NextWork.org

Build a Chatbot with Amazon Lex

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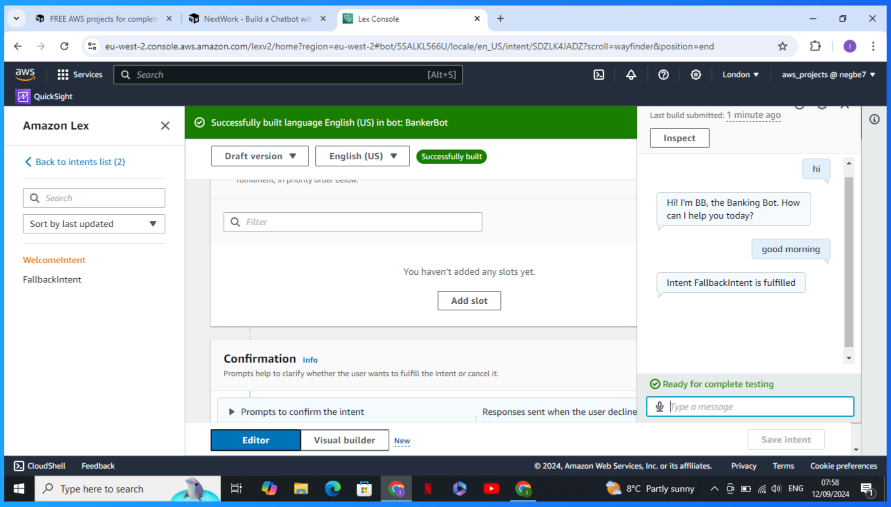

eu-west-2.console.aws.amazon.com/lexv2/home?region=eu-west-2#bot/5SALKL566U/locale/en_US/intent/SDZLK4JADZ?scroll=wayfinder&position=end

Successfully built language English (US) in bot: BankerBot

You haven't added any slots yet.

Confirmation Info

Prompts help to clarify whether the user wants to fulfill the intent or cancel it.

Last build submitted: 1 minute ago

hi

Hi! I'm BB, the Banking Bot. How can I help you today?

good morning

Intent FallbackIntent is fulfilled

Ready for complete testing

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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's useful because it provides ASR and NLU allowing businesses to create chatbots that can understand user input, making it ideal for customer service.

How I used Amazon Lex in this project

In today's project, I used Amazon Lex to build a banking chatbot named BankerBot. It was designed to assist users with common banking queries. The chatbot responds to greetings and can be configured to help users with bank-related actions like checki

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

I didn’t expect how easy this project would feel at first. But I know once I try to refine my bot’s responses to be more specific and efficient, the challenges will definitely arise making it a more complex task

This project took me...

