



# Build a Chatbot with Custom Slots



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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.

Filter

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

Add slot

# Introducing Today's Project!

## What is Amazon Lex?

Amazon Lex allowed me to create a realistic and helpful chatbot which in this instance can be used by a banking company to provide users with their account balance after running through specific checks. It is highly customisable and easy to customise

## How I used Amazon Lex in this project

Added custom slots, to my previously created BankerBot which add as checkpoints to provide certain information, I created custom slots that provide users with their balance.

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

How quick and easy the bot was to deploy and test.

## This project took me...

Less than 20 minutes.

# Slots

Slots are pieces of information that the bot needs to fulfil a user's request.

In this project, I created a custom slot type to store a user's bank account type.

This slot type has restricted slot values, which means the chatbot will only respond to and accept these specific values in this instance, the chatbot will only understand Checking, Savings and Credit as valid account types.

**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

Value Tab or ; or enter return for new value

# Connecting slots with intents

I associated my custom slot with CheckBalance, which allows a user to check their Balance in their various account providing they have the correct personal information linked to their account.

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▶ Prompt for slot: dateOfBirth <small>Message: For verification purposes, what is your date ...</small>	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 pasting some generic prompts that a user will say to the chatbot. For example: Check my account balance, I want to check the balance, Can you help me with account balance?

By adding custom slots in utterances, it allowed me to create specific slots which can run the bot through a specific process such as checking for a valid account type and correct user information.

The screenshot shows the NextWork platform interface. On the left, the 'Inspect' section displays the following details:

- Intent:** CheckBalance
- Slots:** accounttype (Elicitation: Savings), dateOfBirth (Value: 2001-01-01)
- Active contexts:** Intent CheckBalance is fulfilled

On the right, the 'Test Draft version' section shows a conversation log:

- User message: "Check my account balance"
- Bot response: "For which account would you like your balance?"
- User message: "Savings"
- Bot response: "For verification purposes, what is your date of birth?"
- User message: "01/01/2001"
- Bot response: "Intent CheckBalance is fulfilled"

At the bottom, there is a message input field: "Type a message".



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