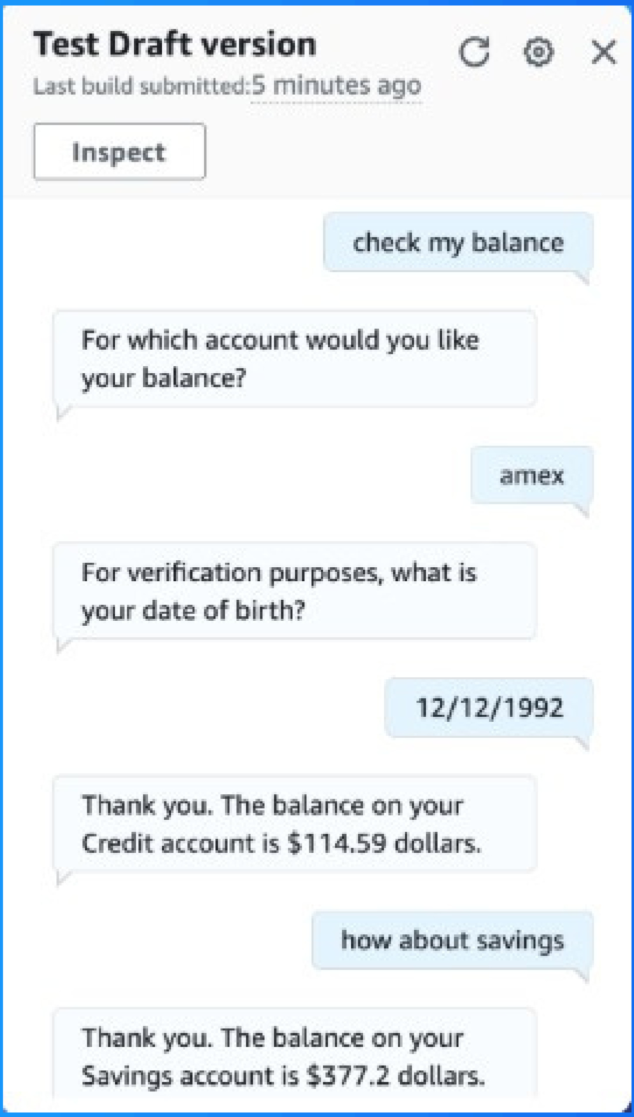
NextWork.org

Save User Info with your Chatbot

Hassan Gachoka



check my balance

For which account would you like your balance?

amex

For verification purposes, what is your date of birth?

12/12/1992

Thank you. The balance on your Credit account is $114.59 dollars.

how about savings

Thank you. The balance on your Savings account is $377.2 dollars.

Introducing Today's Project!

What is Amazon Lex?

Amazon Lex is a fully managed AI service for building conversational interfaces with voice and text. It's useful for creating chatbots and voice assistants that automate tasks, enhance customer service, and integrate with AWS services.

How I used Amazon Lex in this project

In today's project, I used Amazon Lex to create a conversational chatbot. It was designed to check users' balances and handle follow-up queries using context tags. This automated the process, enhancing user experience and reducing manual input.

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

One thing I didn't expect was how crucial context management would be for maintaining smooth conversations. Setting up context tags effectively ensured users could continue interactions without needing to re-enter information, improving efficiency.

This project took me...

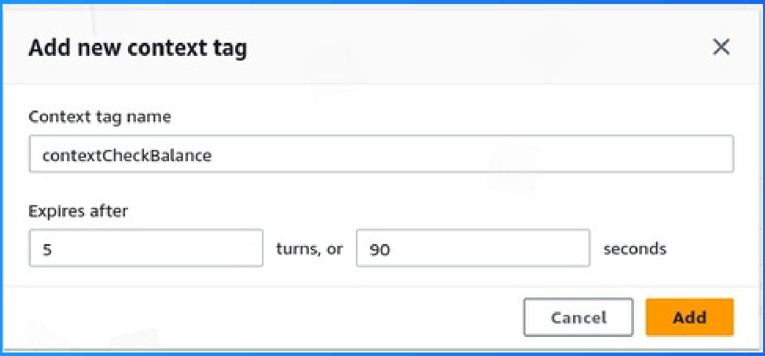
This project took me around 1 hour to complete. It involved setting up Amazon Lex, creating intents, defining contexts, and testing the flow to ensure smooth interactions and responses.

Context Tags

Context tags are labels in Amazon Lex that store and manage session data, allowing the chatbot to remember user details like preferences or answers across different intents, improving the user experience by avoiding repetitive questions.

There are two types of context tags: Output context tags, which store information after an intent finishes, and Input context tags, which check if certain details are available before triggering an intent.

I created an output context tag called "contextCheckBalance." This context tag was created in the intent "Check Balance." This tag stores information about the user's data for future reference in the conversation.


