

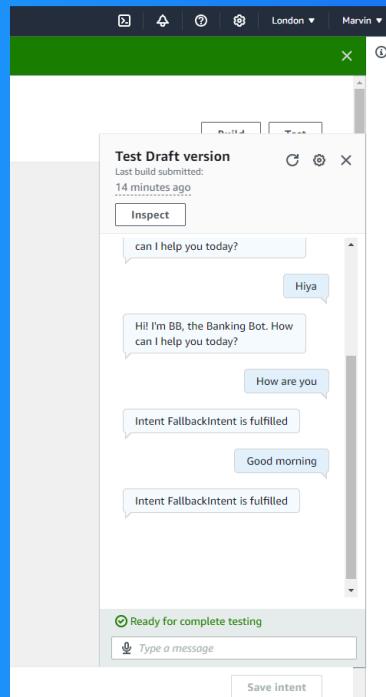


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Build a Chatbot with Amazon Lex



Ofori Yaw Marvin





Ofori Yaw Marvin
NextWork Student

NextWork.org

Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a service in AWS for building conversational interfaces using voice and text. It is useful for Natural language processing, automation, and Integration with other AWS services such as Lambda, DynamoDB, and Cloudwatch.

How I used Amazon Lex in this project

In this project, I set up a chatbot in Amazon Lex and made it welcome its users! I also created FallbackIntent with variations to provide error messages that tell the users it does not understand their input.

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

There was no specific surprise in this project. I was able to successfully deploy the service and customs settings.

This project took me...

I completed this project in about 45 minutes.

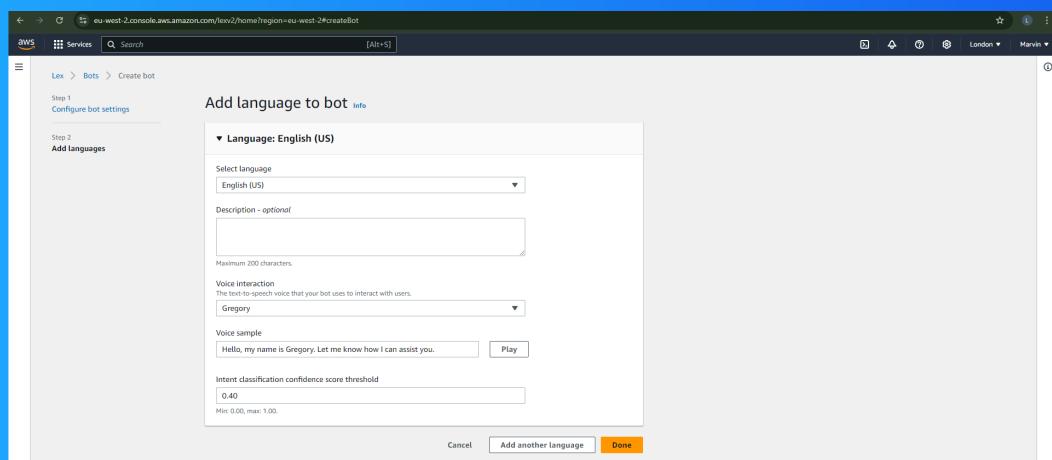


Setting up a Lex chatbot

I created my chatbot from scratch with Amazon Lex. Setting it up took me less than 3 minutes.

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. Later in this project series, I will integrate Lex with Lambda.

In terms of the intent classification confidence score, I kept the default value of 0.40. This means that the chatbot needs to be at least 40% confident that it understands what the user is asking in order to be able to give a response.





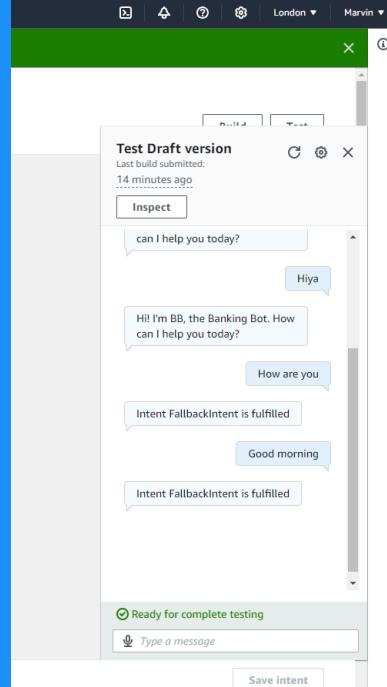
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Intents

Intents are what the users are trying to achieve in their conversation with the chatbot. For example, checking bank account balances; booking flights; and ordering food.

I created my first intent, `WelcomeIntent`, to welcome the user when they say "hello", "Hi"





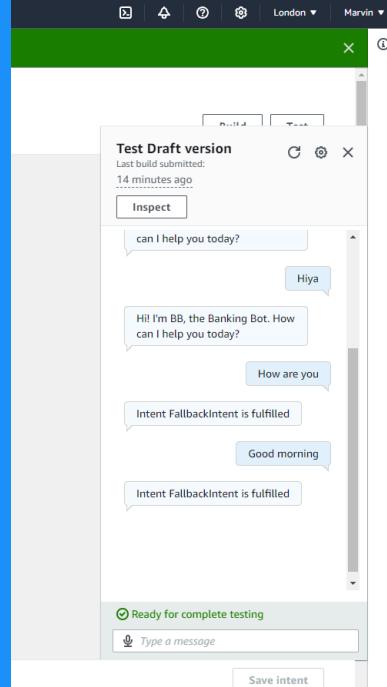
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FallbackIntent

I launched and tested my chatbot, which could respond successfully if I entered "Hi", "Hello", "I need help" and "Can you help me?"

My chatbot returned the error message 'Intent FallbackIntent is fulfilled' when I entered "How are you". This error message occurred because Amazon Lex does not quite recognize the utterance.





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Configuring FallbackIntent

FallbackIntent is a default intent in every chatbot that gets triggered when the chatbot has a confidence score below 40% for all the intents that are defined.

I wanted to configure FallbackIntent because I wanted a custom error message that the chatbot will use to tell the user it does not understand their input.



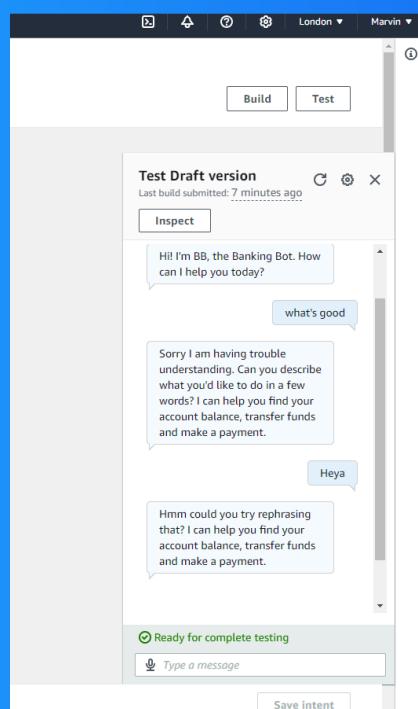
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Variations

To configure FallbackIntent, I rephrased the "Intent FallbackIntent is fulfilled" text in the Closing responses section, by inputting a new response in the message field.

'I also added variations! What this means for an end user is that the variations will give the users a dynamic range of responses, making them sound more conversational!





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