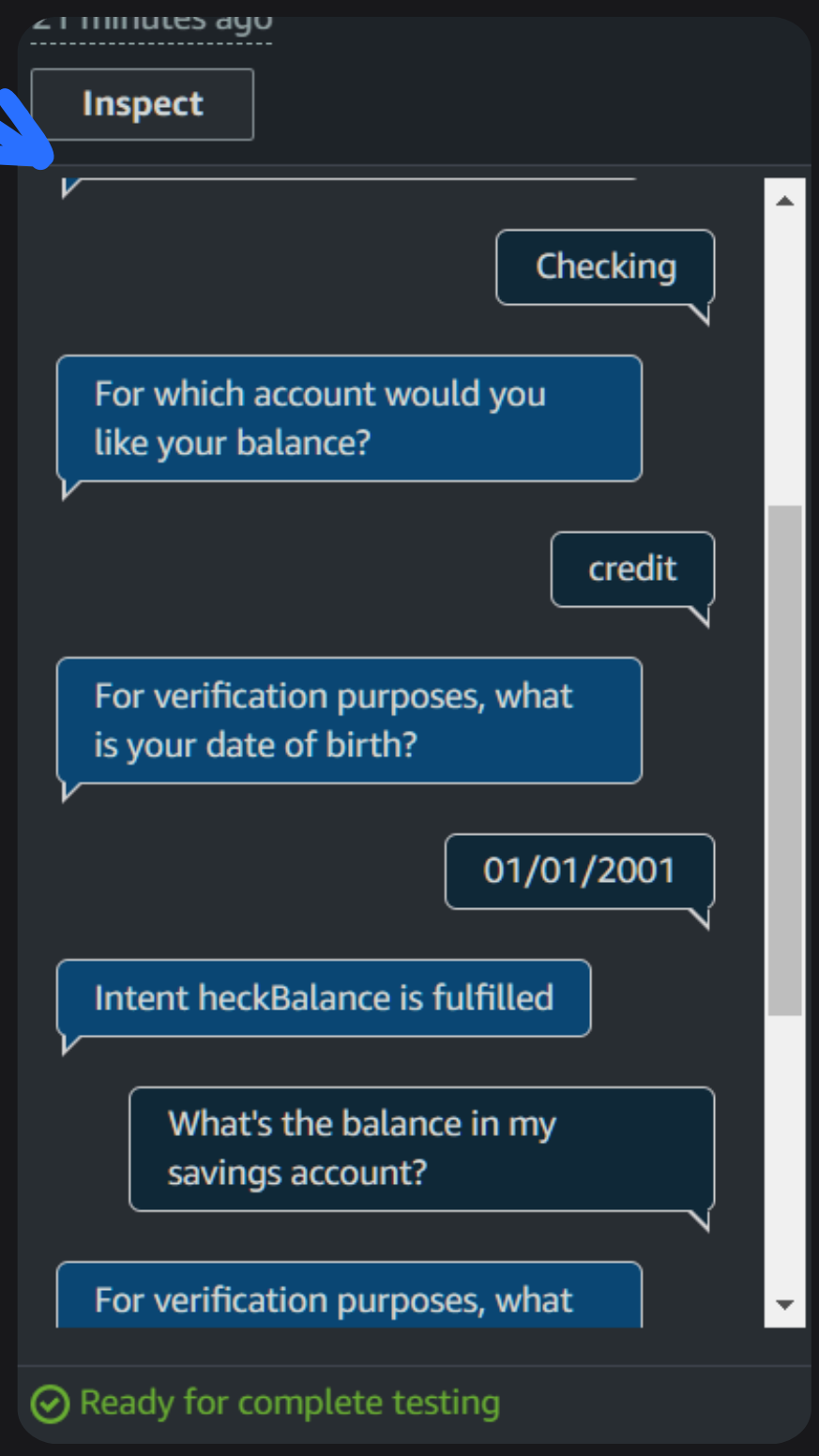
NEXTWORK

How I built a chatbot with Amazon Lex

featuring custom slots!



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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.

