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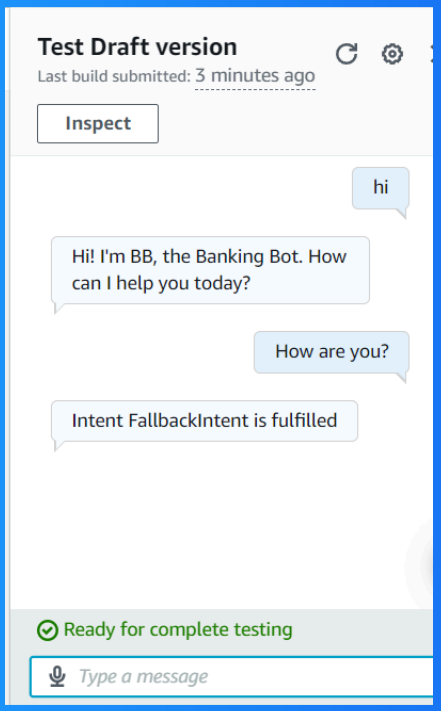
Build a Chatbot with Amazon Lex

Irfan Ansari



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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 is useful because it enables developers to create chatbots and virtual assistants that can understand natural language

How I used Amazon Lex in this project

I used Amazon Lex in today's project, the banker bot, by integrating it to handle user interactions through natural language processing.

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

One thing I didn't expect in this project was the level of user engagement, which led to more diverse queries than initially planned.

This project took me...

15 minutes

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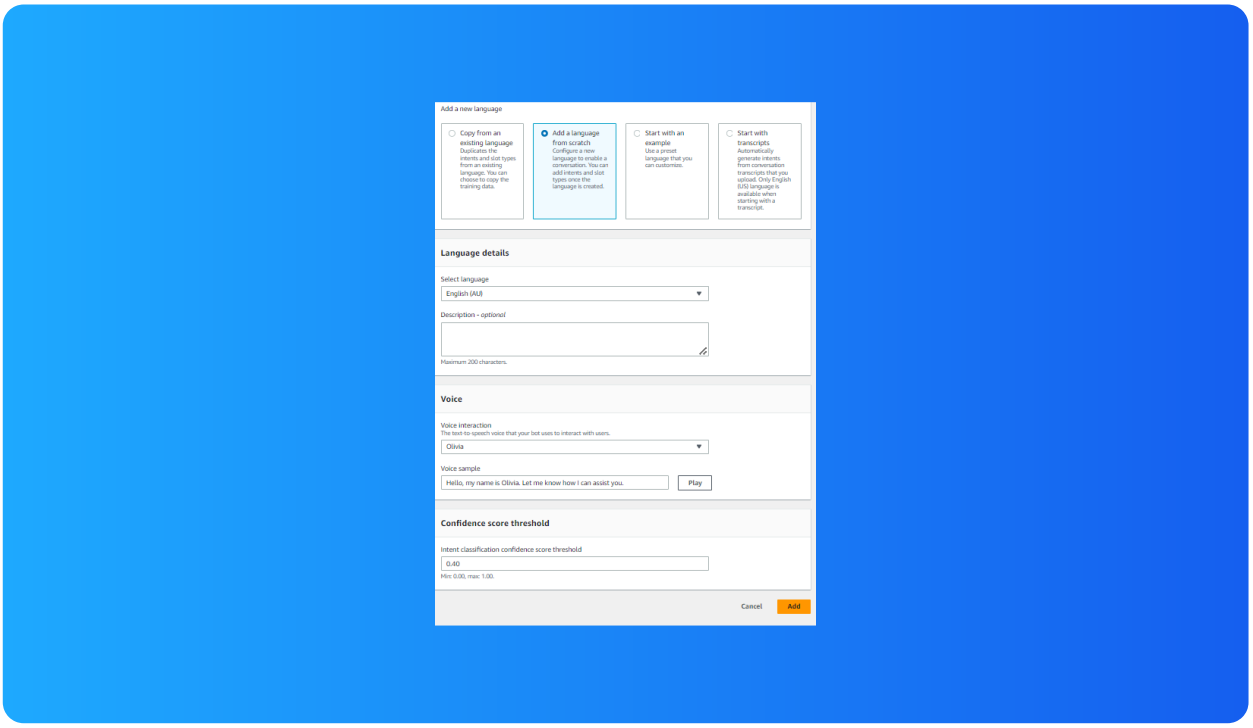
Setting up a Lex chatbot

3 Minutes

Basic Amazon Lex permissions are given to limit access and reduce security risks. This follows the principle of least privilege, ensuring the bot only performs necessary actions.

