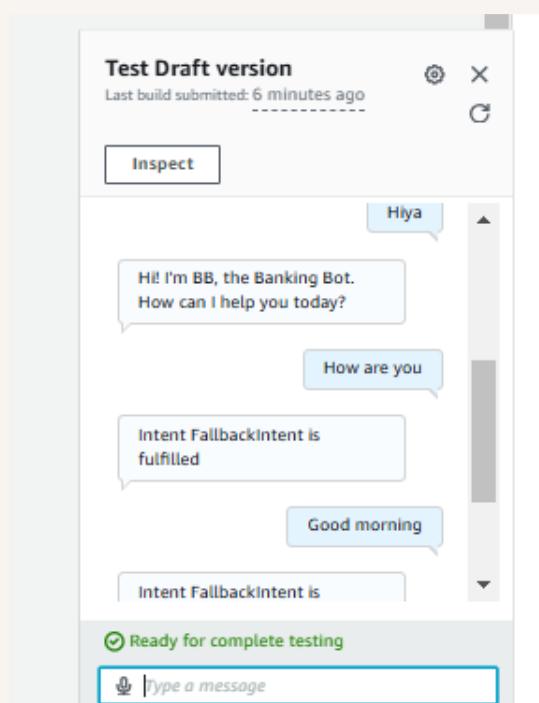


Build a Chatbot with Amazon Lex

AN

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Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a service from AWS that lets you create chatbots and voice assistants. It's great for automating tasks like customer support and creating interactive applications. Lex works easily with other AWS services as well, such as Lambda.

How I used Amazon Lex in this project

I created a bot with Amazon Lex and configured opening responses while adjusting the settings of fallback Intent, variations, classification confidence, and adding the spanish language as a secondary language for inputs.

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

I did not expect the initial error of unrecognized phrases to be displayed as "Intent Fallback Intent is fulfilled". I also was surprised by how Lex offers variations to deliver different responses to the error.

This project took me...

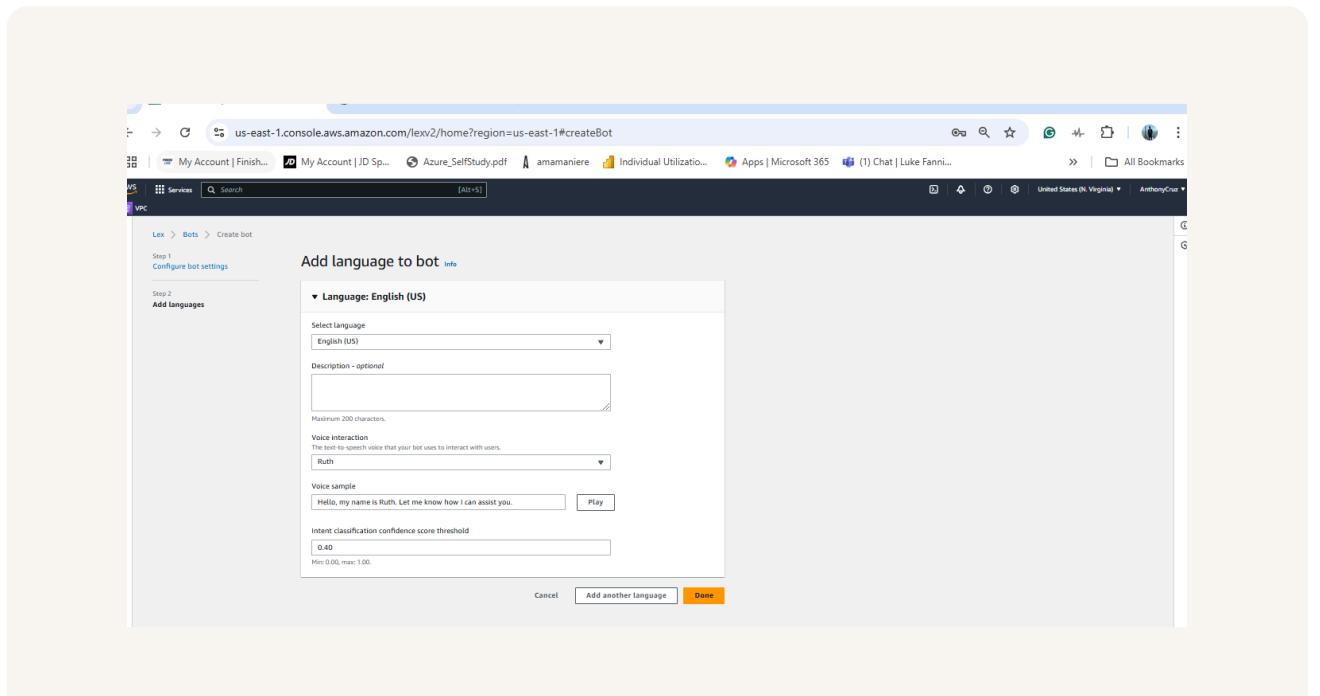
After configuring details and customizations while correcting some troubleshooting issues, this took me 2 hours to complete.