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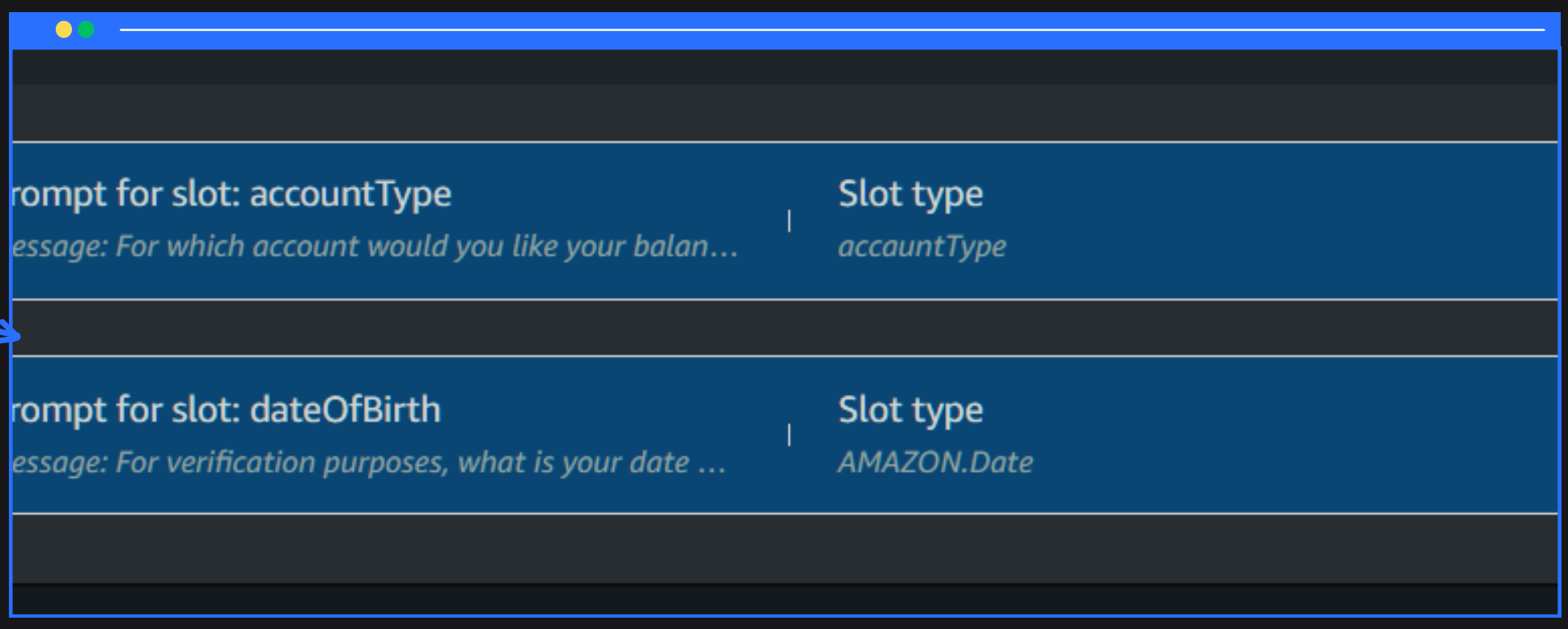
Create custom slots

- **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 accountNumber 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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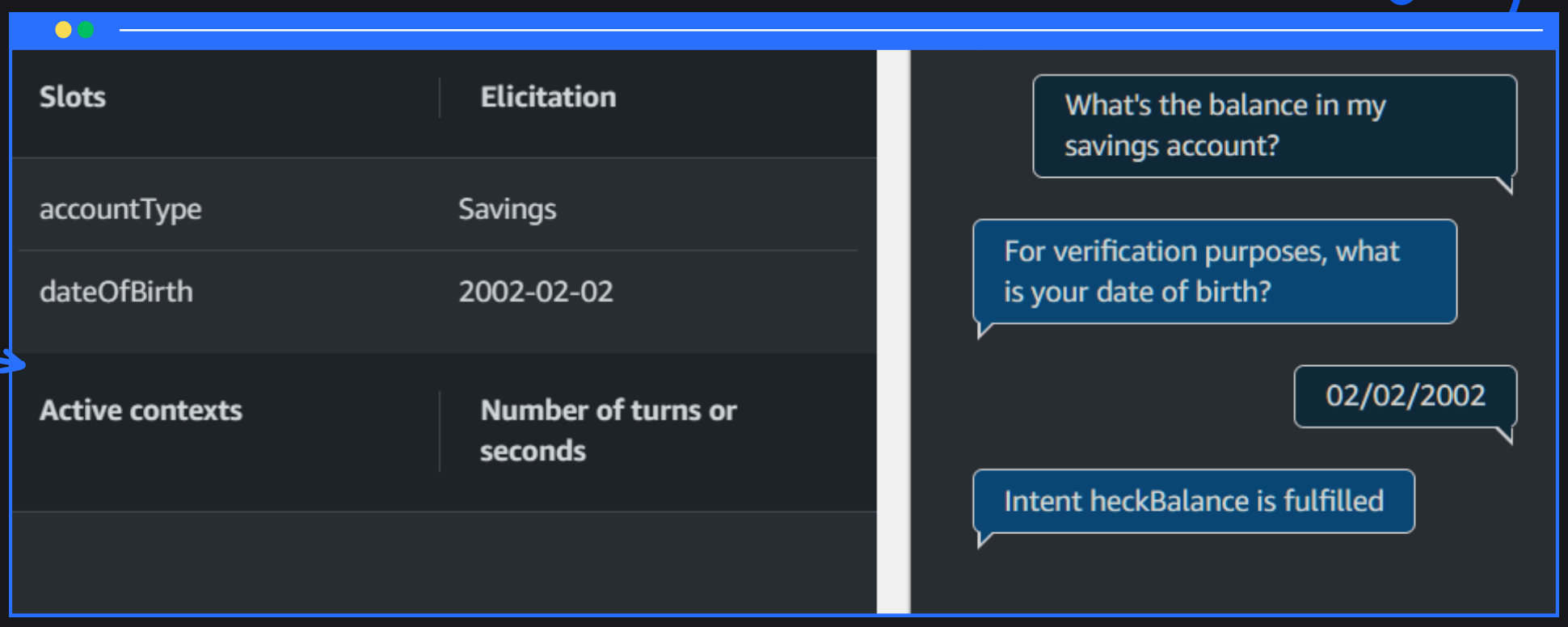
Simplifying the user experience

- 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 accaoutType 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.



Slot values getting recognised in a conversation

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My Key Learnings

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

02 **Slot Types:** 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 Slot in this Project:** Captured user's account number (specific format) for targeted balance checks.

04 **Parsing Custom 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.

- 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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ERROR!👀 oMG!

While I didn't encounter any errors during this project thanks to the video tutorial, I did have a learning curve initially.

I discovered that an issue I faced in a previous project wasn't actually an error, but rather a misunderstanding on how to interpret the "inspect" function within the chat window. This experience highlighted the importance of careful review and the value of clear documentation.

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Thanks NextWork for the free project guide!

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