Add new context tag

Context tag name

contextCheckBalance

Expires after

5 turns, or 90 seconds

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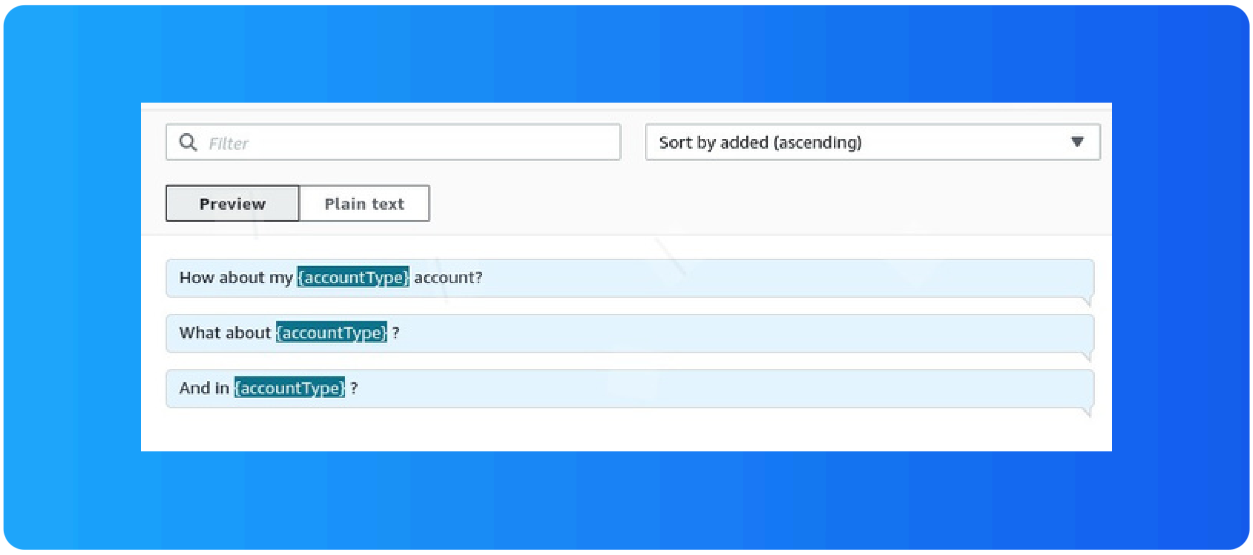
FollowUpCheckBalance

I created a new intent called "FollowupCheckBalance." Its purpose is to handle the user's request for more information or clarification about their balance, using the stored context without asking for authentication again.

This intent is connected to the previous intent I made, CheckBalance, because FollowupCheckBalance uses the stored context from CheckBalance to provide additional information or clarification without requiring re-authentication.



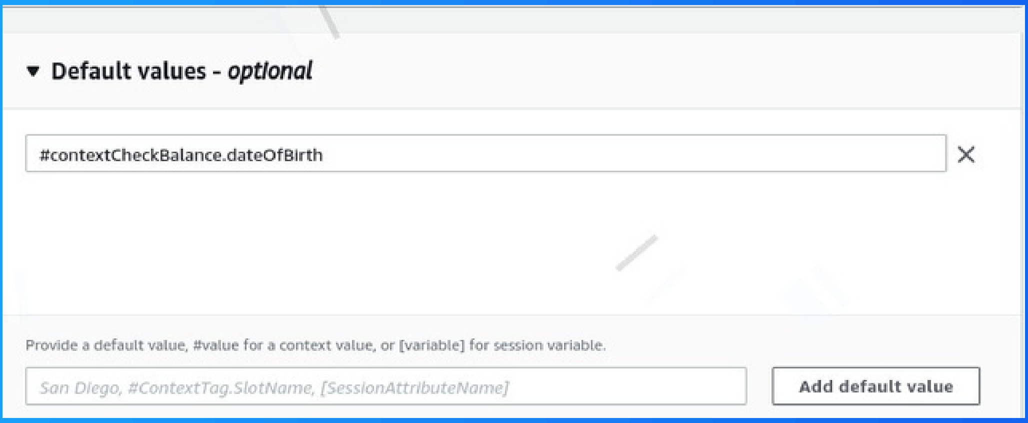
How about my {accountType} account?

What about {accountType} ?

And in {accountType} ?

Input Context Tag

I created an input context, contextCheckBalance, that triggers the FollowupCheckBalance intent. It ensures that the conversation flow continues based on the user's date of birth stored in the output context from the CheckBalance intent.


Default values - optional

#contextCheckBalance.dateOfBirth

Provide a default value, #value for a context value, or [variable] for session variable.

San Diego, #ContextTag.SlotName, [SessionAttributeName]
Add default value

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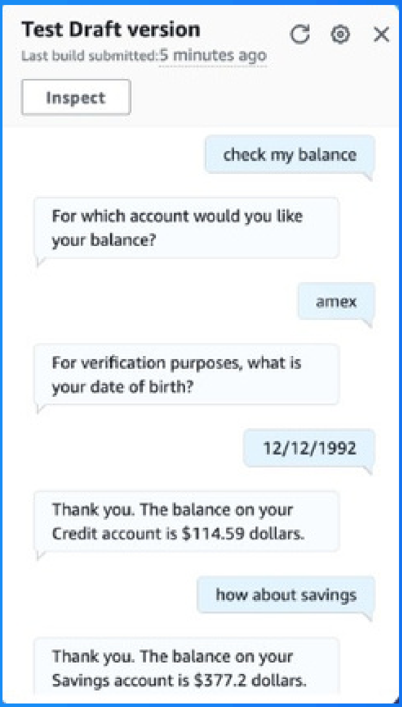
The final result!

To see the context tags and followup intent in action, I asked the chatbot for more details about my balance after the initial check, ensuring that the conversation used the stored date of birth from the contextCheckBalance tag.

If I triggered FollowupCheckBalance without setting up any context, the chatbot wouldn't have the needed information, like the user's date of birth, and might ask for authentication again to proceed with the conversation.



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