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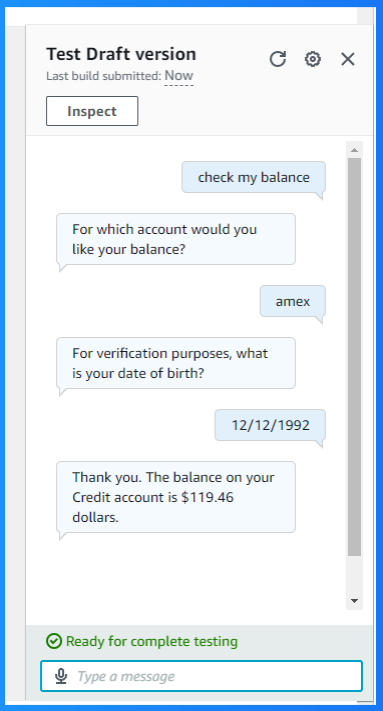
Connect a Chatbot with Lambda

Sai Prasanth Reddy



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Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a service for building chatbots using voice and text. It's useful for creating conversational interfaces, automating tasks, and integrating with AWS services, making it ideal for customer support and interactive applications.

How I used Amazon Lex in this project

I used Amazon Lex in today's project to create a chatbot for checking bank balances, configure intents and slots, connect a Lambda function to generate random balances, and set up code hooks for dynamic interactions during user requests.

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

One thing I didn't expect in this project was the need to configure code hooks separately for fulfillment, even after linking the Lambda function, which added an extra layer of customization to the chatbot's workflow.

This project took me...

This project took me about an hour to complete, including setting up the chatbot, configuring Lambda, defining intents and slots, and testing the interactions with the code hooks.

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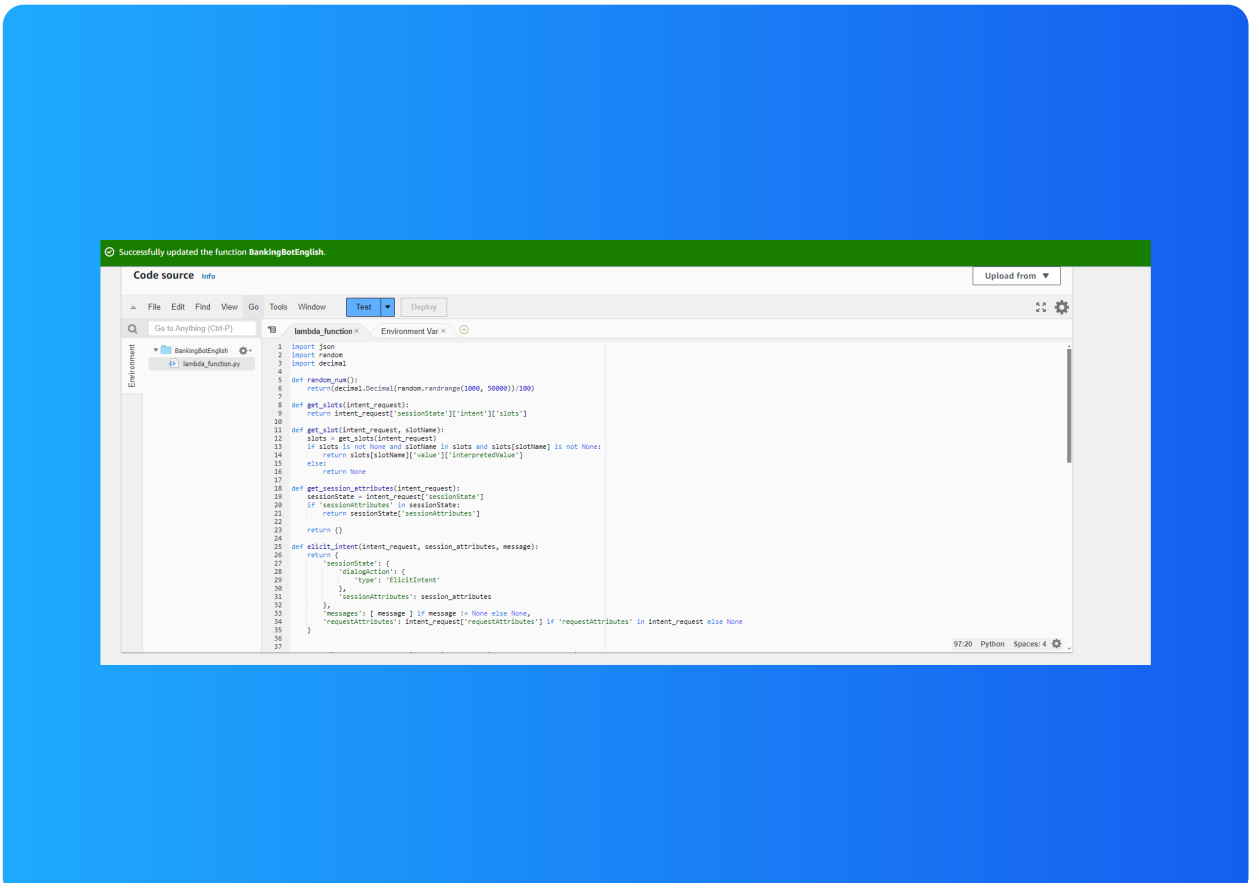
AWS Lambda Functions

