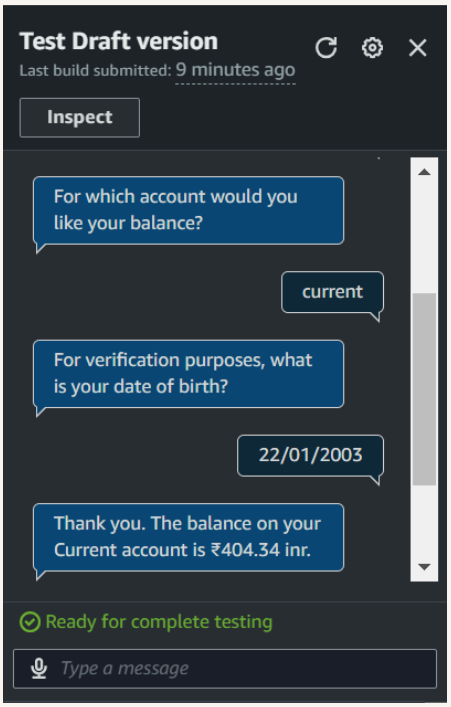
Connect Amazon Lex with Lambda

SI sidhesh2508@gmail.com



SI
sidhesh2508@gmail.com
NextWork Student
NextWork.org

Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a conversational AI service that builds chatbots using NLU and ASR. It automates interactions, integrates with AWS services, scales efficiently, and supports multiple platforms.

How I used Amazon Lex in this project

I used Amazon Lex in today's project to build SmartBanker, a chatbot that understands user queries, captures slot values, and retrieves account balances.

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

One thing I didn’t expect in this project was that AWS Lambda allows running custom code seamlessly without managing servers. I initially thought a separate backend was needed, but Lambda integration with SmartBanker made handling user queries easier

This project took me...

This project took me approximately 2 hours to complete. Most of the time was spent designing SmartBanker’s intents, configuring slots, refining utterances, and integrating AWS Lambda to ensure smooth, accurate, and efficient responses.

SI
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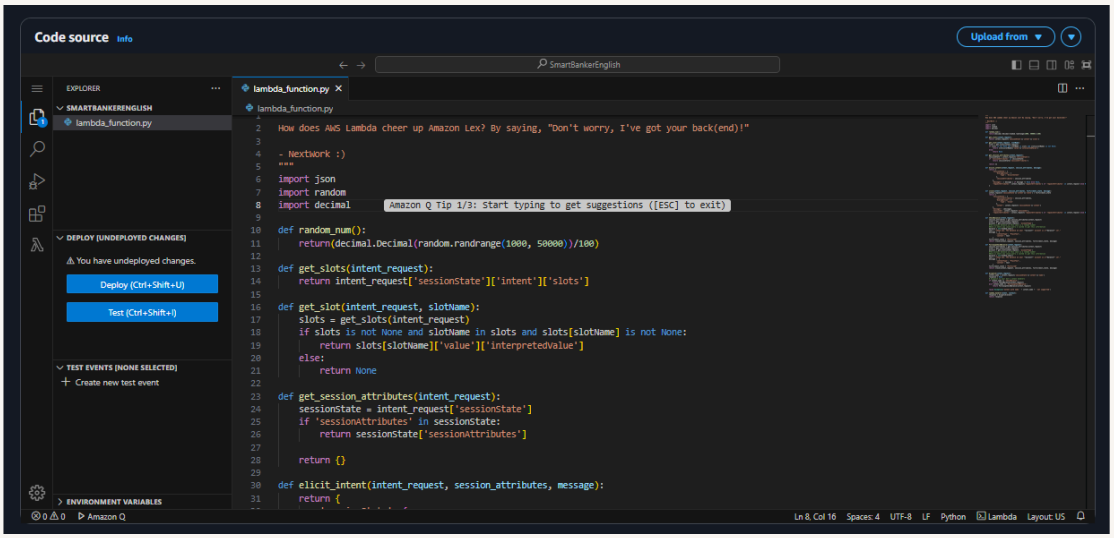
NextWork Student

AWS Lambda Functions

AWS Lambda is a serverless computing service that runs code in response to events without requiring server management. It automatically executes functions on demand, and integrates with AWS services.

This AWS Lambda function processes Amazon Lex chatbot requests, specifically handling CheckBalance and FollowupCheckBalance intents. It extracts user-provided account types, generates a random balance, and responds with the balance information.

