



Build a Chatbot with Custom Slots



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A screenshot of the AWS Lambda function configuration interface, specifically the "Slots" section. The title "Slots (2) - optional" is shown with a small "Info" link. A note below states: "Information that a bot needs to fulfill the intent. The bot prompts for slots required for intent fulfillment, in priority order below." An "Add slot" button is at the top right. A "Filter" input field is present. Two slots are listed:

- Prompt for slot: accountType**
Message: For which account would you like your balan...
Slot type: accountType
- Prompt for slot: dateOfBirth**
Message: For verification purposes, what is your date ...
Slot type: AMAZON.Date



Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a service for building conversational interfaces using voice and text. It's useful because it allows developers to create chatbots and virtual assistants that can understand and respond to natural language.

How I used Amazon Lex in this project

I used Amazon Lex in today's project to create a chatbot that helps users check their account balance. The bot uses custom slots to accurately understand and process different types of account inquiries.

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

One thing I didn't expect in this project was how quickly the chatbot was able to accurately interpret user inputs without requiring additional fine-tuning. It was more efficient than I initially anticipated.

This project took me...

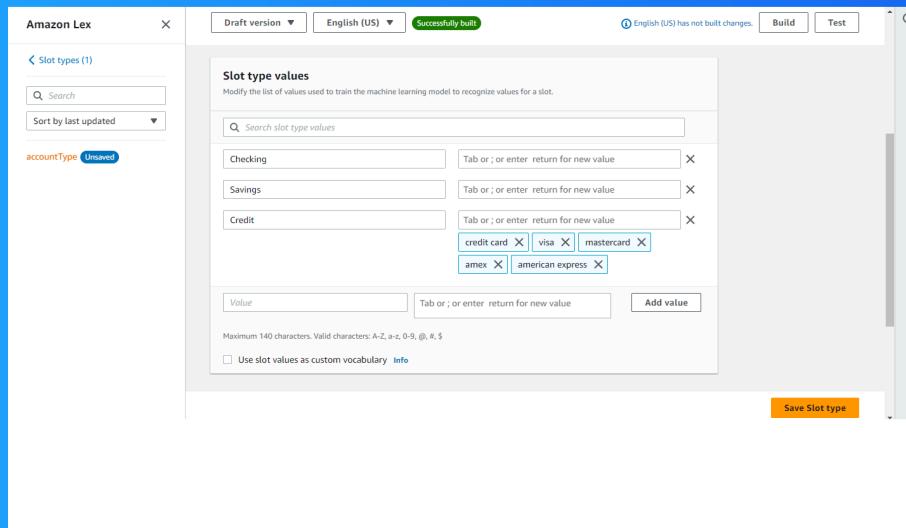
This project took me about 20 minutes to complete, from setting up the chatbot to testing its functionality. It was a quick and straightforward process.

Slots

Slots are pieces of information that a chatbot needs to complete a user's request. Think of them as blanks that need to be filled in a form.

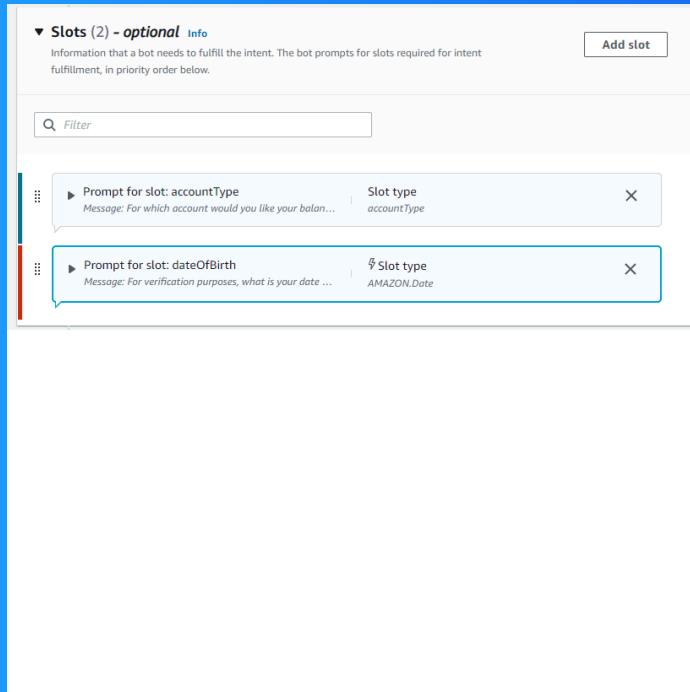
In this project, I created a custom slot type to handle specific bank account categories like Checking, Savings, and Credit. This ensured that the chatbot could correctly identify and respond to user inquiries about these distinct account types.