When you're using Amazon Lex to build a chatbot, this threshold is like a minimum score for your chatbot to confidently understand what the user is trying to say.



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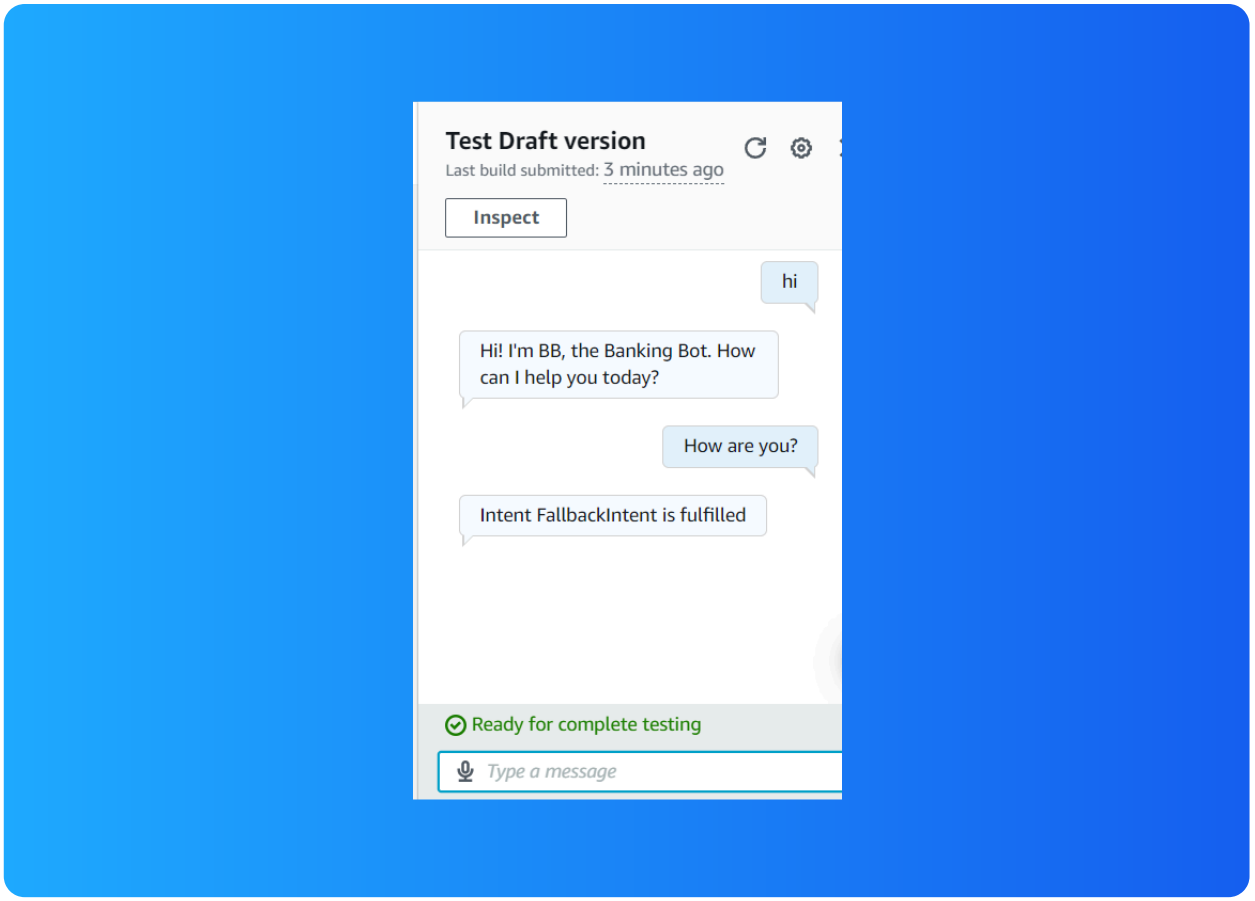
Intents

An intent is 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.

