

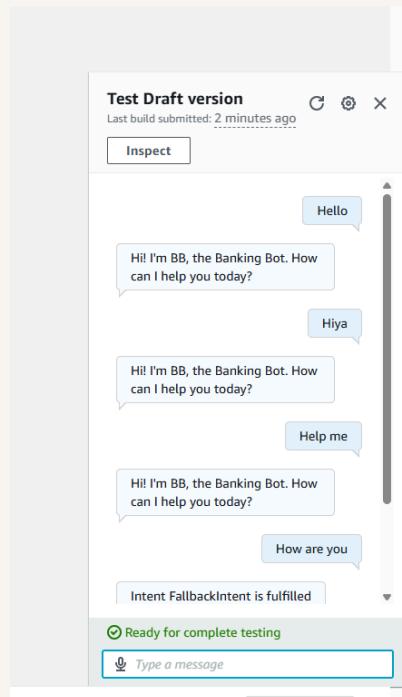


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Build a Chatbot with Amazon Lex



Martin





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Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a service for building chatbots that understand voice and text, enabling automated conversations and seamless AWS integration.

How I used Amazon Lex in this project

I used Amazon Lex to create a chatbot with intents, fallback handling, and response variations, enabling it to understand and respond to user inputs effectively.

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

I didn't expect the FallbackIntent to trigger so often, highlighting the need for better intent training and more varied sample utterances.

This project took me...

This project took me about an hour, including setting up intents, configuring responses, testing, and refining the chatbot's behavior.



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Setting up a Lex chatbot

'I created my chatbot from scratch with Amazon Lex. Setting it up took me less than a minute to complete.

'While creating my chatbot, I also created a role with basic permissions because Amazon Lex needs access to services like CloudWatch, Polly, and Lambda for proper functionality while ensuring security.

In terms of the intent classification confidence score, I kept the default value of 0.40. This means the chatbot accepts intents with at least 40% confidence to balance accuracy and flexibility.



Add language to bot [Info](#)

▼ Language: English (US)

Select language

Description - optional

Maximum 200 characters.

Voice interaction
The text-to-speech voice that your bot uses to interact with users.

Voice sample

Intent classification confidence score threshold
 Min: 0.00, max: 1.00.



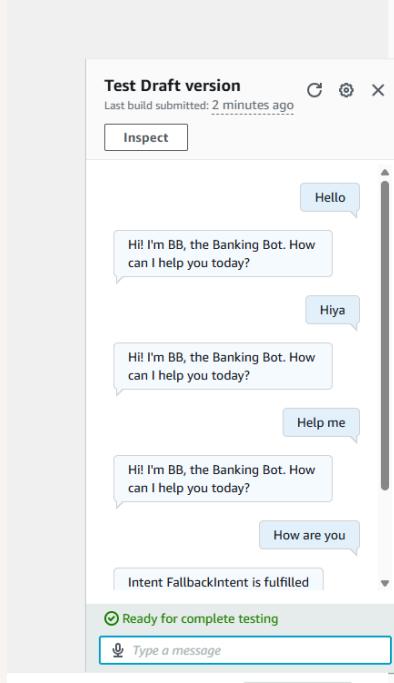
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Intents

Intents are predefined actions that represent a user's goals, guiding the chatbot to trigger the appropriate response.

I created my first intent, WelcomeIntent, to greet users and initiate conversations by responding to common greetings or opening phrases.





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FallbackIntent

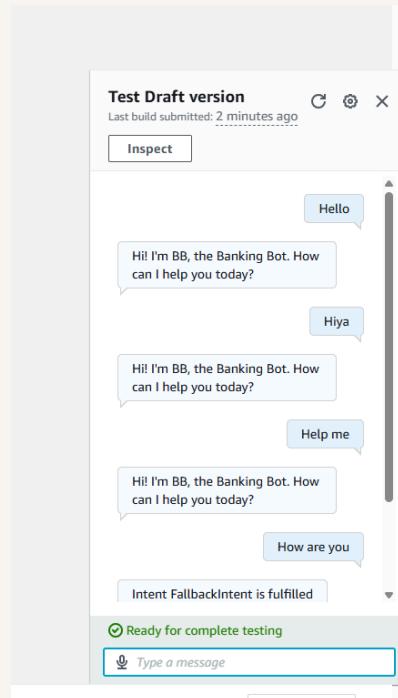
I launched and tested my chatbot, which could respond successfully if I enter greetings like "Hello," "Hi," "Hey," and "Good morning."

My chatbot returned the error message "Intent FallbackIntent is fulfilled" when I entered an unrecognized phrase. This happened because no matching intent was found, triggering the fallback intent.



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Configuring FallbackIntent

FallbackIntent is a default intent in every chatbot that gets triggered when the user's input doesn't match any defined intent.

I wanted to configure FallbackIntent because it helps handle unrecognized inputs by providing a default response instead of returning an error.



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Variations

To configure FallbackIntent, I customized its response to guide users when their input doesn't match any defined intent.

I also added variations! What this means for an end user is that the chatbot can respond with different predefined messages for the same intent, making interactions feel more natural.



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Test Draft version G ⚙ X
Last build submitted: 1 minute ago

Inspect

what you'd like to do in a few words? I can help you find your account balance, transfer funds and make a payment.

Suup

Hmm could you try rephrasing that? I can help you find your account balance, transfer funds and make a payment.

Jambo

Sorry I am having trouble understanding. Can you describe what you'd like to do in a few words? I can help you find your account balance, transfer funds and make a payment.

Ready for complete testing

Type a message

A screenshot of a web-based conversational AI test interface. The window title is "Test Draft version" with a subtitle "Last build submitted: 1 minute ago". There are three message bubbles: one from the bot asking about actions like finding account balance or making payments; one from a user named "Suup" with a question mark; and one from the bot asking for rephrasing. Below these is another message from the bot asking for a description of the intended action. At the bottom, there's a green bar with a checked checkbox labeled "Ready for complete testing" and a text input field with a microphone icon and placeholder text "Type a message".



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