



# Build a Chatbot with Custom Slots



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The screenshot shows a user interface for configuring a chatbot's slots. At the top, there is a section titled "Slots (2) - optional" with a "Info" link and a "Add slot" button. Below this, 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



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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's essentially a tool that allows you to create chatbots or virtual assistants that can understand and respond to human language.

## How I used Amazon Lex in this project

Intent Creation: Defined intents like "Hi," "Hello," "I need help," and "Can you help me." Slot Creation: Created slots for Credit, credit card, visa, mastercard, amex, and american express. Utterance Creation: Provided

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

Gen Ai in AWS lex

## This project took me...

30 minutes

# Slots

Slots are placeholders for specific information that the chatbot needs to fulfill a user's intent.

In this project, I created a custom slot type to accurately capture the wide range of possible bank account types. This was essential because standard built-in slot types didn't encompass the specific terminology used by aws customers,

This slot type has restricted slot values, which means Amazon Lex will only recognize and return values that exactly match or are synonyms of the ones you've defined.

**Slot type values**  
Modify the list of values used to train the machine-learning model to recognise values for a slot.

Search slot type values

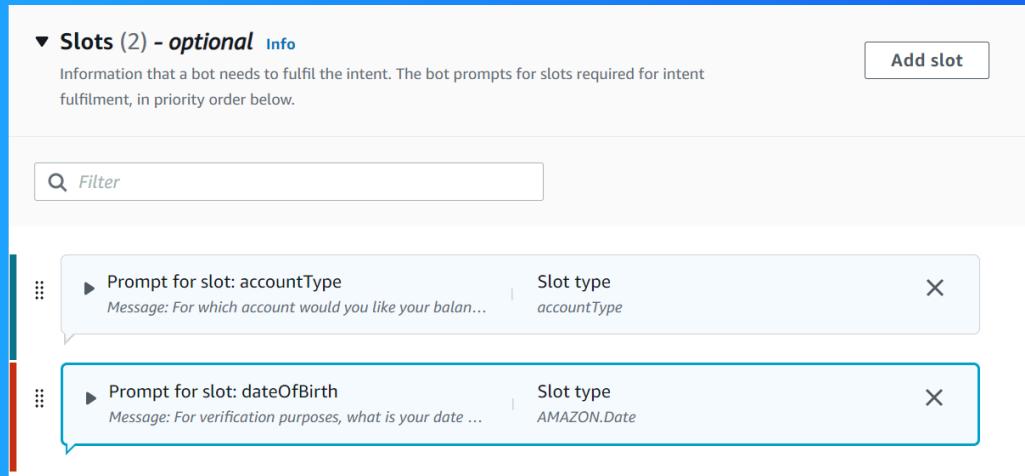
Checking	Tab or ; for a new value	X
Savings	Tab or ; for a new value	X
Credit	Tab or ; for a new value	X
	credit card X visa X visa X amex X	
	american express X	

Value Tab or ; for a new value  Add value

Maximum 140 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$  
 Use slot values as custom vocabulary. [Info](#)

# Connecting slots with intents

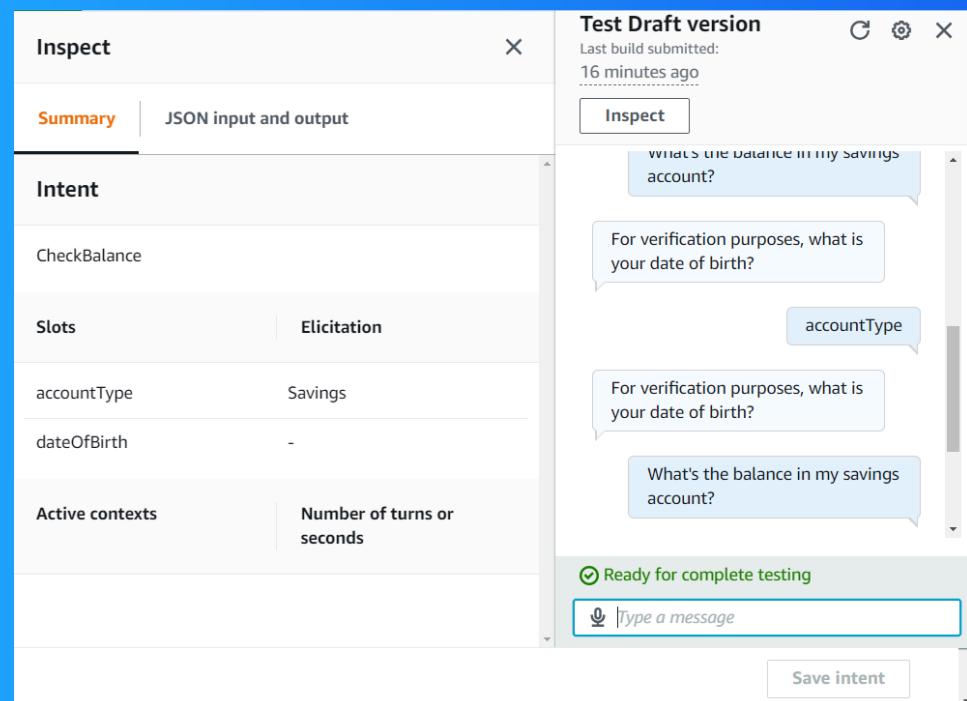
I associated my custom slot with CheckBalance, which triggers the chatbot to request the user's account type. Once the user provides the account type, the chatbot can then proceed to retrieve and display the account balance.



# Slot values in utterances

I included slot values in some of the utterances (i.e. user inputs) by using curly braces around the slot name. For example, instead of simply writing "Check my balance", I included "{accountType}" in the utterance, like "Check my {accountType}

By adding custom slots in utterances, I provided Amazon Lex with examples of how users might refer to different account types. This helped the chatbot learn to recognize various phrasings and accurately extract the account type information from user





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