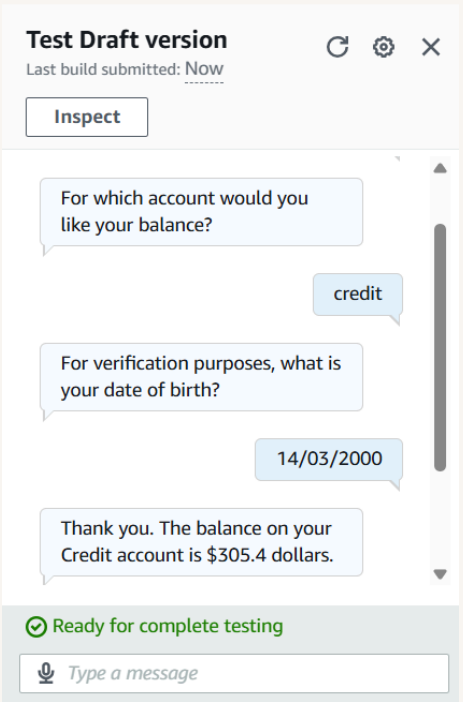
Connect Amazon Lex with Lambda

Ashan Sooriyarachchi



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Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is useful for building scalable, AI-powered chatbots that support both text and voice interactions. It simplifies development with pre-built integrations, seamlessly connects with AWS services like Lambda and handles high use.

How I used Amazon Lex in this project

I used Amazon Lex in today's project to build a chatbot that interacts with users and retrieves a simulated bank balance using AWS Lambda.

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

It was how seamlessly Amazon Lex integrates with AWS Lambda. I thought setting up the connection and handling responses would be more complex, but the Lambda function panel in TestBotAlias made it surprisingly straightforward.

This project took me...

This project took me around two hours to complete.

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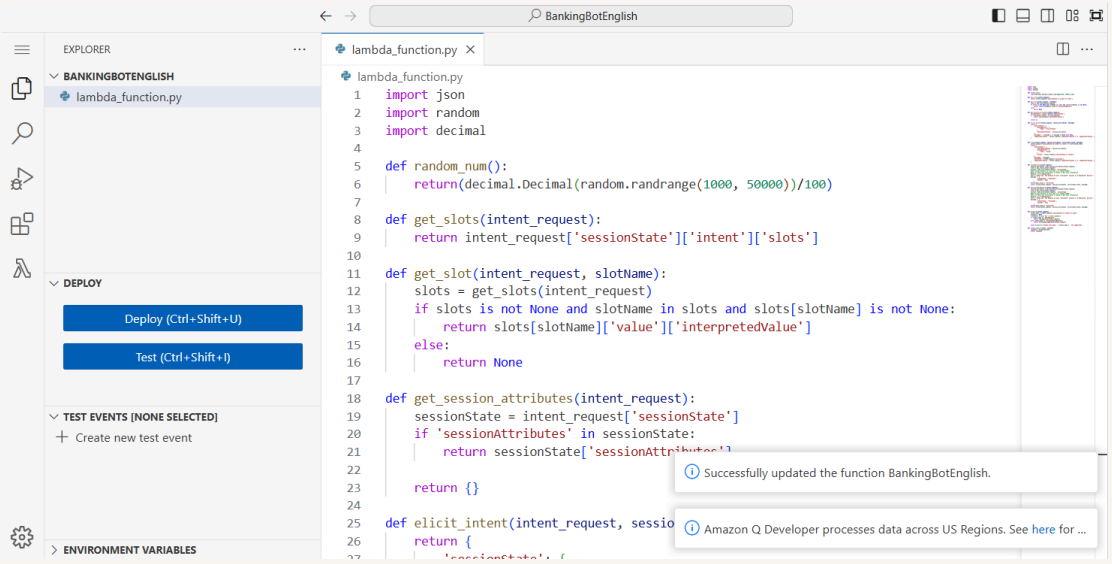
AWS Lambda Functions

AWS Lambda is a serverless computing service that automatically runs code in response to events, scaling dynamically when needed, from a few requests per day to thousands per second.

In this project, I created a Lambda function to simulate retrieving a user's bank balance. When a user asks about their account balance, Amazon Lex invokes the Lambda function, which generates a random number to represent the balance.



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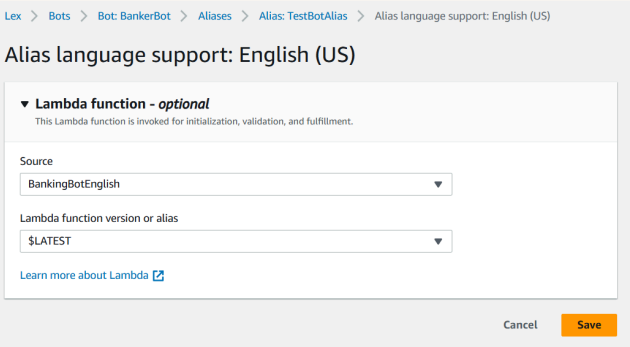
Chatbot Alias

An alias in Amazon Lex is a pointer to a specific version of the bot. When integrating Lex with AWS services or applications, external resources connect to an alias instead of a fixed bot version.

TestBotAlias is the default alias in Amazon Lex used for testing and development. It serves as a playground version of your bot, allowing you to validate functionality and troubleshoot issues before deploying updates to a live environment.

To connect Lambda with my BankerBot, I visited my bot's TestBotAlias and accessed the Lambda function panel. From there, I selected my BankingBotEnglish Lambda function.



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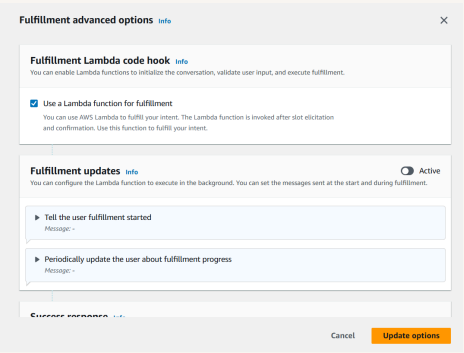
Code Hooks

A code hook is a way to connect the chatbot to a custom Lambda function for handling specific tasks. It enables the bot to perform complex actions, such as retrieving data from a database or making decisions based on past interactions.

Even though I already connected my Lambda function with my chatbot's alias, I had to use code hooks to allow the chatbot to execute custom logic during conversations.

I could find code hooks in the Advanced Options of the Fulfillment section of my chatbot's intent configuration.



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The final result!

I've set up my chatbot to trigger Lambda and return a random dollar figure when a user asks about their account balance. Lex invokes the Lambda function, which generates a random balance and sends it back, which then delivers the response to the user

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