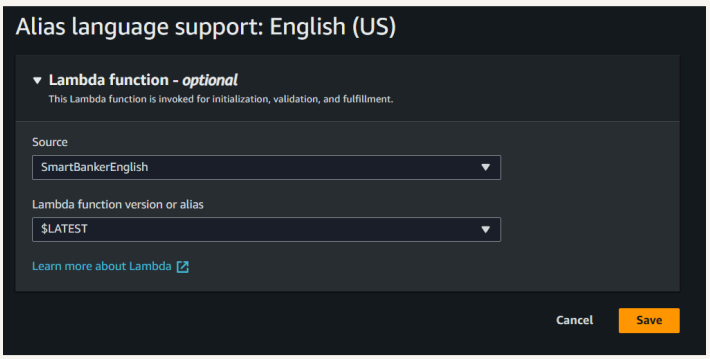


Chatbot Alias

An alias is a pointer to a specific version of an Amazon Lex bot, allowing you to manage different bot versions without modifying the original.

TestBotAlias is a predefined alias in Amazon Lex used for testing and validating bot functionality before deployment.

To connect Lambda with my BankerBot, I visited my bot's TestBotAlias and linked my AWS Lambda function under the code hooks section. I enabled the function for both dialog initialization and fulfillment, ensuring seamless intent handling.

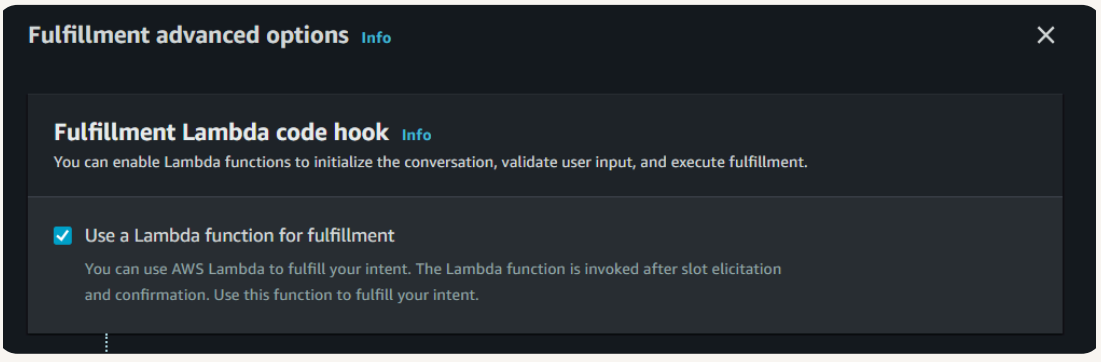


Code Hooks

A code hook is a function in Amazon Lex that connects to AWS Lambda to execute custom logic during a conversation.

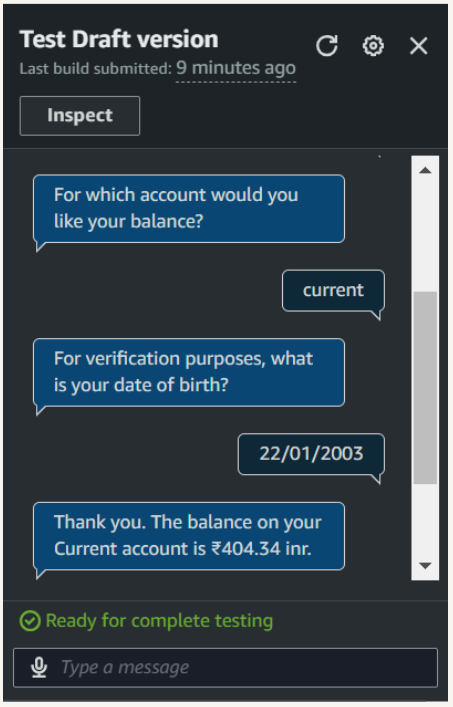
Even though I already connected my Lambda function with my chatbot's alias, I had to use code hooks because they allow SmartBanker to process user inputs dynamically, validate slot values, and generate real-time responses.

I could find code hooks at the AWS Lex console under my bot's TestBotAlias settings. I configured them in the code hooks section by enabling Lambda for dialog code hooks and fulfillment code hooks, allowing bot to process user inputs dynamically.



The final result!

I've set up my chatbot to trigger Lambda and return a random INR figure when the user asks for their balance and provides the account type. Lambda processes the request, generates a balance, and sends a dynamic response through SmartBanker.



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