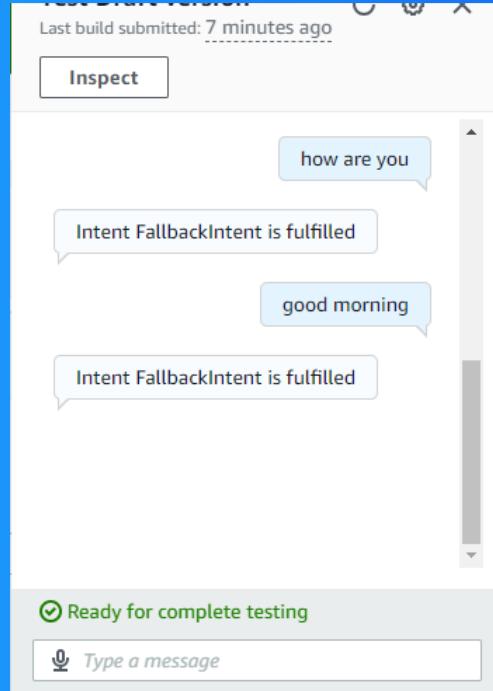




Build a Chatbot with Amazon Lex



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Introducing Today's Project!

What is Amazon Lex?

Amazon Lex helps you build chatbots that understand voice and text. It makes creating smart, conversational interfaces easy, perfect for customer service or reservations. No need to be a coding wizard to make your app interactive!

How I used Amazon Lex in this project

I created BankerBot to help customers check balances and make transfers. I set up the WelcomeIntent with triggers like "hi," "hello," "I need help," and "can you help me?" I also customized the FallbackIntent for clearer error messages.

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

Amount of options available for customization and the visual builder option which makes it easier to understand the flow better.

This project took me...

Around 1 hour



Setting up a Lex chatbot

I created my chatbot from scratch with Amazon Lex. Setting it up took me around 6-7 minutes.

While creating my chatbot, I also created a role with basic permissions because Amazon Lex needs the permission to call other AWS services on my behalf.

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

The screenshot shows the configuration page for a new Lex bot. The configuration includes:

- Language:** English (US)
- Select language:** English (US)
- Description - optional:** (Empty text area)
- Voice interaction:** The text-to-speech voice that your bot uses to interact with users. Set to Matthew.
- Voice sample:** A preview box showing "Hello, my name is Matthew. Let me know how I can assi" with a "Play" button.
- Intent classification confidence score threshold:** Set to 0.40.

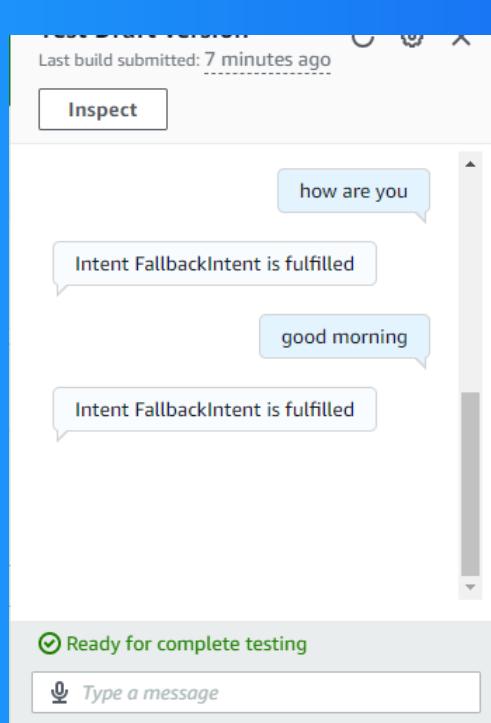
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Intents

Intents are what the user is trying to achieve in their conversation with the chatbot.

I created my first intent, WelcomeIntent, to greet the user and asking for there intent.



