



# Build a Chatbot with Custom Slots



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A screenshot of the Amazon Lex slot configuration interface. The interface shows two custom slots defined for an intent:

- Slot type:** accountType  
**Message:** For which account would you like your balan...
- Slot type:** AMAZON.Date  
**Message:** For verification purposes, what is your date o...

The interface includes a search bar labeled "Filter", a "Confirmation" section at the bottom, and a "Confirmation" button at the bottom right.

# Introducing Today's Project!

Today used some slots creation and add some other utterances which helps bot to check more accurate than last part.

## What is Amazon Lex?

Amazon Lex is a fully managed service that allows developers to build conversational chatbots and voice assistants using natural language processing and speech recognition, making it easy to create scalable, automated, and cost-effective.

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

In Inspect the chatbot has already filled both slots - accountType and dateOfBirth.

## This project took me...

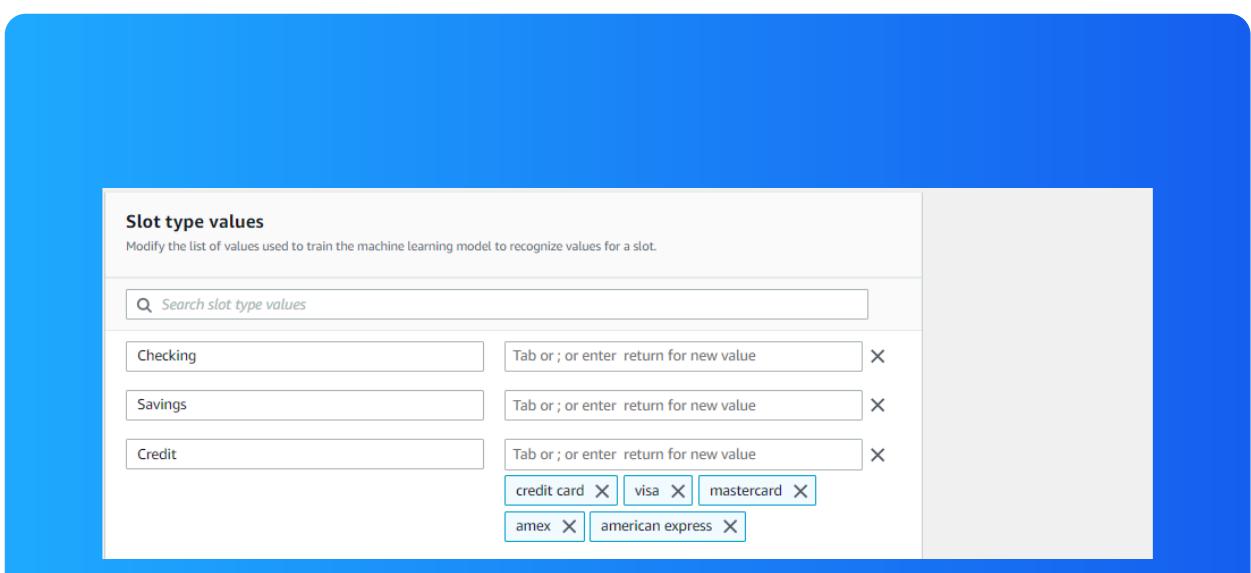
nearly 45 minutes which need time to read the steps and adding screenshot for my documentation.

# 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. For example, if the intent is to book a table at a restaurant, the chatbot needs specific details like: rest

By adding custom slots in utterances, my chatbot's users' interactions become more personalized, allowing the system to capture specific details such as dates, locations, or preferences, which improves the overall accuracy and relevance of responses.

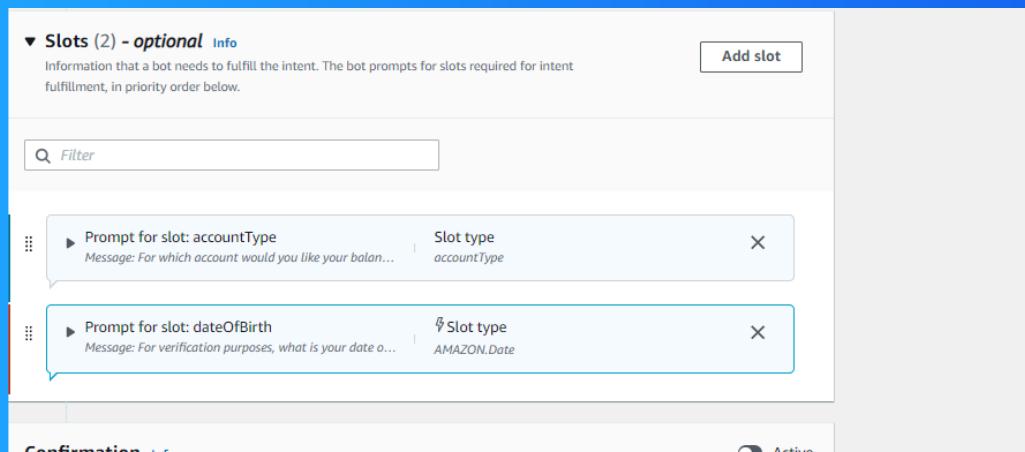
A custom slot type was set up to handle specific input values that are not covered by Amazon Lex's built-in slot types. This allows the bot to understand and validate user inputs specific to the project's requirements. For example: In a food-ordering



# Connecting slots with intents

Selecting Restrict to slot values makes sure that only the values that you specify will count as a valid accountType! Otherwise, Amazon Lex might use machine learning to accept other values that it frequently encounters from users.

Intent to check the balance in the specified account type.



# Slot values in utterances

I included slot values in some of the utterances (i.e. user inputs) by... For example What's the balance in my account? Check my account balance What's the balance in my {accountType} account? How much do I have in {accountType} ?

The screenshot shows the NextWork platform interface. On the left, the 'Inspect' tool is open, displaying the 'Summary' tab which includes JSON input and output. The 'Intent' section shows 'CheckBalance'. The 'Slots' section lists 'accountType' with 'Savings' as the elicitation, and 'dateOfBirth' with '1996-01-07'. The 'Active contexts' section shows 'Number of turns or seconds'. On the right, a 'Test Draft version' window is open, showing a conversation log. The user says 'I want to check my balance please.' The system asks 'For which account would you like your balance?' The user replies 'checking'. The system then asks 'For verification purposes, what is your date of birth?' The user replies '1/7/1996'. A green checkmark indicates 'Ready for complete testing'.



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