Build a Chatbot with Amazon Lex

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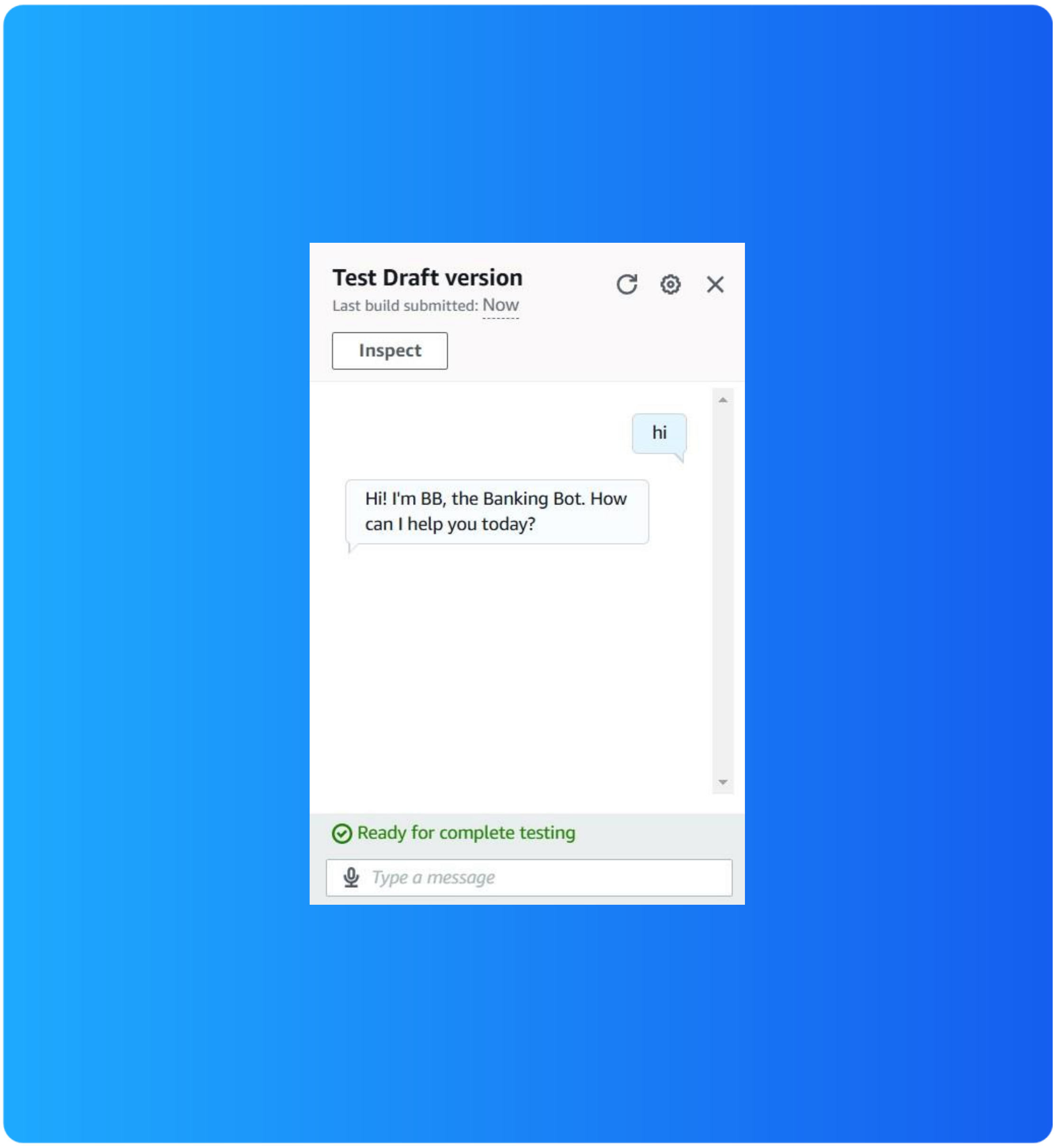
Test Draft version

Last build submitted: Now

Inspect

hi

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

Ready for complete testing

Type a message

Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a fully managed service for building conversational interfaces using voice and text. It’s useful because it enables the creation of chatbots and virtual assistants with natural language understanding, simplifying user interactions.