This slot type has restricted slot values, which means only predefined options like Checking, Savings, and Credit are accepted. It prevents the bot from recognizing unintended inputs.



Connecting slots with intents

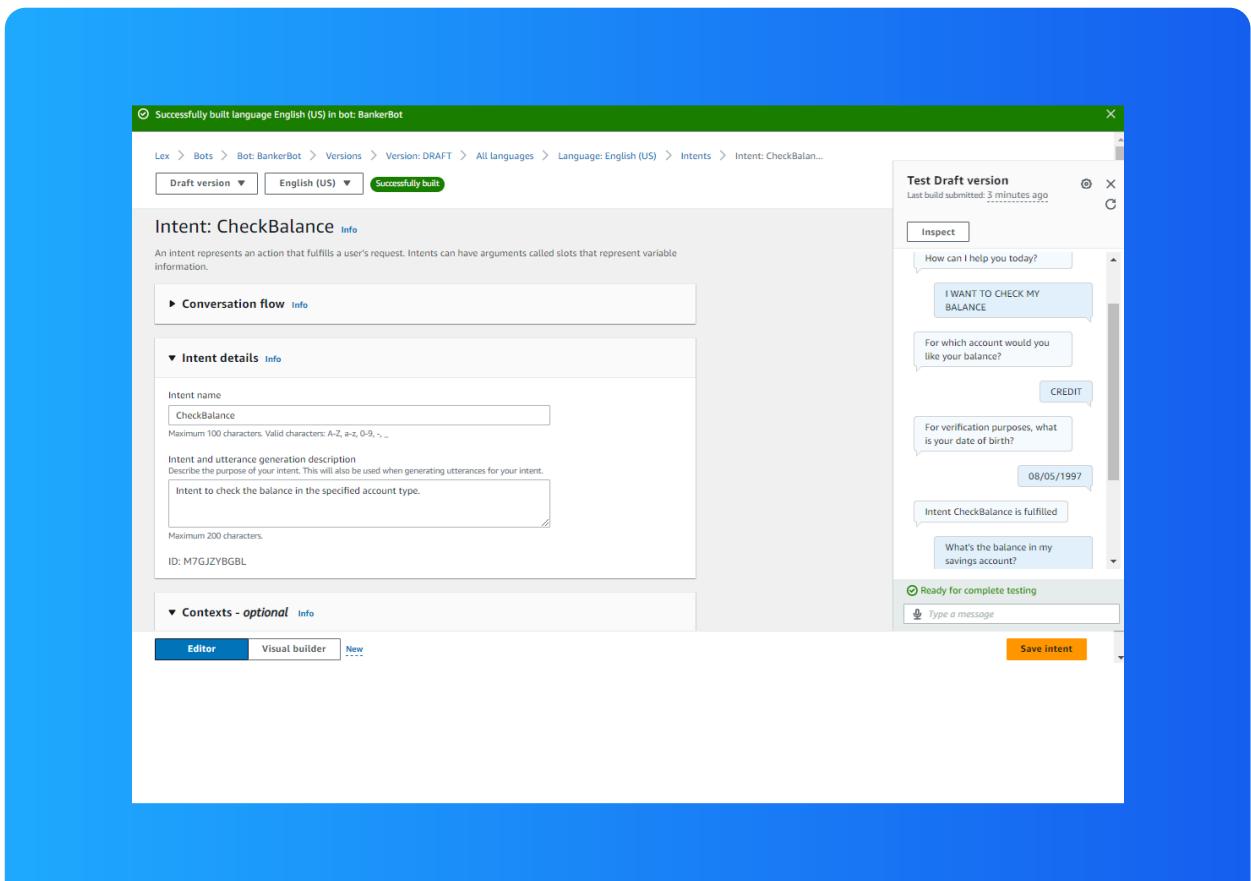
I associated my custom slot with CheckBalance, which allows the chatbot to retrieve and confirm the user's account type before providing their balance. This ensures accurate and relevant responses based on the user's input.



Slot values in utterances

I included slot values in some of the utterances (i.e., user inputs) by using placeholders like {accountType}. For example, in the utterance "What's the balance in my {accountType} account?" the bot can directly identify the account type.

By adding custom slots in utterances, I enabled the chatbot to automatically recognize and fill in specific information, like the account type, from user inputs. This streamlined the interaction, reducing the need for additional prompts.





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