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Add Custom Slots to a Lex Chatbot

MA

maddurishivakruthi@gmail.com

The screenshot shows the AWS Lex console interface. On the left, there's a sidebar with intents: 'CheckBalance' (Unsaved), 'FallbackIntent', and 'Welcomement'. The main area shows the configuration for the 'CheckBalance' intent. It includes a 'Response to acknowledge the user's request' section with a message template: 'Message: -'. Below it is a 'Slots (2) - optional' section. Two slots are defined: 'accountType' (Slot type: accountType) with a message template 'Message: For which account would you like your balan...' and 'dateOfBirth' (Slot type: AMAZON.Date) with a message template 'Message: For verification purposes, what is your date ...'. There's also a 'Confirmation' section with a 'Prompts to confirm the intent' message template 'Message: -' and a 'Responses sent when the user declines the intent' message template 'Message: -'. On the right, a 'Test Draft version' window is open, showing a conversation with the bot. The bot says 'Hello I'm BB, the Banking Bot. How can I help you today?'. The user responds with 'hey'. The bot replies 'Sorry I could not understand that, could you please elaborate.' The user then types 'what's good'. At the bottom right of the test window, there's a 'Save Intent' button.

Introducing Today's Project!

I have used Lex to create a banking chatbot to understand user query. I have also created slots namely accountType and date, for chatbot to ask for user's info post which, it stores the data and provides them with the account balance.

What is Amazon Lex?

Lex is a tool to create chatbots inorder to interact with the customers or users using text or speech to answer their basic questions reducing manual effort. It is useful to create chatbots that understand natural language with ease and train them.

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

One thing I did not expect is for Lex to understand Natural Language so easily, interpret the user's info and store it while understanding the intent behind it.

This project took me...

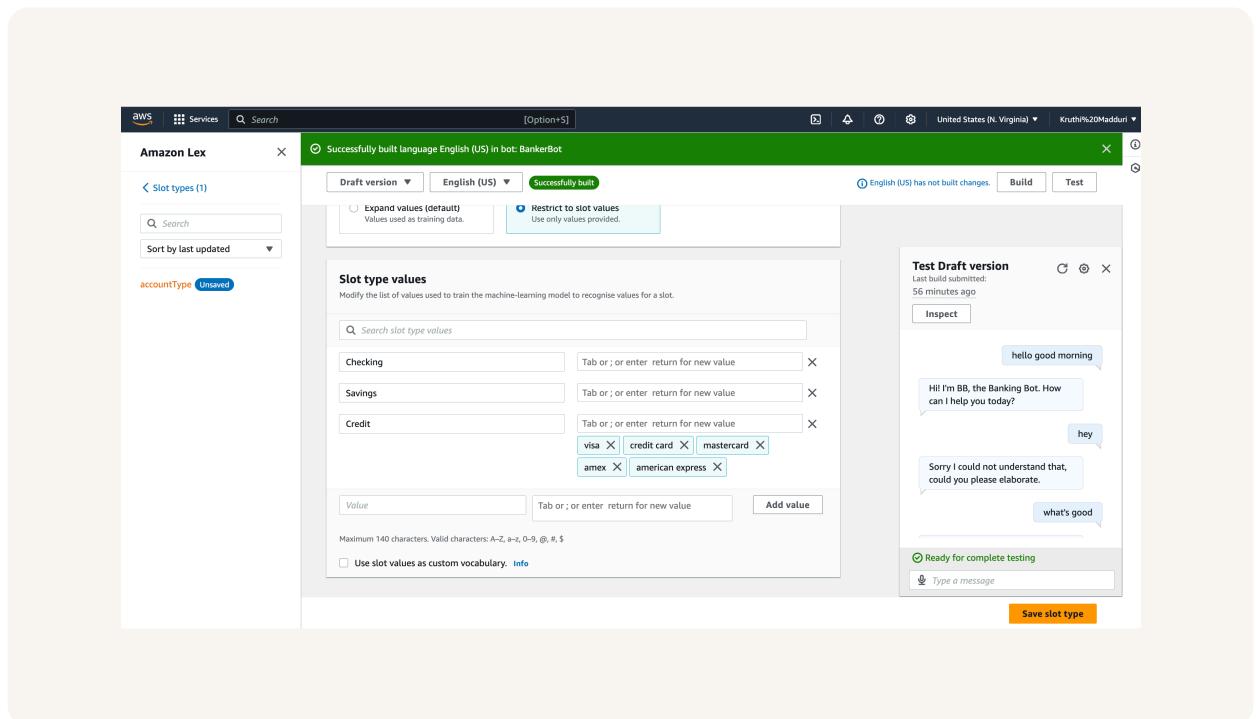
It took me approximately 30 mins.

Slots

Slots are pieces of information that chatbot needs inorder to complete the user requests.

By adding custom slots in utterances, my chatbot's users info in different variations will be processed by the chatbot while it tries to understand the intent of the user's question and respond with the most suitable answer.