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How I used Amazon Lex in this project

I used Amazon Lex to build a conversational chatbot that understands and processes user inputs through text. I configured intents, added sample utterances.

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

One thing I didn’t expect in this project was how crucial fine-tuning the intent confidence scores would be. It required careful balancing to ensure the chatbot handled user inputs accurately without triggering fallback intents too often.

This project took me...

This project took me around two to three working hours to complete.

Setting up a Lex chatbot

I created my chatbot from scratch with Amazon Lex. Setting it up took me approximately 5 mins.

While creating my chatbot, I also created a role with basic permissions because it ensures secure and controlled access to essential AWS services.

In terms of the intent classification confidence score, I kept the default value of 0.40. This ensures that the chatbot selects the right intent with reasonable accuracy. It helps maintain a balance between flexibility and avoiding misclassifications

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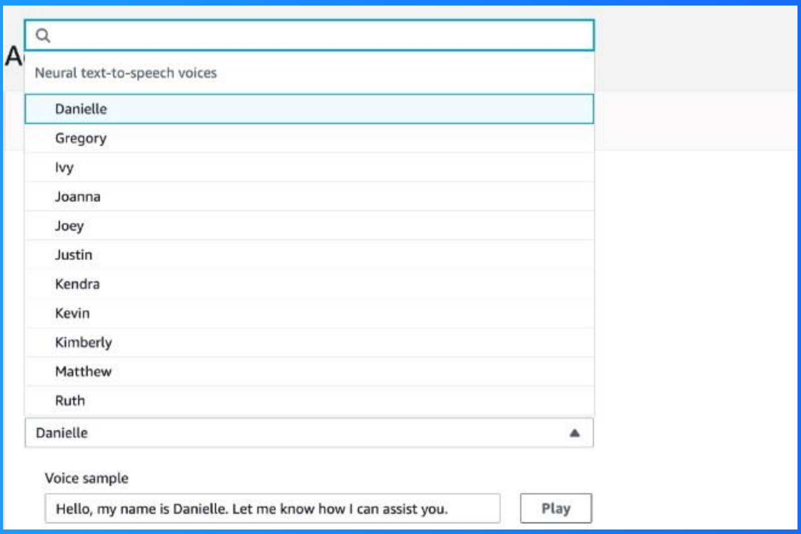

Voice sample: Hello, my name is Danielle. Let me know how I can assist you.

Intents

Intents are the core building blocks of my chatbot. They represent the specific actions or tasks a user wants to perform, like booking a ticket or checking the weather. Each intent includes sample user inputs (utterances) and corresponding responses.

I created my first intent, WelcomeIntent, to greet users when they interact with the chatbot. It provides a friendly introduction, sets the tone for the conversation, and guides users on how to proceed, ensuring an engaging and smooth start.

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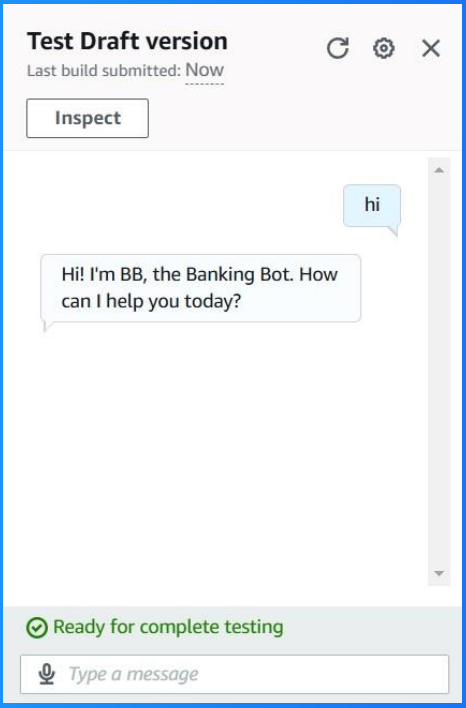

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FallbackIntent

I launched and tested my chatbot, which could respond successfully if I enter greetings like "Hi," "Hello," "I need help," "Hey" or even casual phrases like "What's up?" It recognizes a variety of friendly openings to start the conversation.

