How I built a chatbot with Amazon Lex
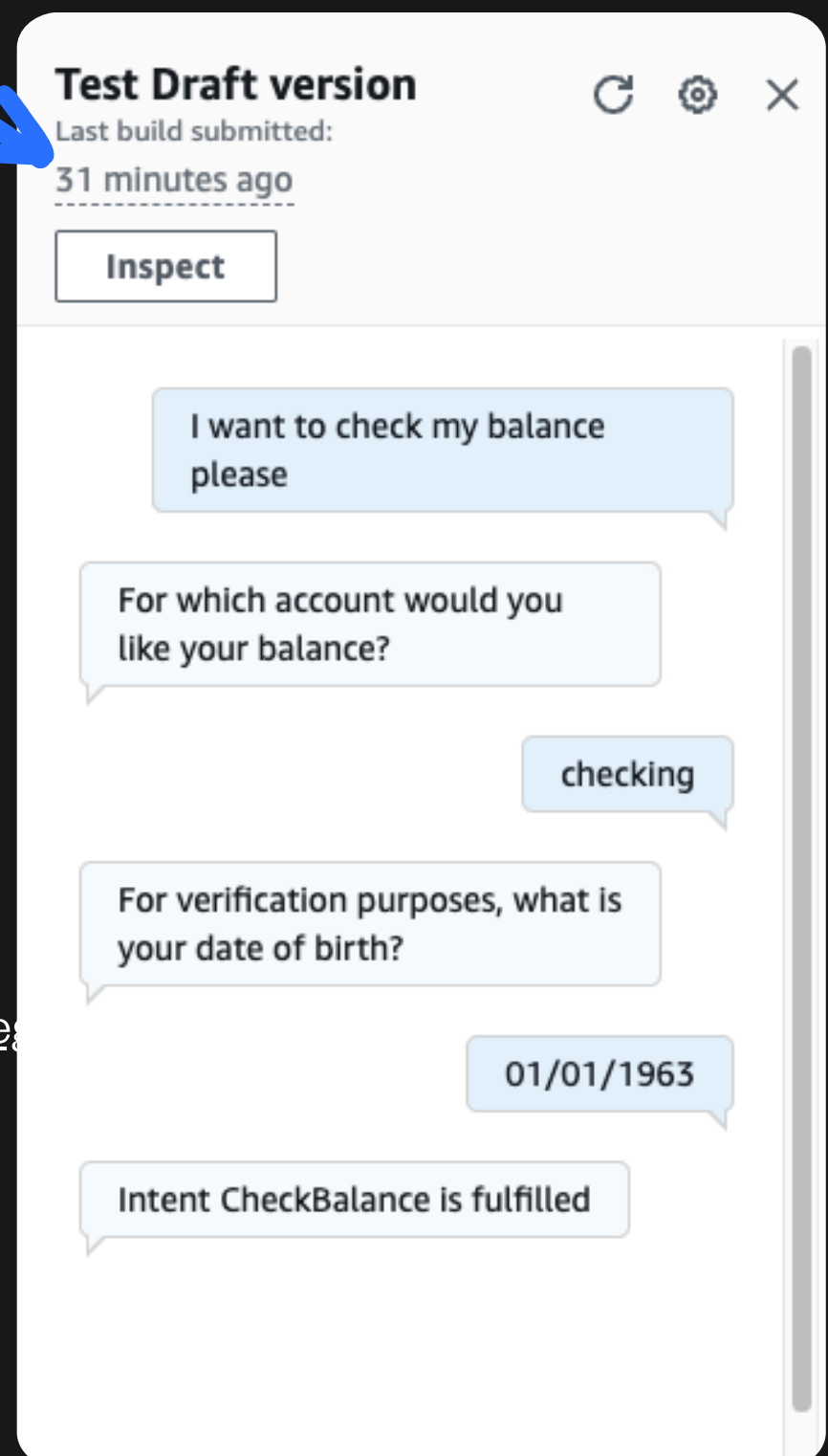
featuring custom slots!

NEXTWORK

Megha Naik

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Test Draft version
Last build submitted:
31 minutes ago

Inspect

I want to check my balance please

For which account would you like your balance?

checking

For verification purposes, what is your date of birth?

01/01/1963

Intent CheckBalance is fulfilled

What is Amazon Lex?

What it does:

- **It helps you build Voice and Text Chatbots in minutes.**

Why it's useful:

- It will save a lot of time for a business or a service and can be personalized

How I'm using it in today's project:

- In this project, I'm using Amazon Lex to create BankerBot, a chatbot designed to simplify checking account balances. BankerBot leverages the CheckBalance intent to understand user requests and provide quick, accurate information.

