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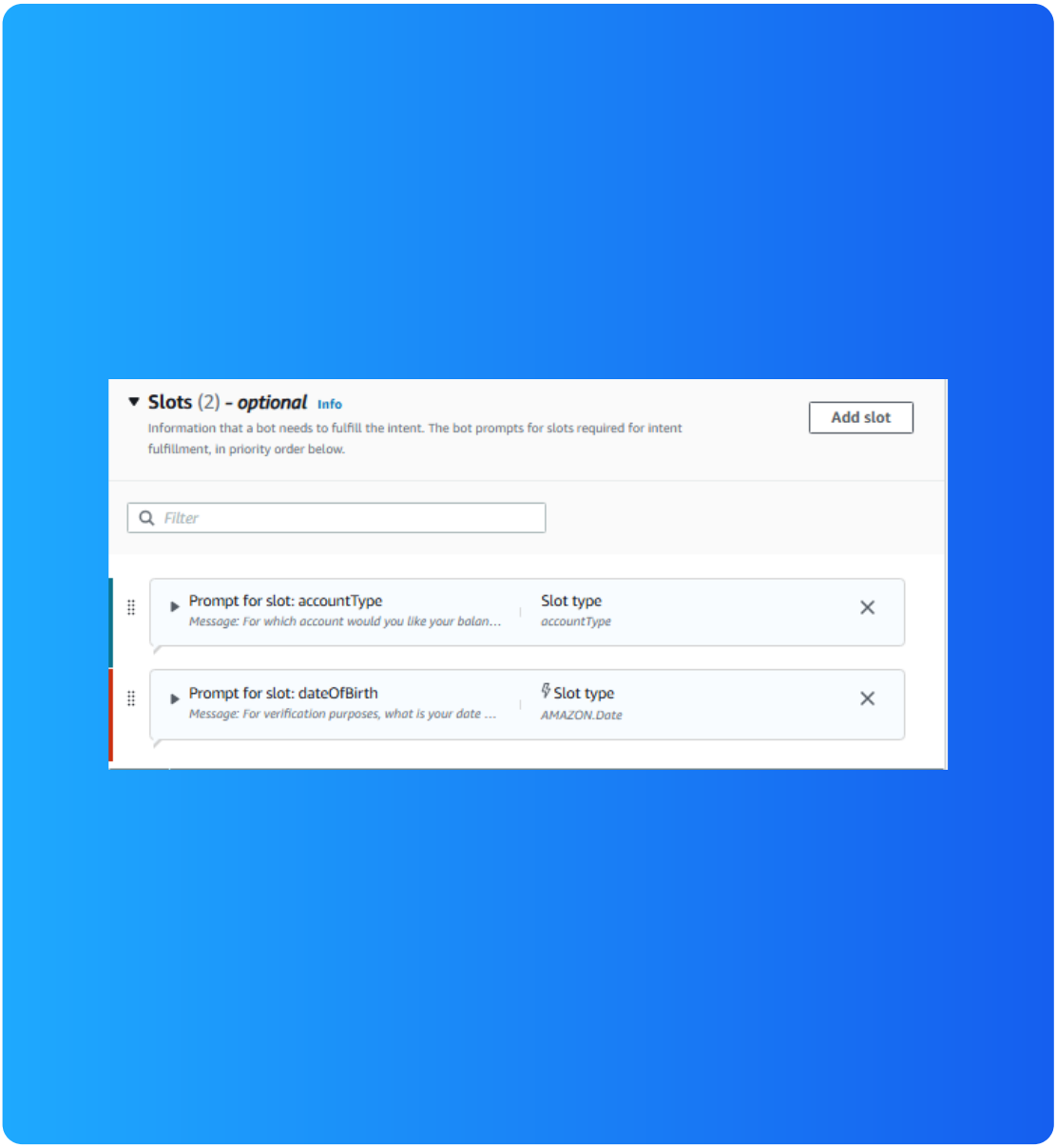
Build a Chatbot with Custom Slots

Gloria



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Introducing Today's Project!

In today's project, I used Amazon Lex to create a chatbot that understands user questions, like checking account balances, and collects specific details using slots. This makes the bot respond accurately and interact naturally with users

What is Amazon Lex?

Amazon Lex is a powerful AWS service that lets you build smart chatbots and conversational interfaces with ease. It uses AI to understand user intent, supports voice and text interactions, and simplifies creating intelligent communication tools

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

One thing I didn’t expect in this project was how intuitive it was to set up and use custom slot types in Amazon Lex, allowing the chatbot to handle specific user inputs more effectively without requiring coding or additional complexity.

This project took me...