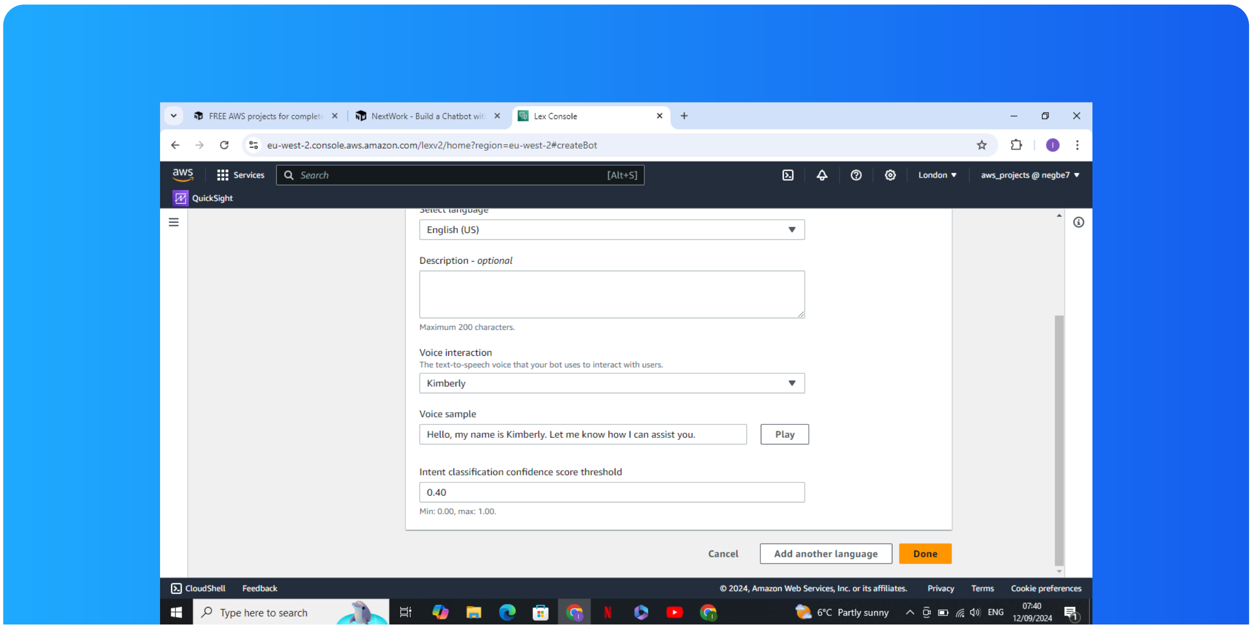
it took me about 1 hour

Setting up a Lex chatbot

I created my chatbot from scratch with Amazon Lex. Setting it up took me around 2 minutes to configure the basic settings, intents, and utterances before the chatbot was ready for testing.

While creating my chatbot, I also created a role with basic permissions because Amazon Lex needs permission to call other AWS services on my behalf. This is crucial for later integrating Lex with Lambda and other AWS services to enhance functionality

In terms of the intent classification confidence score, I kept the default value of 0.40. This means that Amazon Lex will only trigger an intent if it is at least 40% confident that the user's input matches the intent, ensuring more accurate interact



eu-west-2.console.aws.amazon.com/lexv2/home?region=eu-west-2#createBot

Select language
English (US)

Description - *optional*

Maximum 200 characters.

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

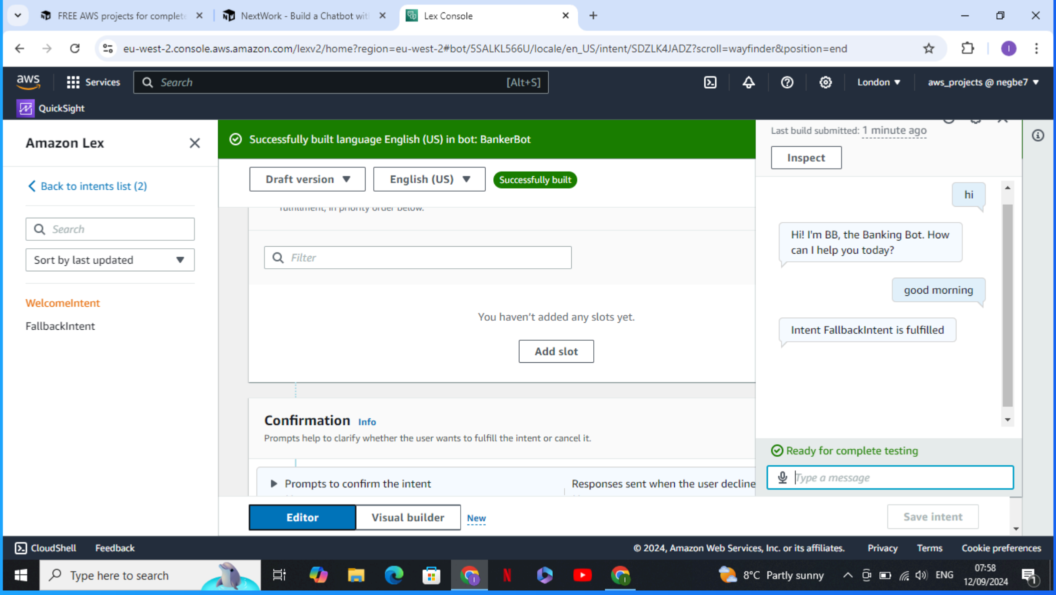
Voice sample
Hello, my name is Kimberly. Let me know how I can assist you.

Intent classification confidence score threshold
0.40
Min: 0.00, max: 1.00.

Intents

Intents are the actions or tasks that a chatbot is designed to perform in response to user input. Each intent represents a goal the user wants to achieve, like booking a flight or checking account balance , based on their request.

