



Build a Chatbot with Custom Slots



sailavanyapudi08@gmail.com

The screenshot shows a blue-themed 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 to know yo...
Slot type: accountType
X
- Prompt for slot: dateOfBirth**
Message: For verification purposes, what is your date ...
Slot type: AMAZON.Date
X

Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a service for building conversational interfaces using voice and text, enabling developers to create chatbots that interact naturally with users for tasks like customer service, information retrieval, and business automation.

How I used Amazon Lex in this project

I used Amazon Lex in today's project to build a chatbot that can handle user inquiries by recognizing intents, extracting relevant information through custom slots, and providing dynamic, conversational responses based on user input. This setup enabl

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

One thing I didn't expect in this project was the amount of fine-tuning required to ensure the bot accurately recognized similar intents without confusion; I had to carefully adjust intent configurations and slot types to prevent overlapping response

This project took me...

This project took me an hour to design intents, configure custom slots and to test to ensure the bot handled various user inputs accurately and naturally.

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 check a user's bank balance

Restricting slot values makes sure that only the values that you specify will count as a valid accountType!. Otherwise, Amazon Lex will use machine learning to accept other values that it sees users constantly entering.

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, @, #, \$

Use slot values as custom vocabulary [Info](#)

Connecting slots with intents

I associated my custom slot with CheckBalance, which is used to check user's account balance for different account types.

▼ **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.

Filter

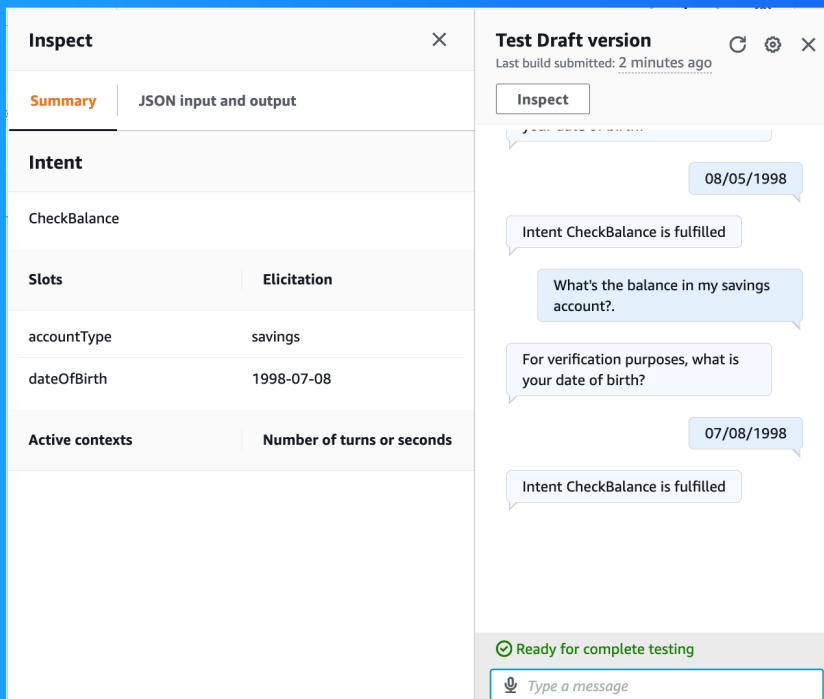
<p>▶ Prompt for slot: accountType <small>Message: For which account would you like to know yo...</small></p>	Slot type <small>accountType</small>	X
<p>▶ Prompt for slot: dateOfBirth <small>Message: For verification purposes, what is your date ...</small></p>	Slot type <small>AMAZON.Date</small>	X

Add slot

Slot values in utterances

I included slot values in some of the utterances (i.e. user inputs) by adding slots under the slots pane. For example i added the Prompt for slot as accountType and the slot type is the accountType which we generated before.

Adding custom slots to utterances in Amazon Lex allows developers to extract and use specific pieces of information from a user's input, making the bot more dynamic and capable of handling complex interactions.





NextWork.org

Everyone should be in a job they love.

Check out nextwork.org for
more projects