This project took me approximately 20 minutes to complete, thanks to the intuitive interface of Amazon Lex, which made setting up intents, slots, and utterances straightforward and efficient.

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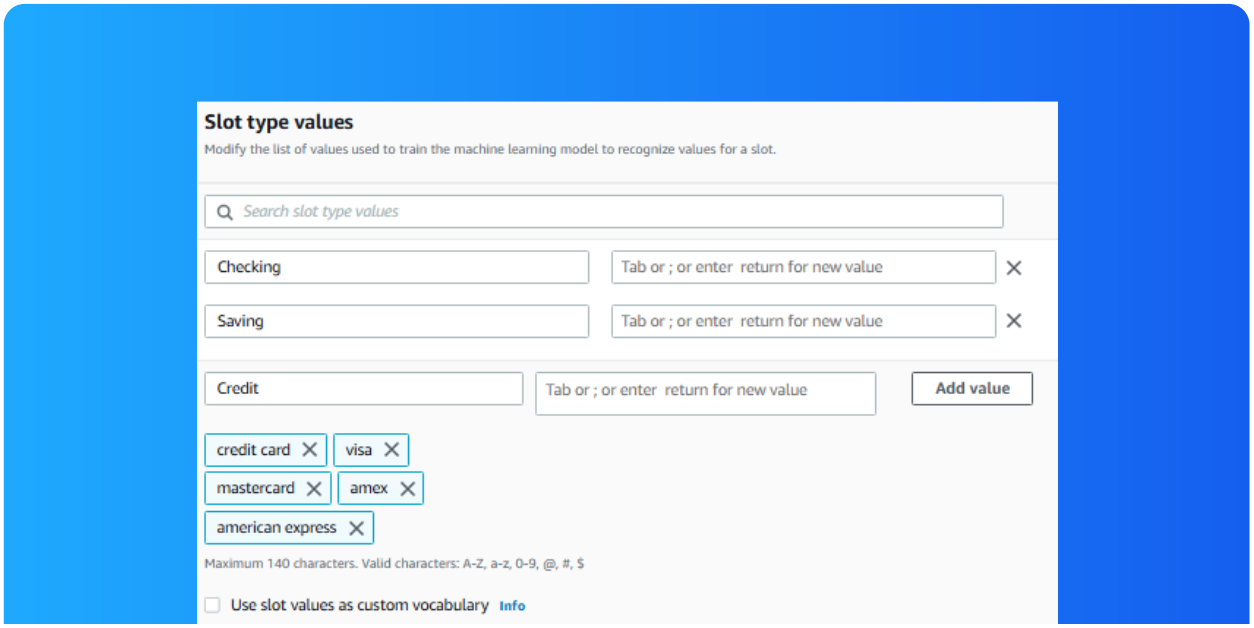
Slots

Slots are placeholders in Amazon Lex that capture specific pieces of information from user input to fulfill intents. For example, in a booking bot, slots like "Date," "Time," or "Location" store user-provided values to complete the interaction.

By adding custom slots in utterances, my chatbot's users can provide specific, context-relevant details during their interaction, enabling more accurate responses. For example, users can specify an account type like "savings" or "checking".

In this project, I created a custom slot type to define specific, context-relevant values that the bot could recognize and handle accurately, ensuring better user input validation and enhancing the precision of responses.