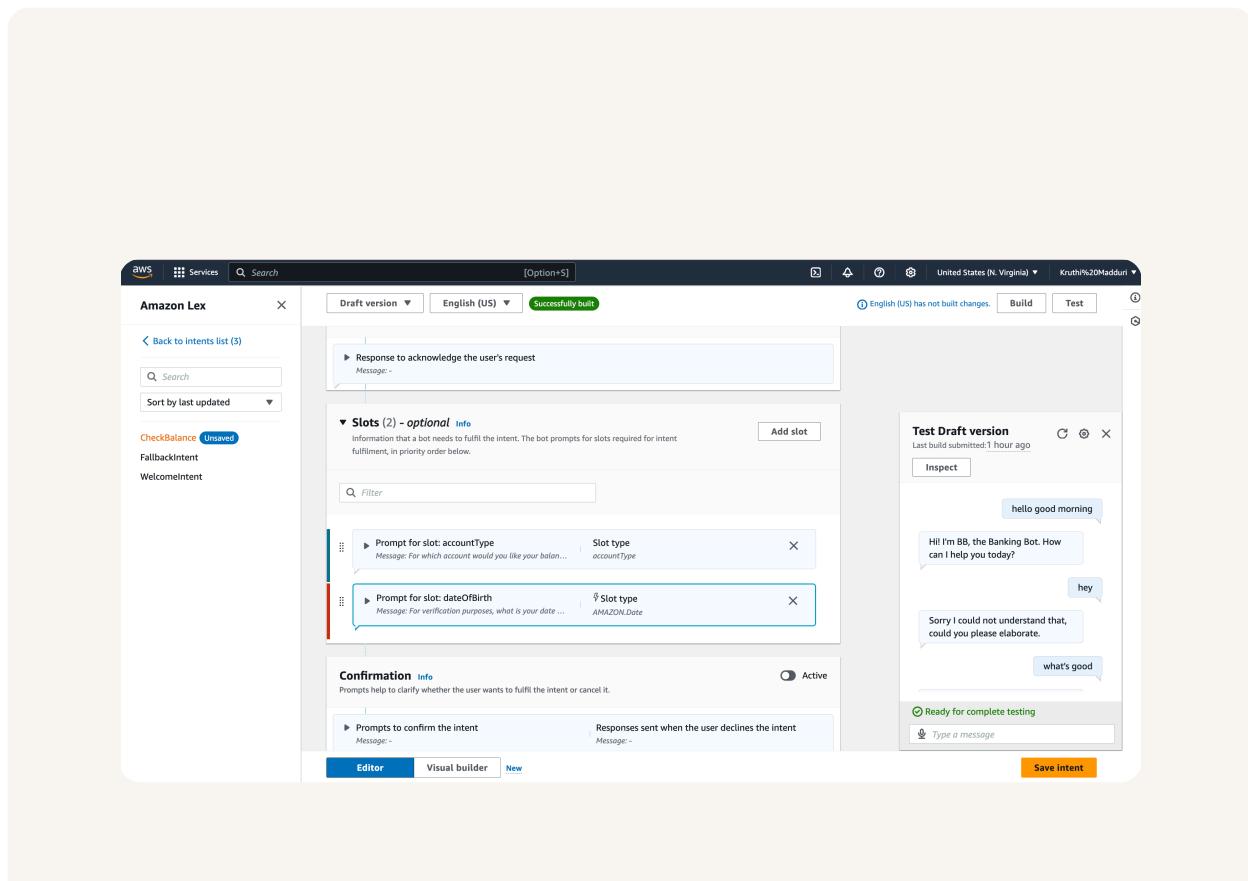
In this project, I created a custom slot type accountType to determine the type of account inorder to help with the user request in regards to the bank details.



Connecting slots with intents

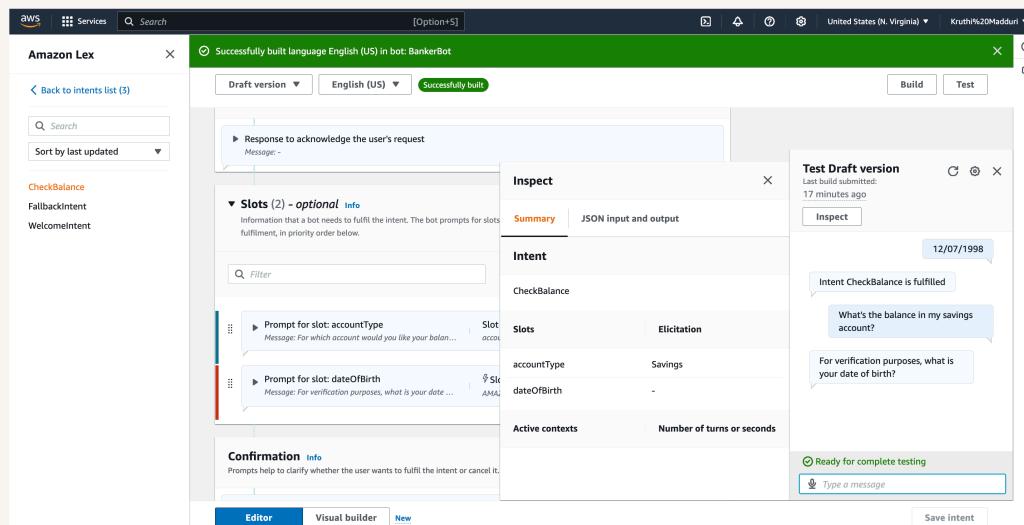
This slot type has restricted slot values, which means that the chatbot will only accept the user input when it matches with the slot values mentioned. Or chatbot would accept different user inputs through machine learning if entered multiple times.

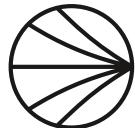
I associated my custom slot with CheckBalance, which is used to fetch user's balance by taking two parameters into consideration i.e., their account type and Date of Birth. As the user provides the chatbot with these two details, it gives the balance



Slot values in utterances

I included slot values in some of the utterances (i.e. user inputs) by..For example accountType. The chatgpt when asked any query by the user to know account balance, while giving account info it stores them and uses it to fetch the account balance.





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