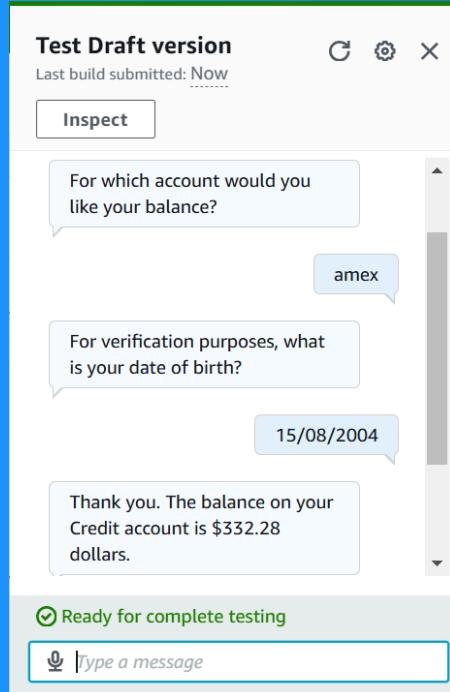




Connect a Chatbot with Lambda



Kunal Parkhade





Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is an AWS service to build chatbot that will take the user input in text or voice format and it will give response accordingly. It is useful because it provides end-to-end solution to build, publish, deploy and monitor chatbots.

How I used Amazon Lex in this project

I used Amazon Lex for connecting a Chatbot with Lambda that facilitates managing servers without running code.

One thing I didn't expect in this project was...

I am not expecting the TestBotAlias will work like that.

This project took me...

This project takes around 40 minutes.



Kunal Parkhade
NextWork Student

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AWS Lambda Functions

AWS Lambda is a service that lets us run the code without provisioning or managing servers.

In this project, I created a Lambda function to give quick answers to the users when they ask about account balance.

The screenshot shows the AWS Lambda Function Editor interface. At the top, a green banner displays the message "Successfully updated the function BankingBotEnglish." The main area is divided into sections: EXPLORER, lambda_function.py, and TEST EVENTS. The EXPLORER section shows a folder named "BANKINGBOTENGLISH" containing "lambda_function.py". The lambda_function.py file is open in the editor, displaying Python code. The code includes imports for json, random, and decimal, along with functions for generating random numbers and processing intent requests. The TEST EVENTS section indicates that no test events have been created. The bottom of the interface shows ENVIRONMENT VARIABLES.

```
lambda_function.py
1 """
2 How does AWS Lambda cheer up Amazon Lex? By saying, "Don't worry, I've got your back(end)!"
3
4 - NextWork -
5 """
6 import json
7 import random
8 import decimal
9
10 def random_num():
11     return decimal.Decimal(random.randrange(1000, 50000))/100
12
13 def get_slots(intent_request):
14     return intent_request['sessionState']['intent']['slots']
15
16 def get_slot(intent_request, slotName):
17     slots = get_slots(intent_request)
18     if slots is not None and slotName in slots and slots[slotName] is not None:
19         return slots[slotName]['value']['interpretedValue']
20     else:
21         return None
22
23 def get_session_attributes(intent_request):
```