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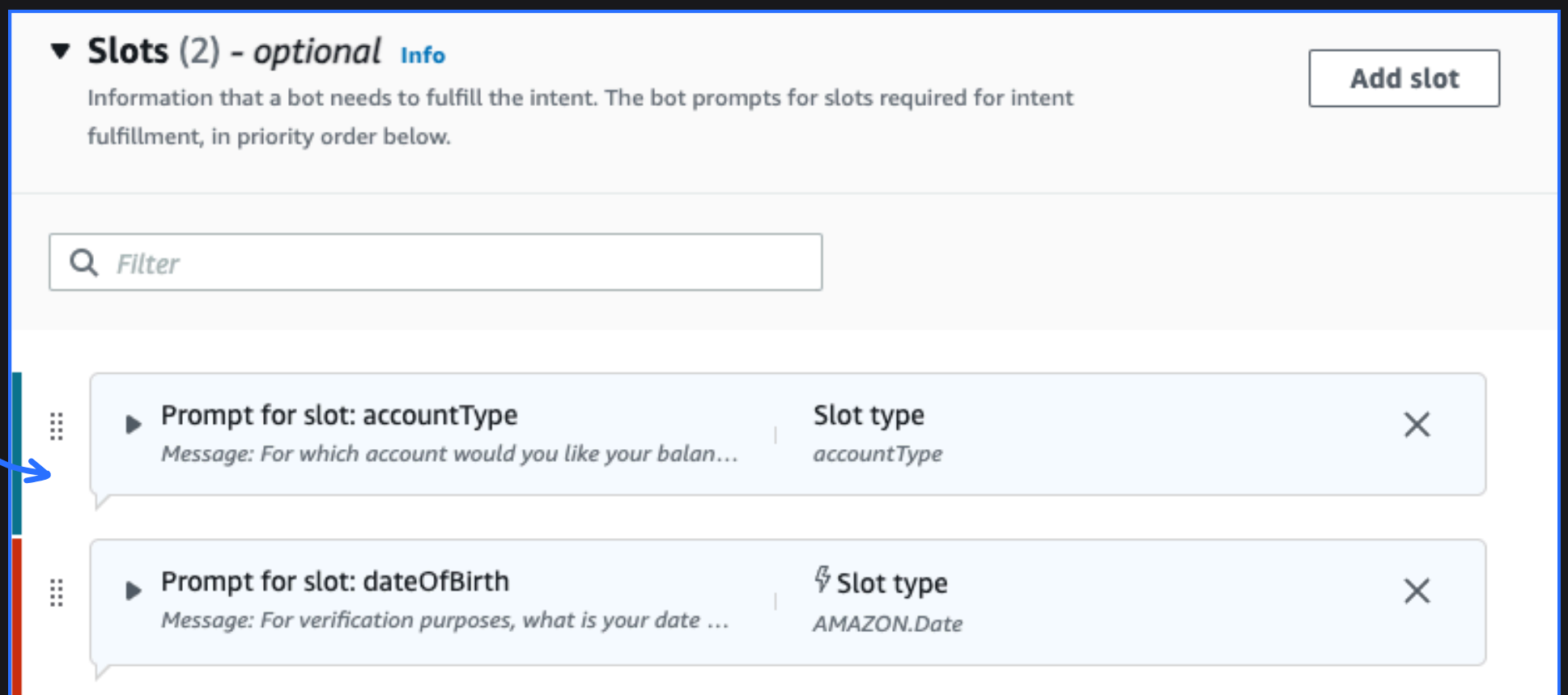in https://www.linkedin.com/in/naikmegha

Create custom slots

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

- In this project, I created a **custom slot** to check account balance using accountType and verify the user using dateOfBirth slot
- I then associated the custom slot with a new intent, CheckBalance, so that when a user asks a query (utterance) the BankerBot will ask for account type and user's date of birth for verification.

My custom slots

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

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

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Simplifying the user experience

- I included slot values in some of the utterances (i.e. user inputs) for this intent too. For example, I defined intent Balance in {accountType}, which expects the slot accountType info.

- By adding custom slots in the utterance, (like "Balance in {accountType}"), the bot understands the account type without prompting, making the conversation smoother for users.

Inspect   ✕

Summary | JSON input and output

Intent

CheckBalance

Slot values getting recognised in a conversation →

Slots	Elicitation
accountType	Checking
dateOfBirth	1963-01-01
Active contexts	**Number of turns or seconds**

Test Draft version   ↻ ⚙ ✕
Last build submitted: 4 minutes ago

Inspect

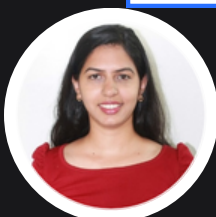I want to check my balance please

For which account would you like your balance?

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Intent CheckBalance is fulfilled

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My Key Learnings

01 Slots are placeholders in Amazon Lex that collect specific information from user inputs needed to fulfill an intent.

02 Slot types define the kind of data a slot can capture. Custom slot types allow you to create specific categories of information tailored to your chatbot's needs.

03 I used custom slots in this project to check the balance from the specific account type of the user.

04 To Parse the custom slot, I used curly braces **{}** within the utterance (e.g., "Balance in {accountType}") to indicate the slot for user input.

05 This project taught me how to fine-tune bot interactions for a better user experience by adjusting the slot prompts and responses based on user feedback.

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Final thoughts...

- This project took me about 30 min. Writing documentation took me around 15 min.

- Delete EVERYTHING at the end! Let's keep this project free :)

- In the next phase of this project, we're enhancing BankerBot's memory with context carryover, allowing it to remember key details like the user's birthday during a session for a smoother experience. I'll also set up a new flow for transferring money between accounts!

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Thanks NextWork for the free project guide!

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ERROR! 👀 *oMG!*

An error I ran into was...

Kudos to me! There's no error while doing this project

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