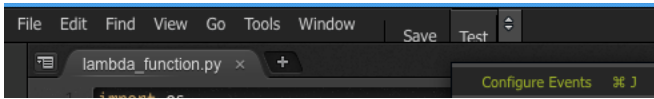
Use only letters, numbers, hyphens, or underscores with no spaces.

Policy templates - optional ⓘ
Choose one or more policy templates.

Cancel Create function

5. Copy code from Lab1.py in Lambda editor

6. Configure sample test event to test the code



Configure test event



A function can have up to 10 test events. The events are persisted so you can switch to another computer or web browser and test your function with the same events.

- ☐ Create new test event
☒ Edit saved test events

Saved test event

DoSomething



```
1 {  
2   "messageVersion": "1.0",  
3   "invocationSource": "DialogCodeHook",  
4   "userId": "test_user",  
5   "sessionAttributes": {},  
6   "bot": {  
7     "name": "HR_Bot",  
8     "alias": "$LATEST",  
9     "version": "$LATEST"  
10  },  
11   "outputDialogMode": "Text",  
12   "currentIntent": {  
13     "name": "DoSomething",  
14     "slots": {  
15       "Name": "sam"  
16     },  
17     "confirmationStatus": "None"  
18   }  
19 }
```

Delete

Cancel

Save

```
{  
  "messageVersion": "1.0",  
  "invocationSource": "DialogCodeHook",  
  "userId": "test_user",  
  "sessionAttributes": {},  
  "bot": {  
    "name": "HR_Bot",  
    "alias": "$LATEST",  
    "version": "$LATEST"  
  },  
  "outputDialogMode": "Text",  
  "currentIntent": {  
    "name": "DoSomething",  
    "slots": {  
      "Name": "Srinivas"  
    },  
  },  
}
```

```
"confirmationStatus": "None"
}
}
```

Add more prompts and corresponding utterances to the slot, remember to BUILD again

Name settings

Prompts

e.g. What is your destination?

+

whats you name?

x

who is this?

x

Maximum number of retries

2

Corresponding utterances

e.g. I would like to go to {toCity}

+

my name is {Name}

x

Cancel

Save

Test your bot and ask me questions😊

Ref: <https://docs.aws.amazon.com/lex/latest/dg/lambda-input-response-format.html>