Kunal Parkhade
NextWork Student

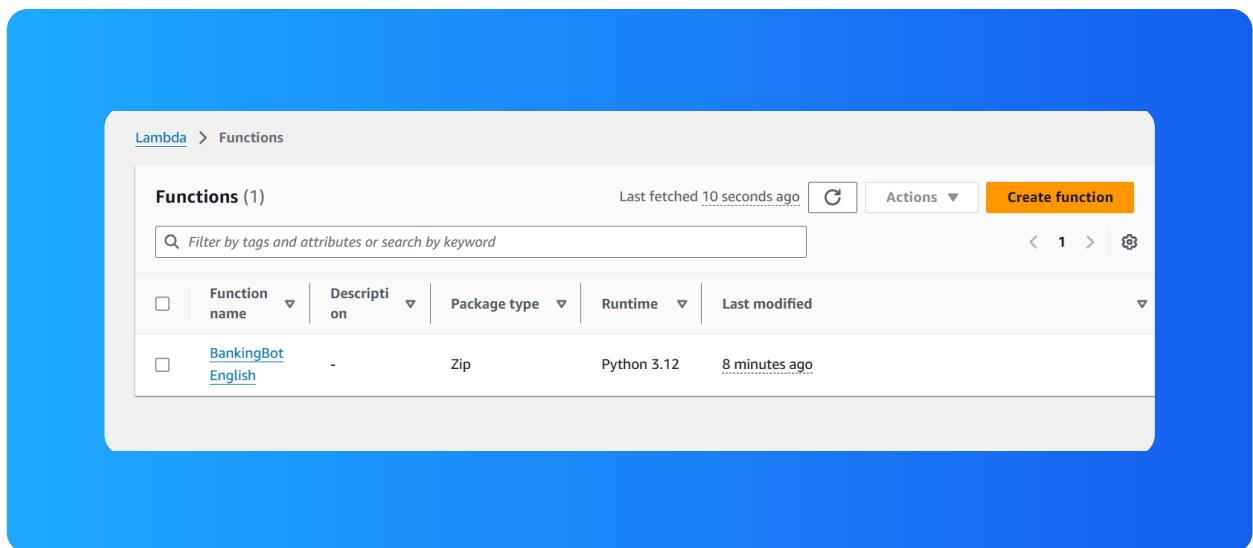
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Chatbot Alias

An alias is a pointer for a specific version of the bot.

TestBotAlias is a default alias which is used for Testing and Development

To connect Lambda with my BankerBot, I visited my bot's TestBotAlias and define source and lambda function version as '\$LATEST'





Kunal Parkhade
NextWork Student

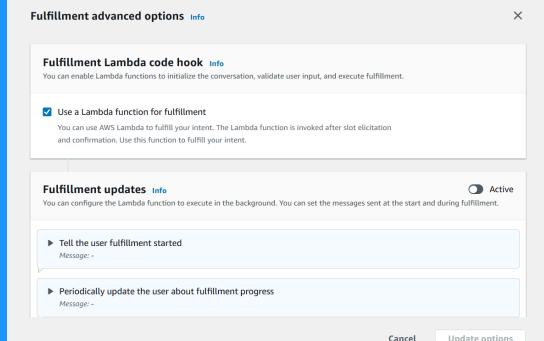
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Code Hooks

A code hook helps for connecting the chatbot to Lambda function for doing specific task during a conversation. Code hook makes the chatbot smarter by handling complex actions which a basic chatbot can't handle.

Even though I already connected my Lambda function with my chatbot's alias, I had to use code hooks because it handles more complex actions like checking data from a database.

I could find code hooks at fulfilment panel of CheckBalance intent.



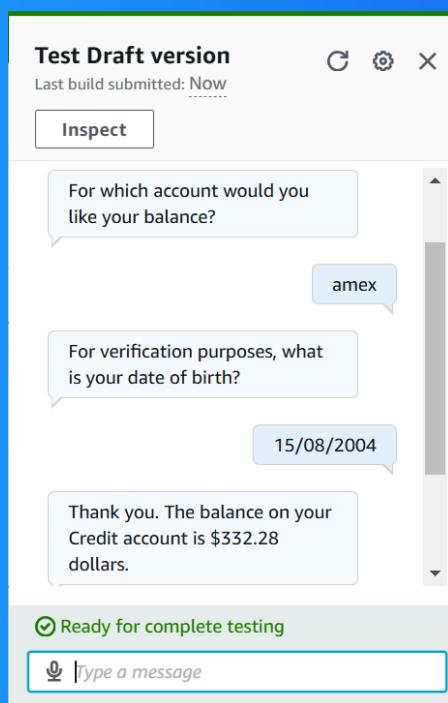


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The final result!

I've set up my chatbot to trigger Lambda and return a random dollar figure when user will give information for verification purpose.





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