



# Build a Chatbot with Custom Slots



DEVA TELAGAREDDY

A screenshot of the Amazon Lex console interface. At the top, there is a header with the text "Slots (2) - optional" and an "Info" link. Below this, a sub-header says "Information that a bot needs to fulfill the intent. The bot prompts for slots required for intent fulfillment, in priority order below." On the right side of the header is a button labeled "Add slot". Below the header, there is a search bar with the placeholder text "Filter". Underneath the search bar, there are two entries for custom slots:

- The first entry shows a prompt message "▶ Prompt for slot: accountType" followed by "Message: For which account would you like your balan..." and a "Slot type" section with "accountType" and a delete "X" button.
- The second entry shows a prompt message "▶ Prompt for slot: dateOfBirth" followed by "Message: For verification purposes, what is your date ..." and a "Slot type" section with "AMAZON.Date" and a delete "X" button.

# Introducing Today's Project!

## What is Amazon Lex?

Amazon Lex is a service for building conversational interfaces using voice or text, allowing developers to create chatbots and virtual assistants with ease.

## How I used Amazon Lex in this project

In today's project, I used Amazon Lex to develop a BankerBot that handles banking inquiries like checking balances and transferring funds by defining intents, creating custom slots for account types.

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

One thing I didn't expect in this project was how significantly the custom slot type improved the accuracy of user input recognition, making the conversation flow more natural and reducing the number of clarifications needed during interactions.

## This project took me...

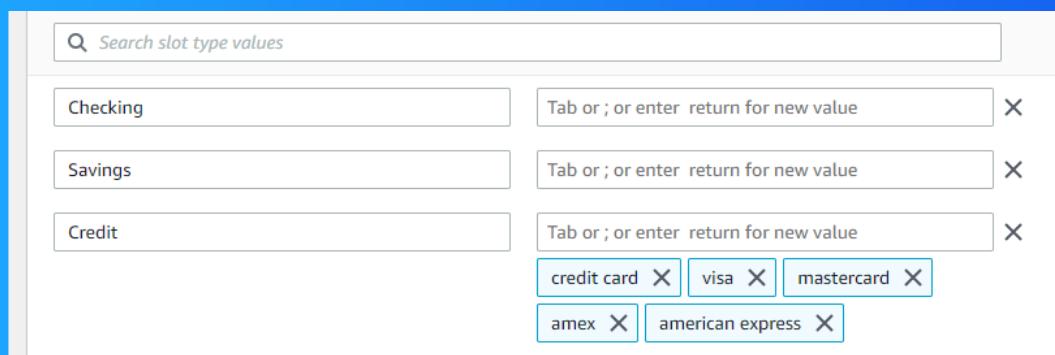
This project took me around 1 hour to complete

# Slots

Slots are essentially the pieces of a conversation that the bot needs to capture, and they can be tailored to different scenarios such as ordering food, booking a hotel, or scheduling appointments.

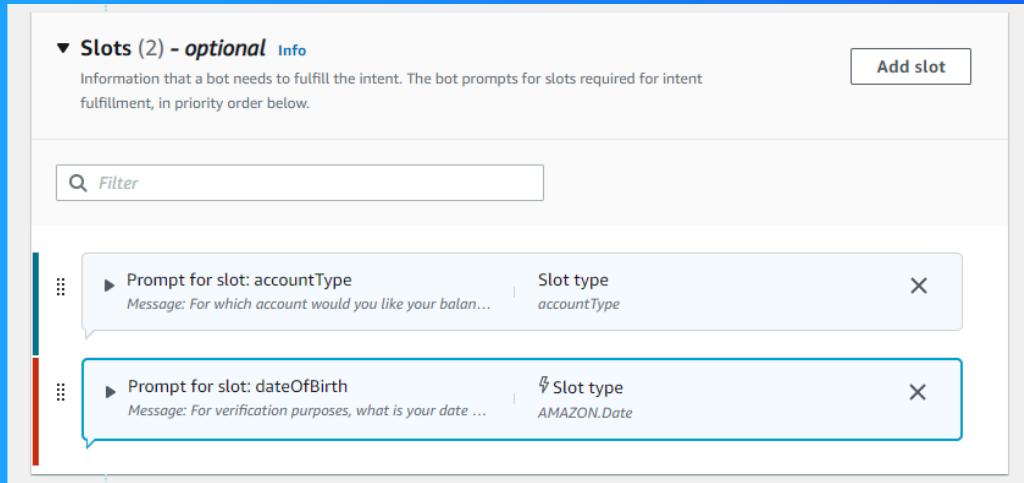
I created a custom slot type to handle three types of accounts(Credit, Savings, and Checking) ,custom slot types can help the bot correctly identify and process the user's input.

Enabling "Restrict to slot values" ensures that the BankerBot will only accept the specified three account types (Credit, Savings, Checking) as valid, preventing Amazon Lex from recognizing any alternative inputs.



# Connecting slots with intents

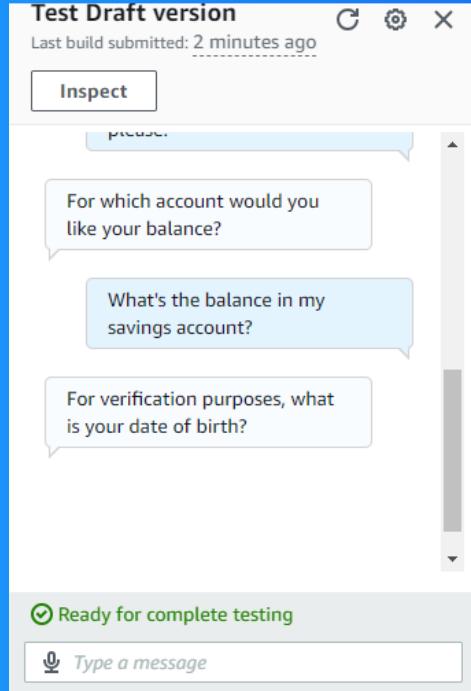
I associated my custom slot with CheckBalance, which allows the BankerBot to prompt users for their account type (Credit, Savings, or Checking) when they request to check their balance.



# Slot values in utterances

I included slot values in some of the utterances (i.e., user inputs) by directly embedding the slot placeholders within the example phrases users might say. For example, I used utterances like "I want to check my {AccountType} balance".

By adding custom slots in utterances, I enabled the BankerBot to dynamically capture essential information from users, such as their chosen account type (Credit, Savings, or Checking), making the conversation more natural and efficient.





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