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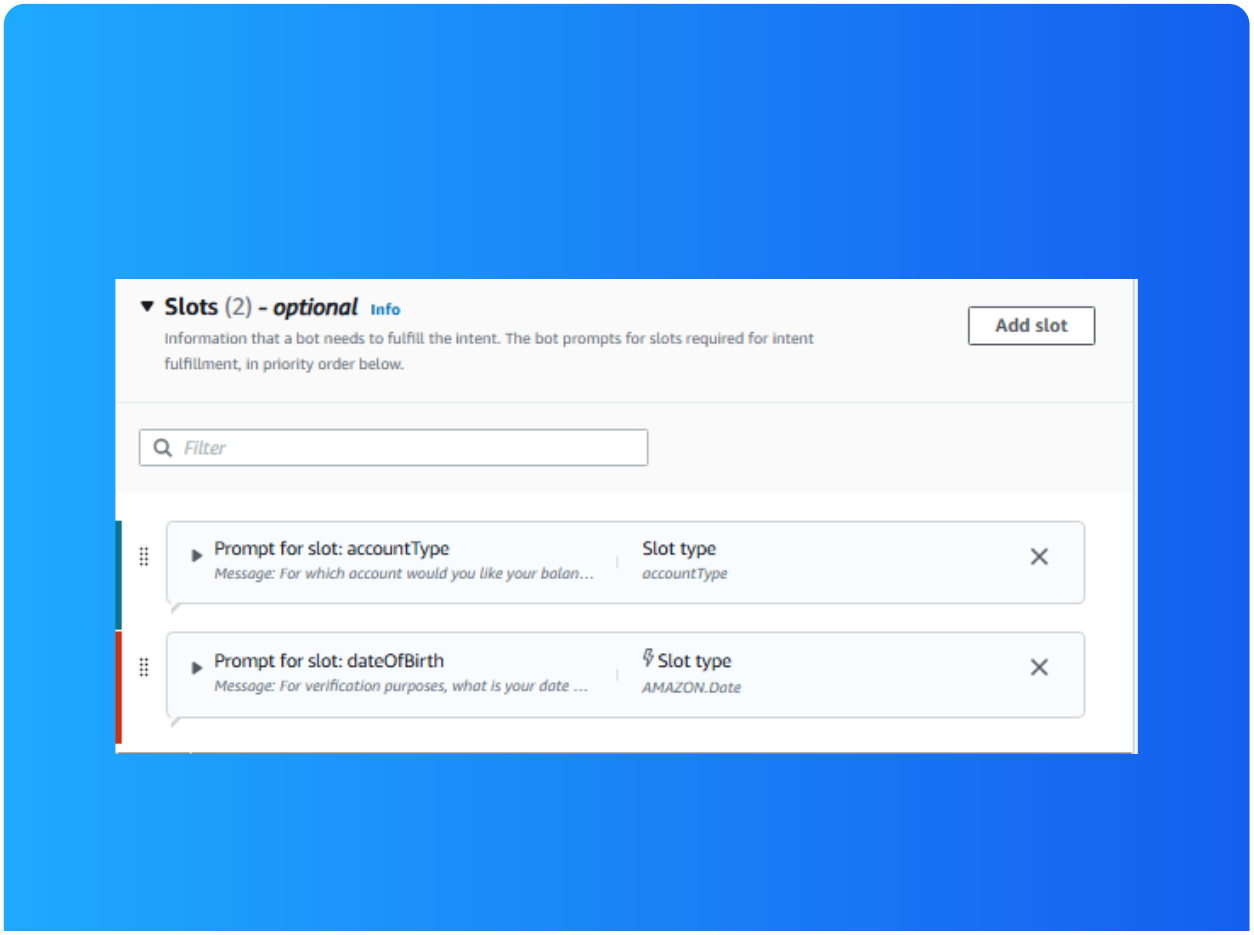
Connecting slots with intents

This slot type has restricted slot values, which means the user input must match one of the predefined values in the slot type list, ensuring the bot only accepts valid and expected inputs for more controlled and accurate interactions.

I associated my custom slot with CheckBalance, which is an intent designed to handle user queries related to account balances. It identifies the user's request to check their balance.



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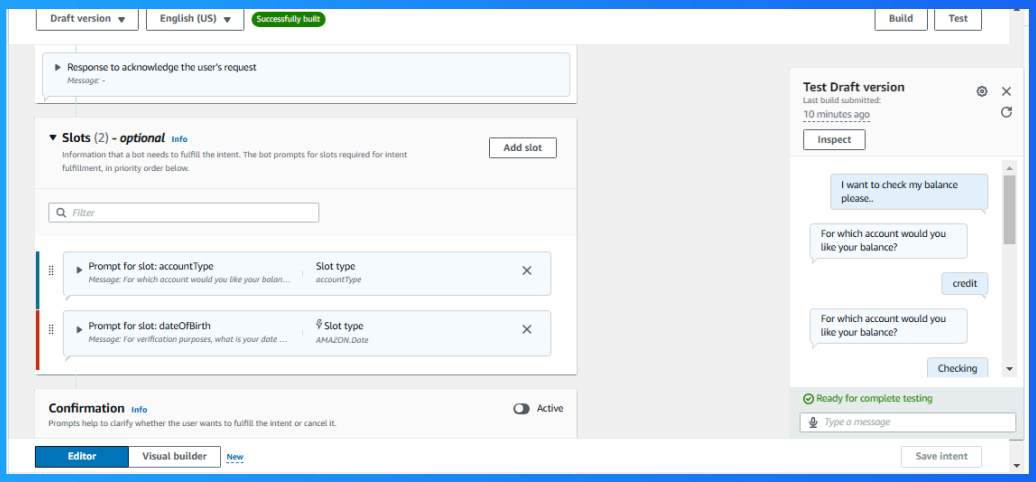
Slot values in utterances

I included slot values in some of the utterances (i.e., user inputs) by adding placeholders for slots within the sample phrases. For example, I used phrases like "Balance in {accountType}" and "What is my {accountType} balance?".



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