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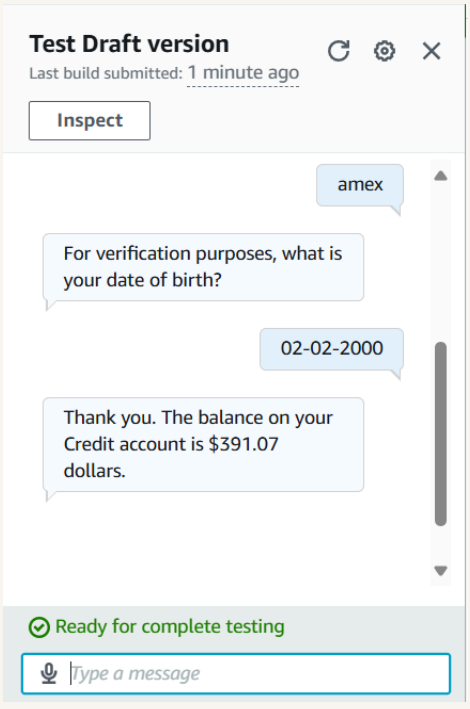
Connect a Chatbot with Lambda

Dineshraj Dhanapathy



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Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a service for building conversational interfaces using voice and text. It is useful because it simplifies the creation of chatbots and virtual assistants, integrating easily with other AWS services.

How I used Amazon Lex in this project

In today's project, I used Amazon Lex to build a conversational interface for my BankerBot. It allowed users to interact via text, triggering Lambda to generate and return dynamic bank balance information.

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

One thing I didn't expect in this project was the complexity of fine-tuning the code hook for accurate balance retrieval. It took more adjustments to ensure smooth communication between Lex and Lambda.

This project took me...

This project took me about a few hour to complete. Most of the time was spent configuring Amazon Lex, testing the Lambda function, and fine-tuning the code hook to ensure accurate responses from the bot.

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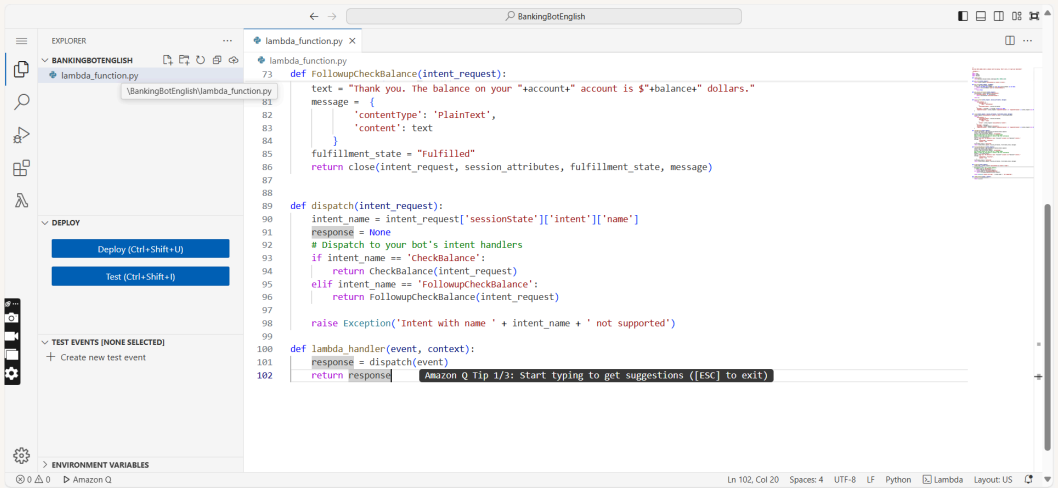
AWS Lambda Functions

AWS Lambda is a serverless compute service that automatically runs code in response to events, scales dynamically, and manages infrastructure, allowing developers to focus on writing code without provisioning servers.