I created my first intent, WelcomeIntent, to greet users when they start interacting with the bot. It typically provides a friendly welcome message and sets the stage for further conversation



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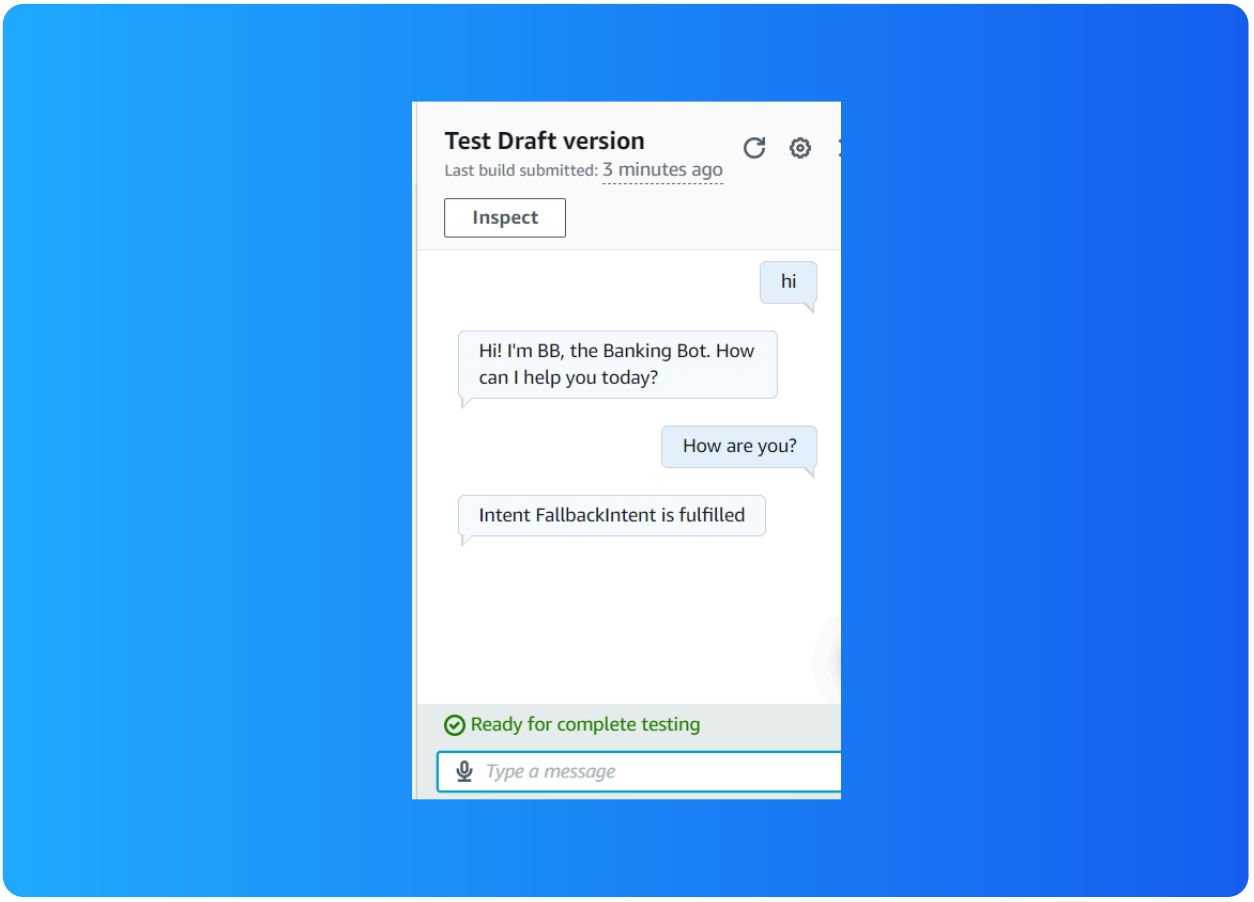
FallbackIntent

I launched and tested my chatbot, which could respond successfully if I enter "hi" with a greeting like, "Hi! I'm BB, the Banking Bot. How can I help you today?" It will also handle "How are you?" with the FallbackIntent.

My chatbot returned the error message Intent FallbackIntent is fulfilled when I entered queries it couldn't understand. This error message occurred because the chatbot was unable to match the input to any defined intents, triggering the fallback resp



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Configuring FallbackIntent

FallbackIntent is a default intent in every chatbot that gets triggered when the user's input does not match any defined intents. It serves as a catch-all, allowing the bot to respond generically and maintain conversation flow.