AWS Lambda is a serverless compute service that runs code in response to events and automatically manages the underlying infrastructure. It's useful for executing code without provisioning or managing servers, enabling scalable, event-driven apps.

In this project, I created a Lambda function to help the chatbot provide quick answers about account balances. It generates a random number to simulate the balance, which is then passed to Lex, allowing the chatbot to display the balance to the user.



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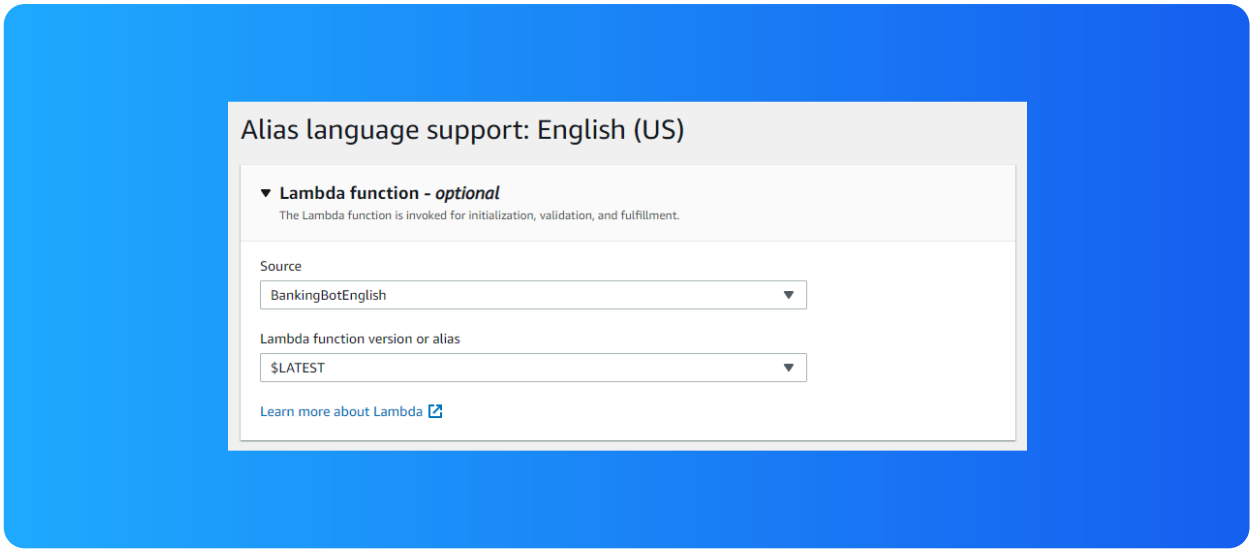
Chatbot Alias

An alias in Amazon Lex is a version pointer that lets you direct your chatbot to use a specific version of a bot. It helps manage different bot versions, allowing updates or changes without disrupting the current user experience.

TestBotAlias is an alias in Amazon Lex that points to a specific version of a bot, allowing you to test and validate new changes or features in a controlled environment without affecting the live version used by end users.