Setting up a Lex chatbot

I created my chatbot from scratch with Amazon Lex. Setting it up took me about 10 minutes to decide on the different voice assistants and configuring the IAM Role for Lex

While creating my chatbot, I also made a role with basic permissions because it needs access to and permission to call other resources within AWS, such as Lambda.

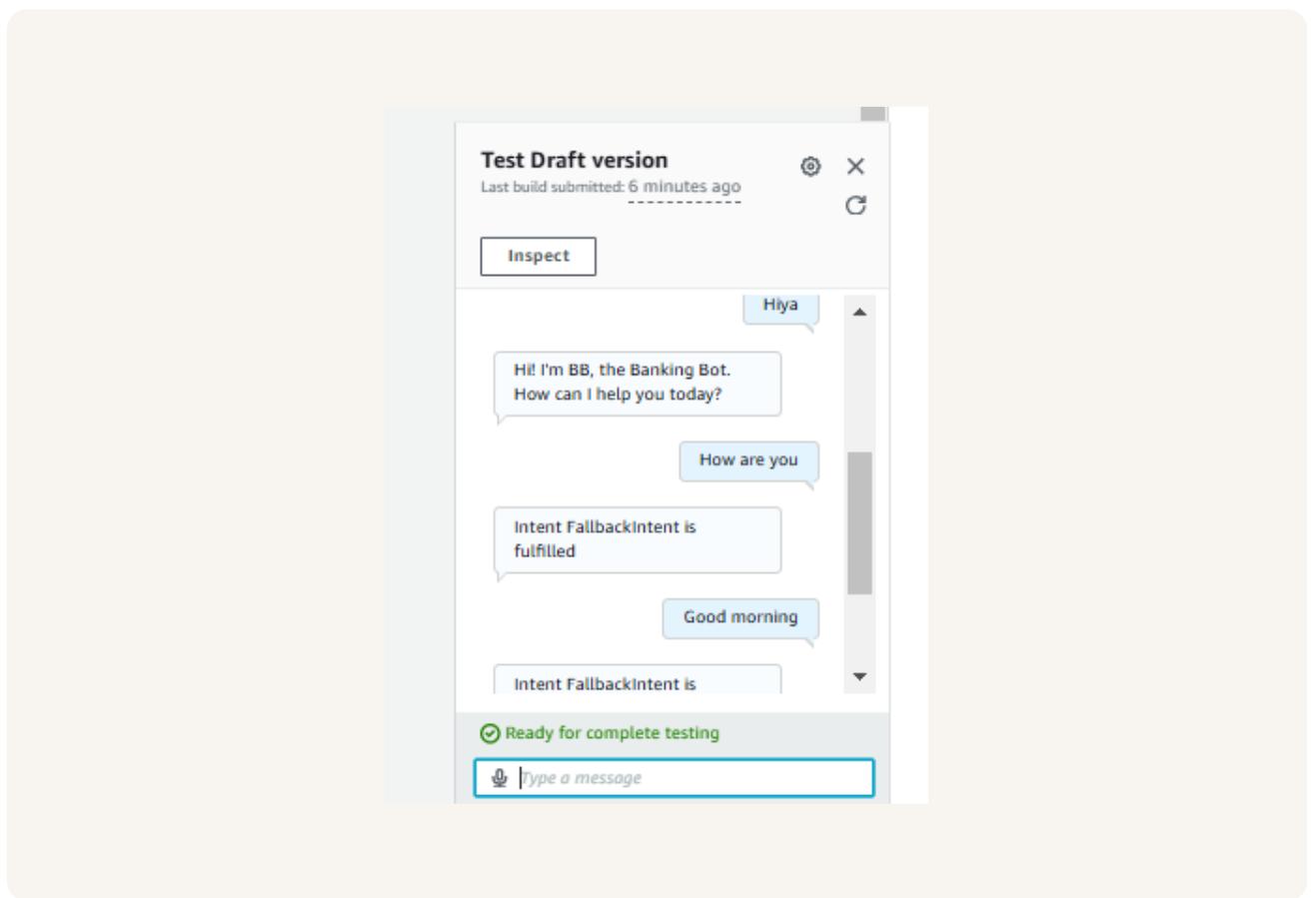
In terms of the intent classification confidence score, I kept the default value of 0.40. This means that the chat bot will answer inputs when it is at least 40 percent confident in its answer. If that threshold is not met it will produce an error.