I wanted to configure FallbackIntent because it helps handle unexpected user inputs effectively. This ensures that the chatbot can still engage users and guide them when their queries are not recognized.

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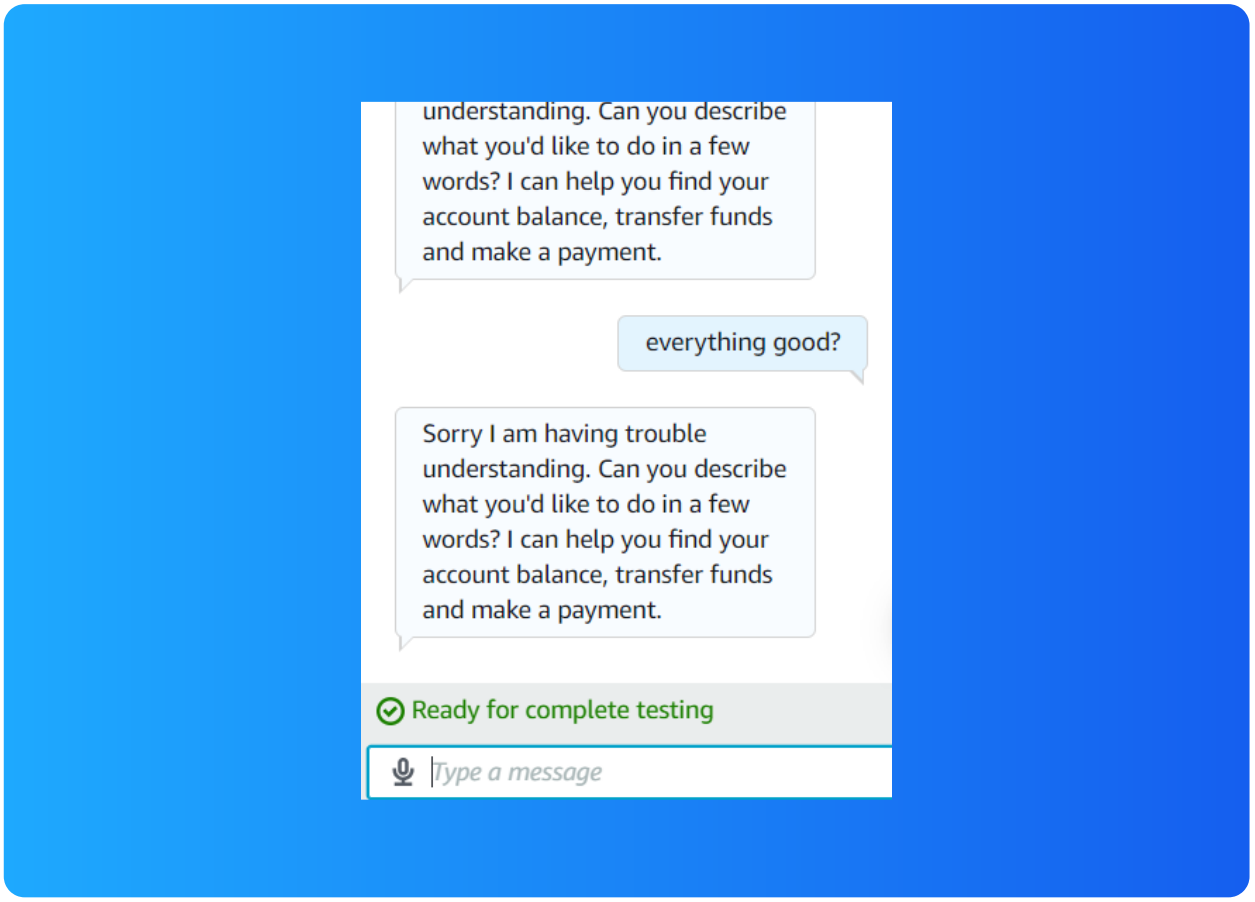
Variations

To configure FallbackIntent, I defined it in the chatbot's intent settings and set up responses for unrecognized inputs

I also added variations! What this means for an end user is that the chatbot can recognize different ways of asking the same question, improving understanding and response accuracy.



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