To connect Lambda with my BankerBot, I visited my bot's TestBotAlias, clicked on English, and the Lambda function panel popped up. I selected the Lambda function to handle requests, enabling the bot to use it for processing user queries.



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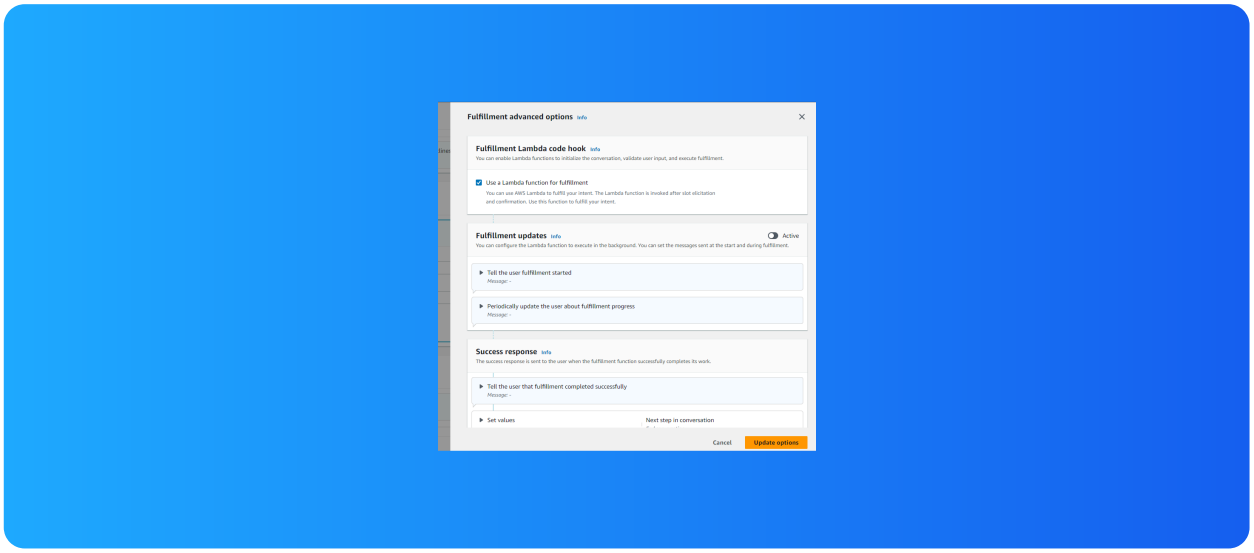
Code Hooks

A code hook is a piece of code that is triggered at specific points during a chatbot interaction in Amazon Lex, such as before fulfilling an intent or after gathering slot data, allowing for dynamic responses or additional processing.

Even though I already connected my Lambda function with my chatbot's alias, I had to use code hooks because they trigger the Lambda function at specific points, like during validation or fulfillment, enabling more dynamic and customized interactions.

I could find code hooks at the intent configuration section of my chatbot, specifically under Fulfillment options, where I set the Lambda function to run.



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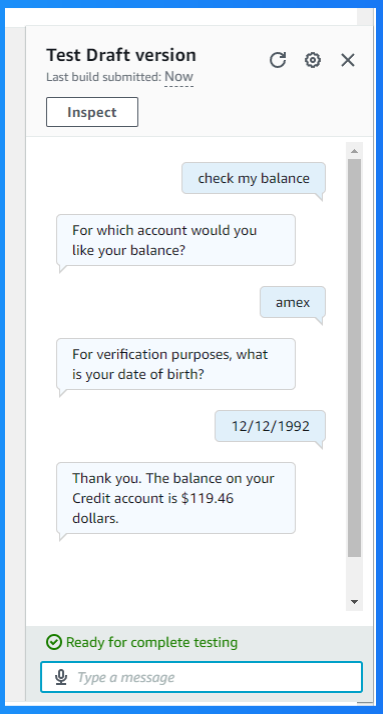
The final result!

I've set up my chatbot to trigger Lambda and return a random dollar figure when a user asks about their account balance, allowing the chatbot to simulate a response with a generated balance amount.



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