NEXTWORK

How I built a chatbot with Amazon Lex

featuring custom slots!

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aws-projects

Test Draft version
Last build submitted: 5 minutes ago

Inspect

For which account would you like your balance?

Savings

For verification purposes, what is your date of birth?

2002 04 04

Intent CheckBalance is fulfilled

✓ Ready for complete testing

🎤 Type a message
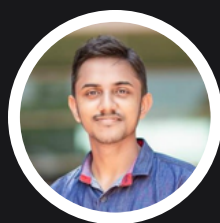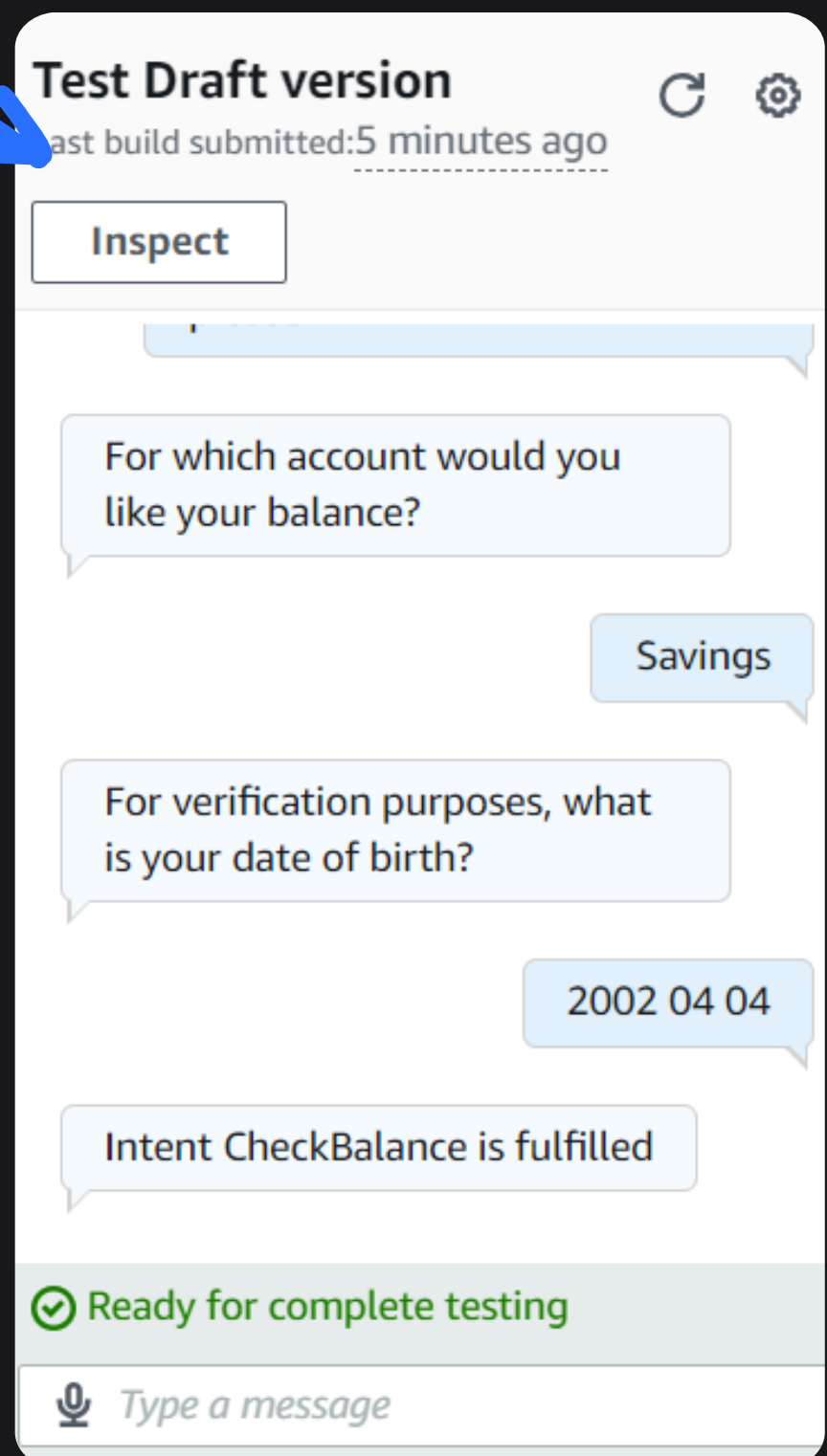
# What is Amazon Lex?

What it does:

- It is a practice conversation interface that uses text or voice to interact with users.

