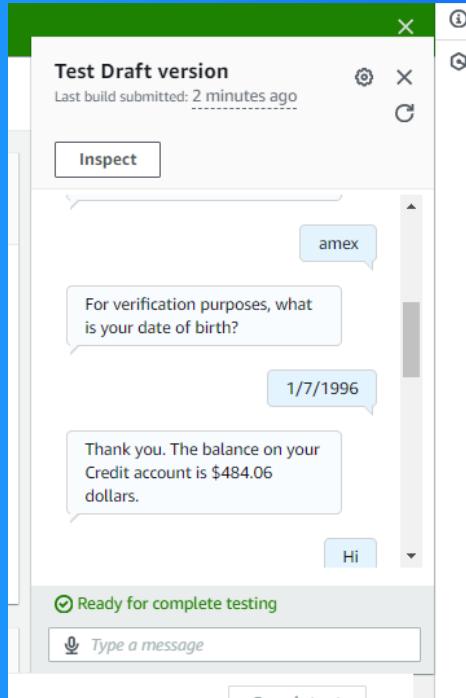




# Connect a Chatbot with Lambda



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# Introducing Today's Project!

## What is Amazon Lex?

Amazon Lex builds chatbots using natural language, making it easy to create scalable and automated conversations.

## How I used Amazon Lex in this project

Today we used Lex in AWS lambda function, where user can get random account balance when asked to check the balance. We deployed a code for the automatic reply which is so helpful.

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

That random reply from bot while asking for check balance. I'm still getting confused how it will get random numbers.

## This project took me...

It takes nearly 1 hour to complete my project and documentation and also for Q/A session.

# AWS Lambda Functions

AWS Lambda is a serverless compute service that runs your code in response to events, such as API requests or file uploads, without managing servers. It scales automatically, supports multiple programming languages, and charges only for execution time.

In this project, I created a Lambda function to run the code, which will pick a random number to pretend it's the balance which someone ask about account balance. It will pass this random number to Lex, which will push balance.

The screenshot shows the AWS Lambda Function Editor interface. The left sidebar displays the function structure with a single file named `lambda_function.py`. The main area shows the Python code for the Lambda function:

```
10 def random_num():
11     return decimal.Decimal(random.randrange(1000, 50000))/100
12
13 def get_slots(intent_request):
14     slots = 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):
24         sessionState = intent_request['sessionState']
25         if 'sessionAttributes' in sessionState:
26             return sessionState['sessionAttributes']
27
28     return {}
```

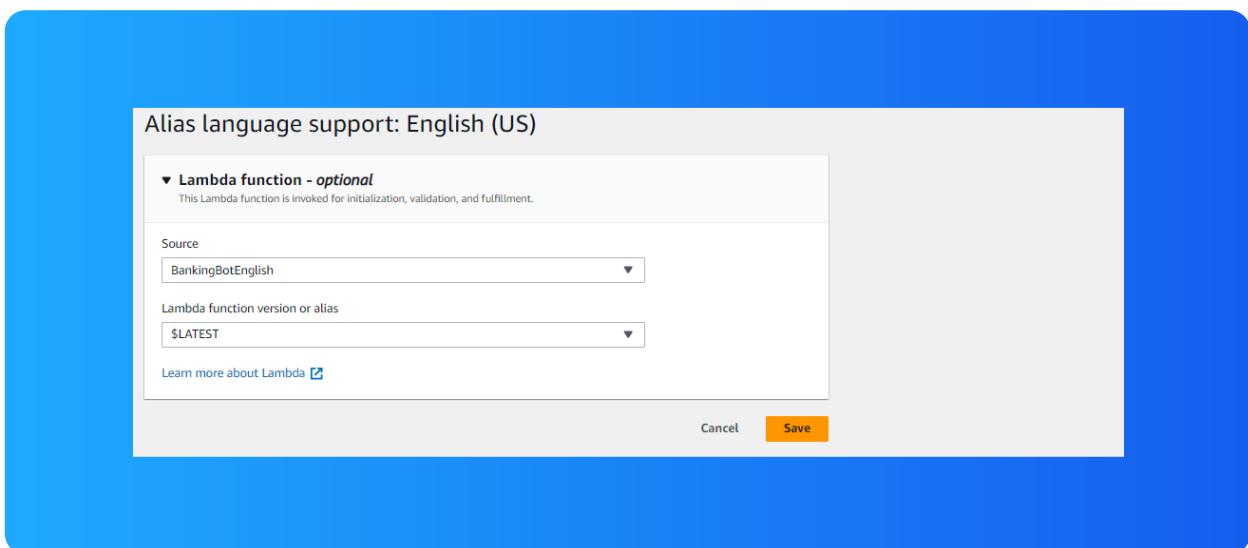
The status bar at the top indicates "Successfully updated the function BankingBotEnglish." The right sidebar includes tabs for "Info" and "Tutorials", and a "Create a simple web app" tutorial section.

# Chatbot Alias

An alias is a points to a specific version of your bot. With an alias, you can update the bot version that your client applications use.

TestBotAlias is a default version of your bot that's made for testing or development. This is the playground version of your bot that you'll use to make sure everything works smoothly before rolling out changes!

To connect Lambda with my BankerBot, I visited my bot's TestBotAlias and in language support select English. When we click on it lambda function tab will appear in source select the bankerbot and down select latest version of lambda function.

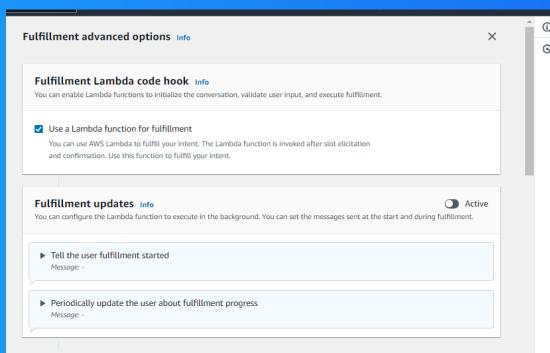


# Code Hooks

A Code hook is help us to connect your chatbot to custom Lambda functions for doing specific tasks during a conversation.

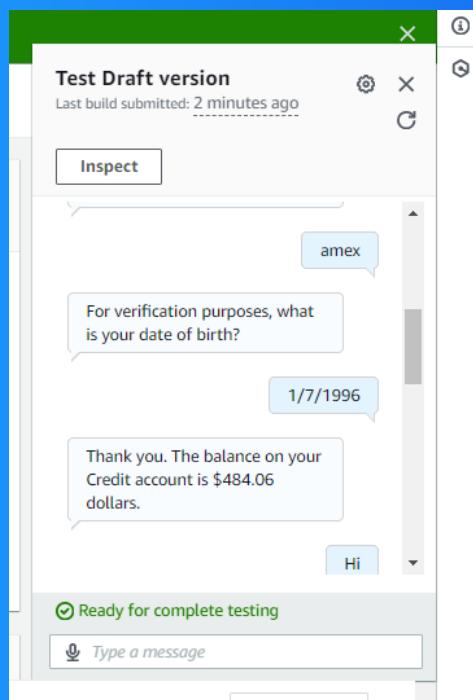
Even though I already connected my Lambda function with my chatbot's alias, I had to use code hooks because They're used to handle more complex actions.

I could find code hooks at Intent tab where I used in checkbalance intent.



# The final result!

I've set up my chatbot to trigger Lambda and return a random dollar figure when user check for balance and then bot ask for which account type and date of birth.





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