I created my first intent, WelcomeIntent, to greet users and help initiate the conversation. It responds to basic greetings like 'hi' or 'hello' and starts the interaction by introducing the bot



eu-west-2.console.aws.amazon.com/lexv2/home?region=eu-west-2#bot/5SALKL566U/locale/en_US/intent/SDZLK4JADZ?scroll=wayfinder&position=end

Successfully built language English (US) in bot: BankerBot

Draft version ▼ English (US) ▼ Successfully built

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Confirmation Info

Prompts help to clarify whether the user wants to fulfill the intent or cancel it.

▶ Prompts to confirm the intent

Responses sent when the user decline

hi

Hi! I'm BB, the Banking Bot. How can I help you today?

good morning

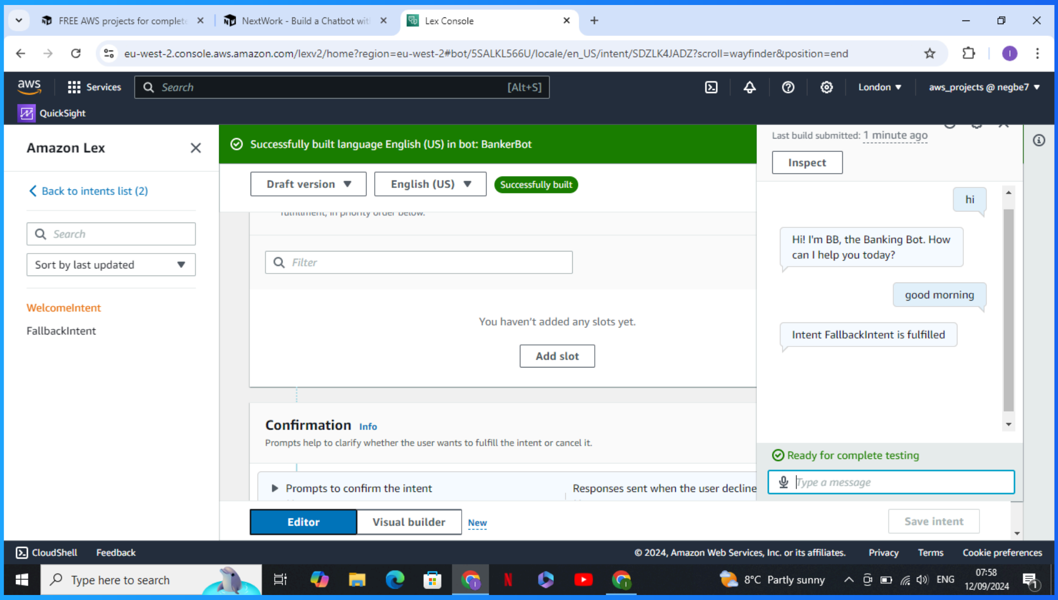
Intent FallbackIntent is fulfilled

Ready for complete testing

FallbackIntent

I launched and tested my chatbot, which could respond successfully if I entered greetings like 'hi,' 'hello,' 'I need help,' and 'Can you help me?' These phrases initiated the chatbot's responses and began interactions

My chatbot returned the error message Intent FallbackIntent is fulfilled when I entered a phrase it did not recognize. This error occurred because the input didn't match any predefined intents for the chatbot.



eu-west-2.console.aws.amazon.com/lexv2/home?region=eu-west-2#bot/5SALKL566U/locale/en_US/intent/SDZLK4JADZ?scroll=wayfinder&position=end

Successfully built language English (US) in bot: BankerBot

Draft version · English (US) · Successfully built

Amazon Lex

Back to intents list (2)

WelcomeIntent

FallbackIntent

You haven't added any slots yet.

Confirmation Info

Prompts help to clarify whether the user wants to fulfill the intent or cancel it.

Last build submitted: 1 minute ago

hi

Hi! I'm BB, the Banking Bot. How can I help you today?