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.
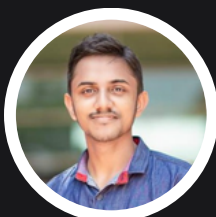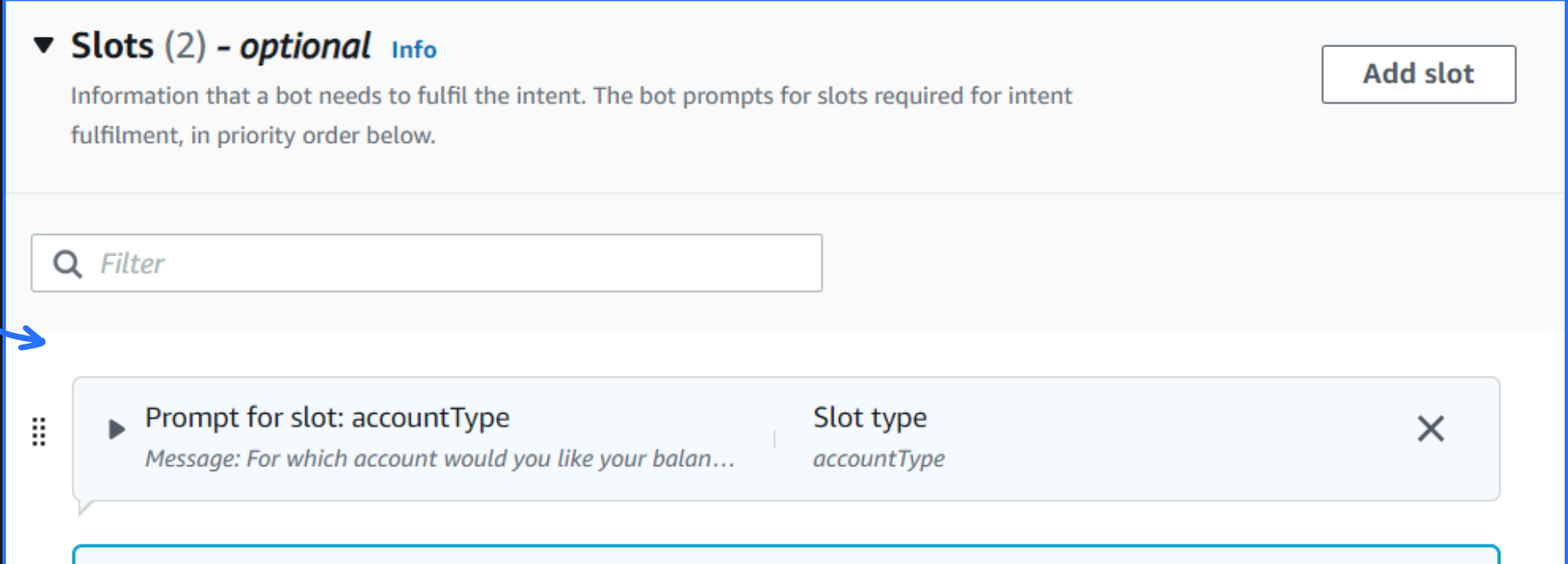
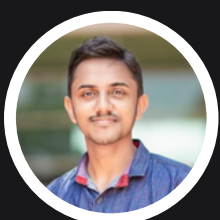**Sadeesha Perea**
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Create custom slots

- **Slots** are defined sets of possible values that users might provide for specific pieces of information within your chatbot conversation.

- In this project, I created a custom slot type. This slot captures the user's specific account types they want to check.

- I then associated the custom slot with a new intent, CheckBalance. This intent is designed to understand user requests related to checking their account balance. It will leverage the captured account number from the custom slot to retrieve the user's specific balance and provide them with a personalized response.

My custom slots →

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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 account Type 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.

CheckBalance

Slots	Elicitation
accountType	Savings
dateOfBirth	2002-04-04
Active contexts	Number of turns or seconds

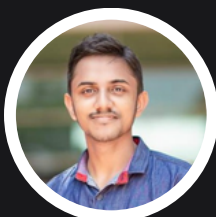**Slot values getting recognised in a conversation**

Savings

For verification purposes, what is your date of birth?

2002 04 04

Intent CheckBalance is fulfilled

✓ Ready for complete testing

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My Key Learnings

01 Slots: Specific data points users provide during conversation (e.g., account number).

02 SlotTypes: Define the format of expected data (e.g., text, numbers). Custom slot types allow for more specific formats (e.g., account number format).

03 Custom Slotin this Project: Captured user's account number (specific format) for targeted balance checks.

04 ParsingCustom Slot: Used curly braces {} within the utterance (e.g., "Balance in {accountType}") to indicate the slot for user input.

05 Bonus Learning: I also learned the value of customizing slot types! This allows for more precise user input capture and streamlines the conversation flow.
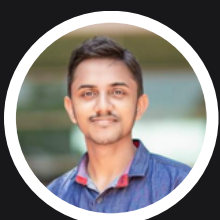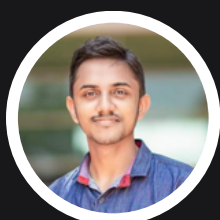
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Final thoughts...

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

- Deleted EVERYTHING at the end to 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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