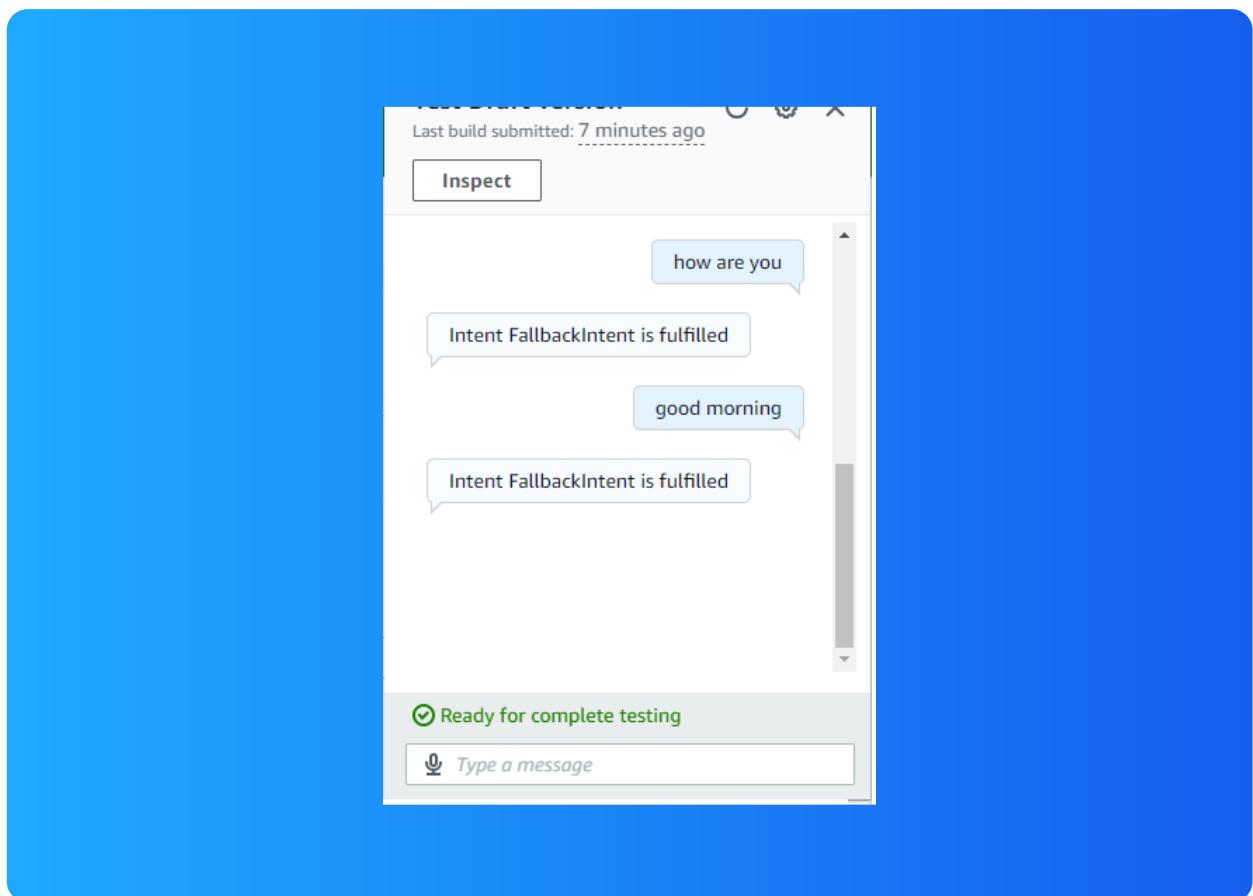
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FallbackIntent

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

My chatbot returned the error message 'Intent FallbackIntent is fulfilled' when I entered 'How are you', 'Good Morning'. This error message occurred because Amazon Lex doesn't quite understand your utterance or input.





Configuring FallbackIntent

FallbackIntent is a default intent in every chatbot that gets triggered when your chatbot has confidence score below 40% for the intents you've defined. Its a custom error message your chatbot will use to tell user it doesn't understand their input.

I wanted to configure FallbackIntent because the default message "Intent FallbackIntent is fulfilled" can be confusing and users might not know what it means.