Intents

Intents are what the user is trying to achieve in their conversation with the chatbot. For example, checking a bank account balance, booking a flight, ordering food. If you set up different intents, one single chatbot can manage a bunch of requests

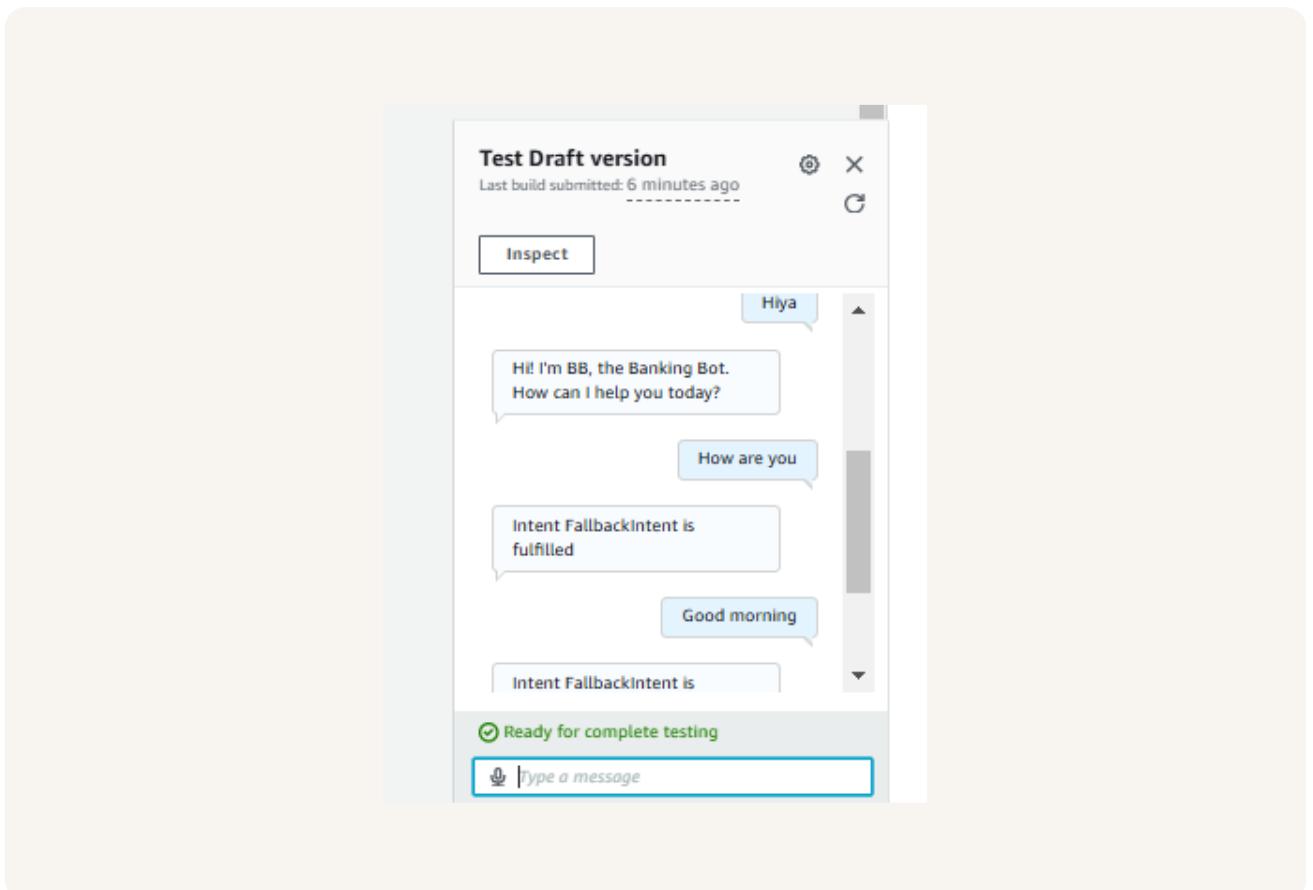
I created my first intent, "WelcomeIntent", to initialize the conversation when the user greets the chatbot for the first time.



FallbackIntent

I launched and tested my chatbot, which could respond successfully if I enter "Hello", "Hiya", "Good morning" as starting responses.

