



# Build a Chatbot with Custom Slots



Kunal Parkhade

A screenshot of a user interface for configuring chatbot slots. At the top, there's a section titled "Slots (2) - optional" with a "Info" link. Below it, a note says "Information that a bot needs to fulfill the intent. The bot prompts for slots required for intent fulfillment, in priority order below." A "Filter" input field is available. Two slots are listed:

- 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



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# Introducing Today's Project!

## What is Amazon Lex?

Amazon Lex is an AWS service to build chatbot that will take the user input in text or voice format and it will give response accordingly. It is useful because it provides end-to-end solution to build, publish, deploy and monitor chatbots.

## How I used Amazon Lex in this project

I have used Amazon Lex in today's project for creating CheckBalance intent. In today's project, the chatbot will ask some information to user for verification purposes.

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

I didn't expect that the Lex will have multiple slot type like blank and built-in

## This project took me...

This project takes around 20 minutes.



# Slots

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

In this project, I created a custom slot type to `accountType`.

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

**Slot type values**

Modify the list of values used to train the machine learning model to recognize values for a slot.

Search slot type values

|          |  |                    |
|----------|--|--------------------|
| Checking | Tab or ; or enter return for new value | X                  |
| Savings  | Tab or ; or enter return for new value | X                  |
| Credit   | Tab or ; or enter return for new value | X                  |
|          | credit card X                          | visa X             |
|          | mastercard X                           |                    |
|          | amex X                                 | american express X |

Value    Tab or ; or enter return for new value    Add value

Maximum 140 characters. Valid characters: A-Z, a-z, 0-9, @, #, \$



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# Connecting slots with intents

I associated my custom slot with CheckBalance, which will check my balance, but before that it will ask some information to user.

The screenshot shows the 'Slots (2) - optional' section of the Amazon Lex configuration. It includes a 'Filter' search bar and two entries:

- 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

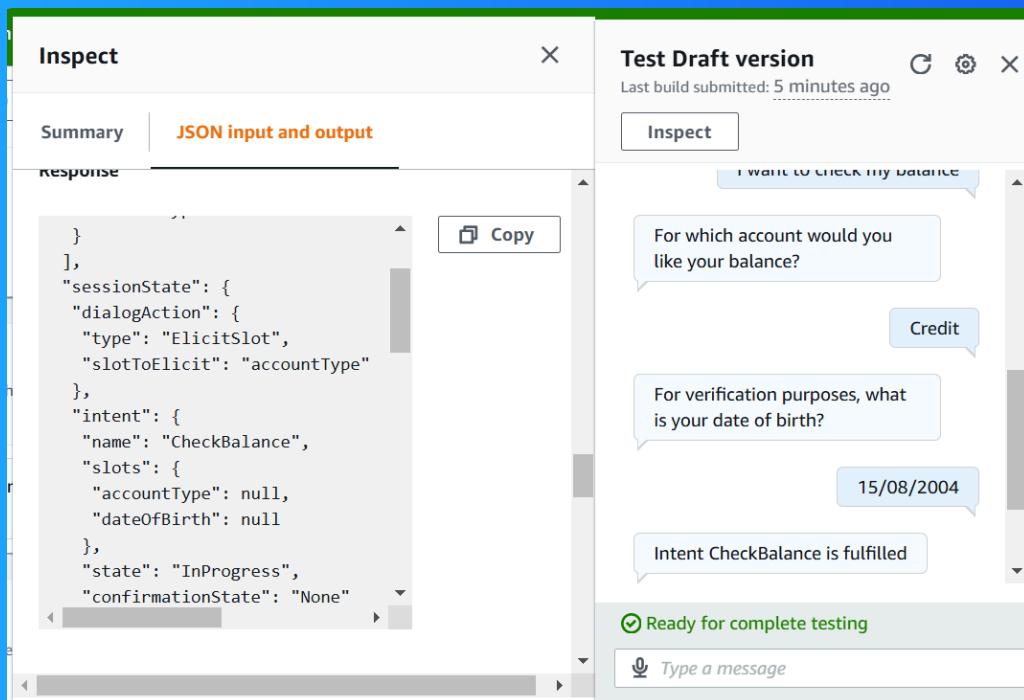
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# Slot values in utterances

I included slot values in some of the utterances (i.e. user inputs) by just enclosing the slot with curly brackets.

By adding custom slots in utterances, we can modify it according to our requirement.





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