good morning

Intent FallbackIntent is fulfilled

Ready for complete testing

Configuring FallbackIntent

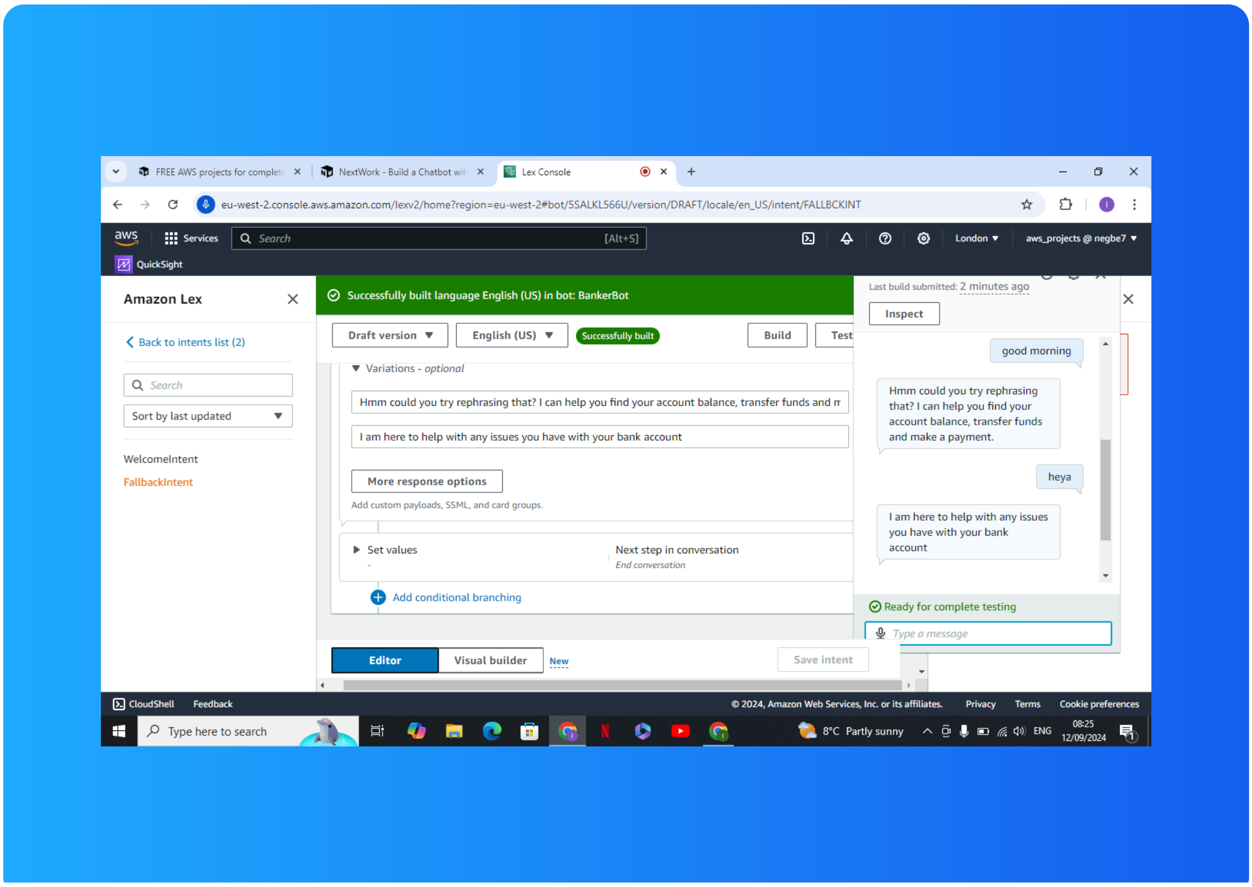
FallbackIntent is a default intent in every chatbot that gets triggered when the chatbot cannot understand or match the user's input to any predefined intents. This helps handle unrecognized requests and provides a graceful fallback response.

I wanted to configure FallbackIntent because it provides a default response when my chatbot can't match user input to any existing intents. This ensures that the bot gracefully handles unrecognized inputs and improving user experience.

Variations

To configure FallbackIntent, I selected it from the intent list in Amazon Lex, then edited the default message to provide a response when the bot can't match any user input to other intents. This ensures the bot responds appropriately.

I also added variations! What this means for an end user is that the chatbot can recognize different ways a user might express the same request. This ensures better accuracy in understanding user input across multiple phrasing options



eu-west-2.console.aws.amazon.com/lexv2/home?region=eu-west-2#bot/5SALKL566U/version/DRAFT/locale/en_US/intent/FALLBCKINT

Successfully built language English (US) in bot: BankerBot

Variations - *optional*

Hmm could you try rephrasing that? I can help you find your account balance, transfer funds and m

I am here to help with any issues you have with your bank account

Add custom payloads, SSML, and card groups.

Set values

Next step in conversation
End conversation

Last build submitted: 2 minutes ago

good morning

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

heya

I am here to help with any issues you have with your bank account

Ready for complete testing

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Everyone should be in a job they love.

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