



# Add Custom Slots to a Lex Chatbot



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▼ **SLOTS (2) - optional** Info

Information that a bot needs to fulfill the intent. The bot prompts for slots required for intent fulfillment, in priority order below.

<p>▶ Prompt for slot: accountType Message: For which account would you like your balan...</p>	Slot type <i>accountType</i>	<input type="button" value="X"/>
<p>▶ Prompt for slot: dateOfBirth Message: For verification purposes, what is your date ...</p>	Slot type <i>AMAZON.Date</i>	<input type="button" value="X"/>

# Introducing Today's Project!

I used Lex to set up my own chatbot with custom slots.

## What is Amazon Lex?

Amazon Lex is an AI chat builder that allows users to interact with any application using natural language voice or chat.

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

How one can use custom slots in their utterances

## This project took me...

About an hour

# Slots

Slots are pieces of information that a chatbot needs to complete a user's request.

By adding custom slots in utterances, my chatbot's users can specify the account type in their question and will only be prompted for their date of birth.

In this project, I created a custom slot type to fit my needs because bank account information is quite a custom type of data.

The screenshot shows a web-based configuration interface for defining slot type values. At the top, there is a header titled "Slot type values" with a subtitle "Modify the list of values used to train the machine learning model to recognize values for a slot." Below this, there is a search bar labeled "Search slot type values". The main area contains a list of values categorized by account type:

- Checking:** Tab or ; or enter return for new value (with an "X" button)
- Savings:** Tab or ; or enter return for new value (with an "X" button)
- Credit:** Tab or ; or enter return for new value (with an "X" button)
  - credit card (with an "X" button)
  - visa (with an "X" button)
  - mastercard (with an "X" button)
  - amex (with an "X" button)
  - american express (with an "X" button)

At the bottom of the list area, there is a "Value" input field, a "Tab or ; or enter return for new value" input field, and a "Add value" button. A note below the fields states "Maximum 140 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$". There is also a checkbox labeled "Use slot values as custom vocabulary" with an "Info" link next to it.

# Connecting slots with intents

This slot type has restricted slot values, which means that only the values that I specify will count as a valid accountType.

I associated my custom slot with CheckBalance, which is the intent to check the user's bank balance.

The screenshot shows the NextWork interface with a focus on the 'Slots' section for an intent. The interface has a light beige background with a large central card.

**Slots (2) - optional** Info

Information that a bot needs to fulfill the intent. The bot prompts for slots required for intent fulfillment, in priority order below.

**Add slot**

**Filter**

**Prompt for slot: accountType**  
Message: For which account would you like your balan... | Slot type accountType **X**

**Prompt for slot: dateOfBirth**  
Message: For verification purposes, what is your date ... | Slot type AMAZON.Date **X**

# Slot values in utterances

I included slot values in some of the utterances (i.e. user inputs) by using the text {accountType} so that Amazon Lex is now prepared to look for slot values from the user's input.

**Inspect** ×

**Summary** | JSON input and output

**Intent**

CheckBalance

**Slots** **Elicitation**

accountType Checking

dateOfBirth 1002-02-01

**Active contexts** **Number of turns or seconds**

**Test Draft version** ↻ ⚙ ✕

Last build submitted: 8 minutes ago

**Inspect**

01/01/1002

Intent CheckBalance is fulfilled

I want to check the balance for my Checking account

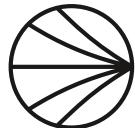
For verification purposes, what is your date of birth?

02/01/1002

Intent CheckBalance is fulfilled

⌚ Ready for complete testing

Type a message



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