In this project, I created a Lambda function to generate random bank balance numbers on request. Lambda will pass this random number to Lex, who will then push the bank balance figure to the user through your Lambda will pass this random number to



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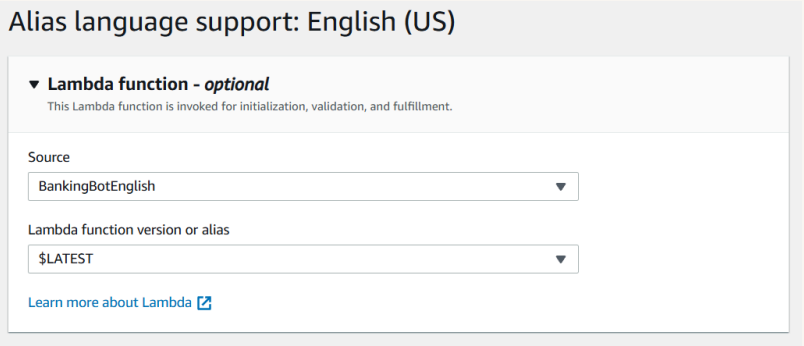
Chatbot Alias

An alias is a pointer to a specific version of an AWS Lambda function, enabling smooth deployments, traffic shifting, and version management without changing the function's ARN, improving flexibility and control.

TestBotAlias is a Lambda function alias used for testing specific versions before deployment. It allows safe validation, traffic shifting, and rollback handling without affecting the live production environment.

To connect Lambda with my BankerBot, I visited my bot's TestBotAlias and linked it to my Lambda function version or alias field at the default $LATEST.



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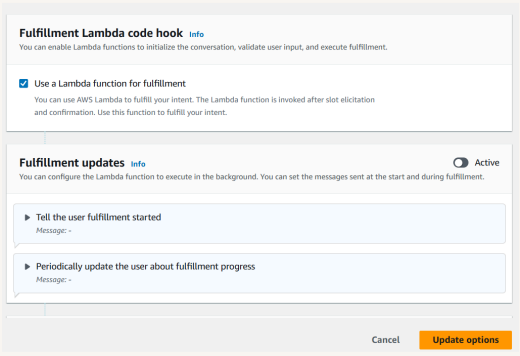
Code Hooks

A code hook is a function that runs during a chatbot's lifecycle to process logic, validate inputs, or fetch data. In AWS Lex, it invokes Lambda functions to enhance responses and handle dynamic interactions.

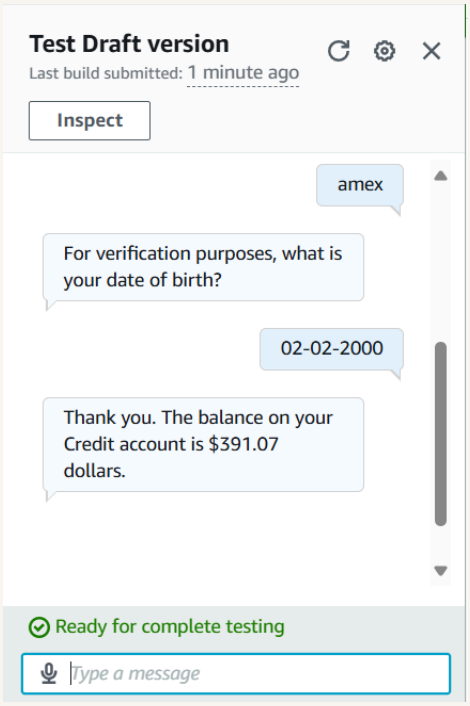
Even though I already connected my Lambda function with my chatbot's alias, I had to use code hooks because they enabled real-time validation, dynamic responses, and ensured accurate bank balance retrieval.

I could find code hooks at the AWS Lex console under the intent settings. I configured them in the fulfillment and validation sections to invoke my Lambda function for dynamic bank balance responses.



The final result!

I've set up my chatbot to trigger Lambda and return a random dollar figure when a user asks for their balance. It formats the response like: "Thank you. The balance on your Credit account is $391.07."



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