My chatbot returned the error message 'Intent FallbackIntent is fulfilled' when I entered an unrecognized phrase. This error message occurred because the input didn’t match any defined intents, triggering the default fallback intent.

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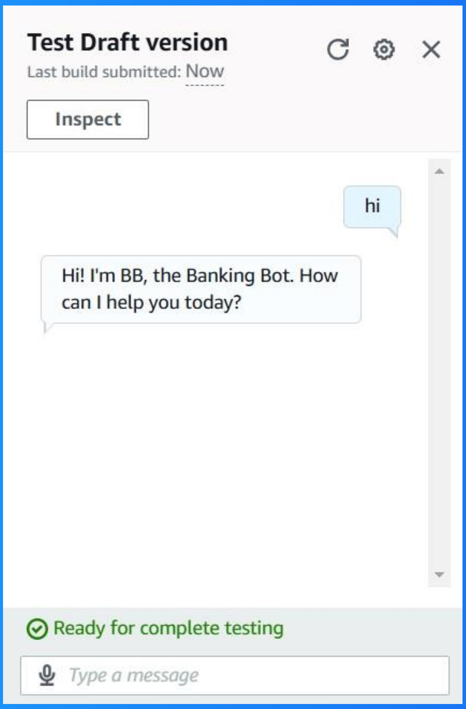

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Configuring FallbackIntent

FallbackIntent is a default intent in every chatbot that gets triggered when the user input doesn’t match any predefined intents or when the confidence score is below the threshold, ensuring the chatbot can handle unexpected inputs.

I wanted to configure FallbackIntent because it helps the chatbot handle unrecognized or unclear user inputs. It ensures the conversation doesn’t break and provides a way to guide users back to valid interactions.

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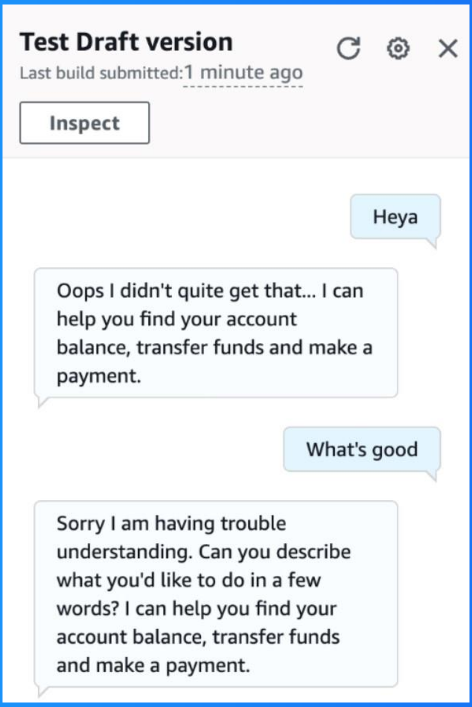
Variations

To configure FallbackIntent, I created a default intent in Amazon Lex and specified sample phrases that users might say when the chatbot doesn't recognize their input. I also set up appropriate prompts to guide users back to valid interactions.

I also added variations! What this means for an end user is that the chatbot can recognize and respond to different ways of asking the same question or making similar requests, ensuring a more natural and flexible conversation experience.



Heya

Oops I didn't quite get that... I can help you find your account balance, transfer funds and make a payment.

What's good

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.