My chatbot returned the error message 'Intent FallbackIntent is fulfilled' when I entered "How are you?" This error message occurred because my bot could not quite recognize my utterance...yet.



Configuring FallbackIntent

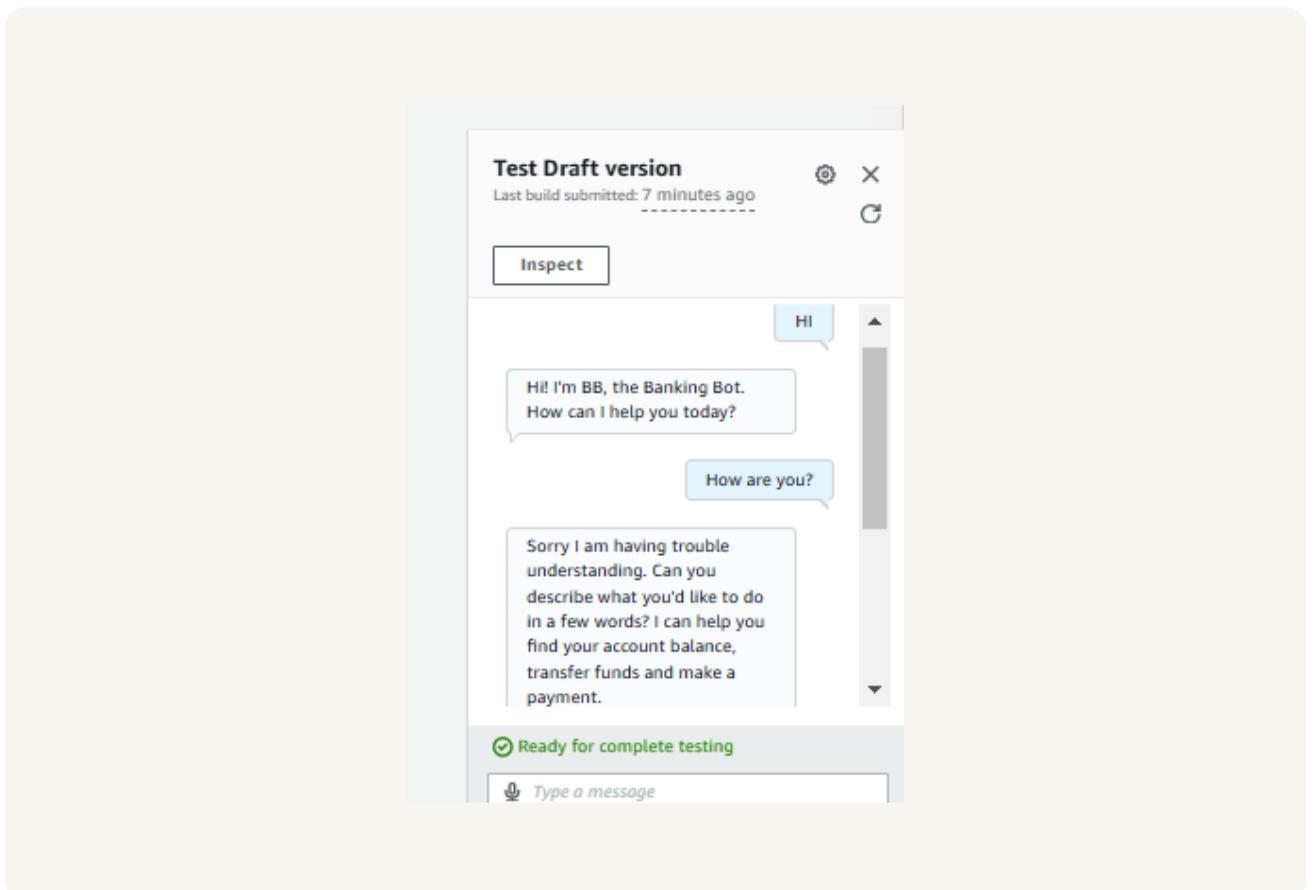
FallbackIntent is a default intent in every chatbot that gets triggered when the bot receives a response it is not familiar with. AKA a custom error message that your chatbot will use when the intent classification confidence score is below threshold

I wanted to configure FallbackIntent because the user may get confused with the initial "intent fallback is fulfilled" response. So displaying options makes the customer experience smoother.

Variations

To configure FallbackIntent, I made specific responses to offer the user configured options so that the bot may avoid unrecognized inputs.

I also added variations! This means offering different stylized custom responses to the end user. Variations will give users a dynamic range of responses, making the outputs sound more conversational.





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