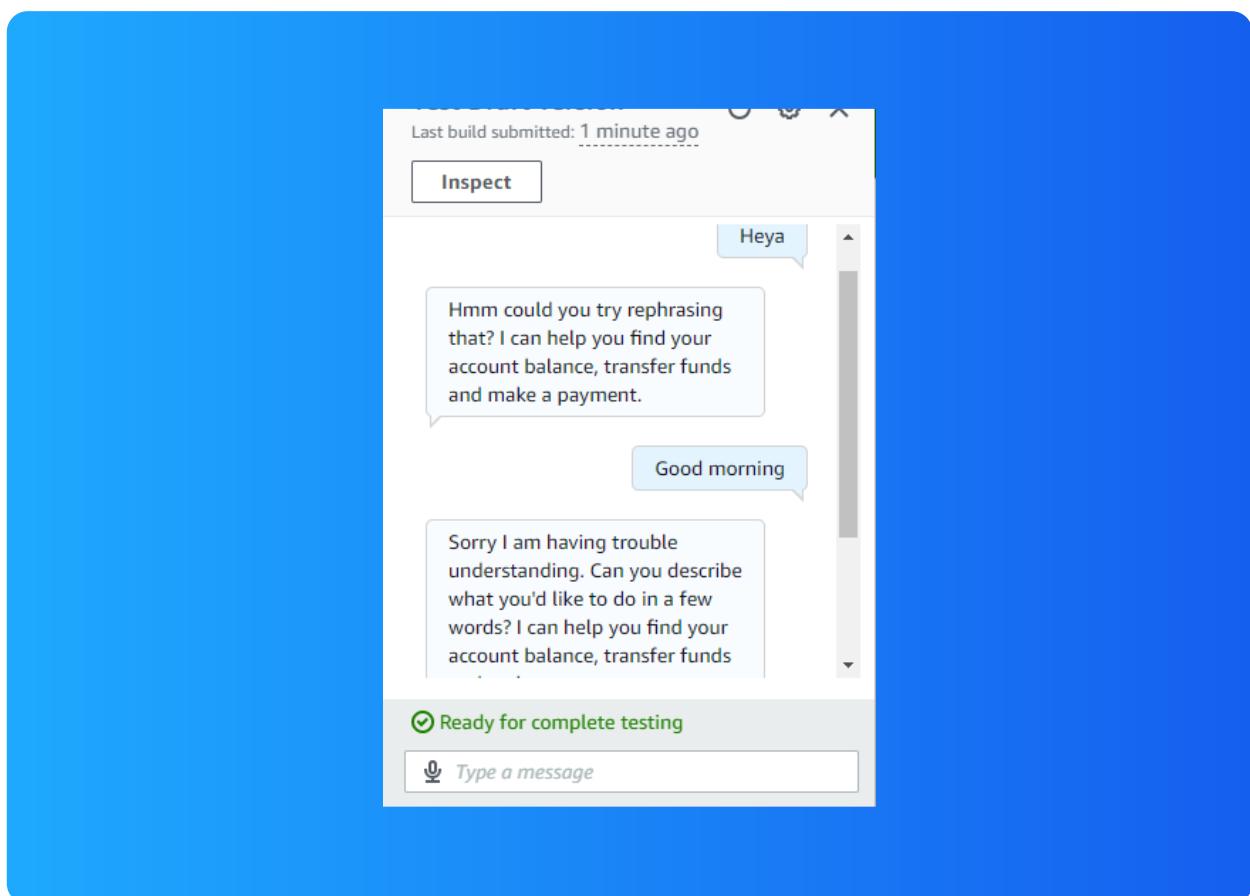
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Variations

To configure FallbackIntent, I selected the Closing response tab on FallbackIntent panel, expanded the Response sent to the user after the intent is fulfilled and filled necessary message I needed in the Message field.

I also added variations! What this means for an end user is a dynamic range of responses, making them sound more conversational and fun.





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