

Language translation bot using Amazon Lex

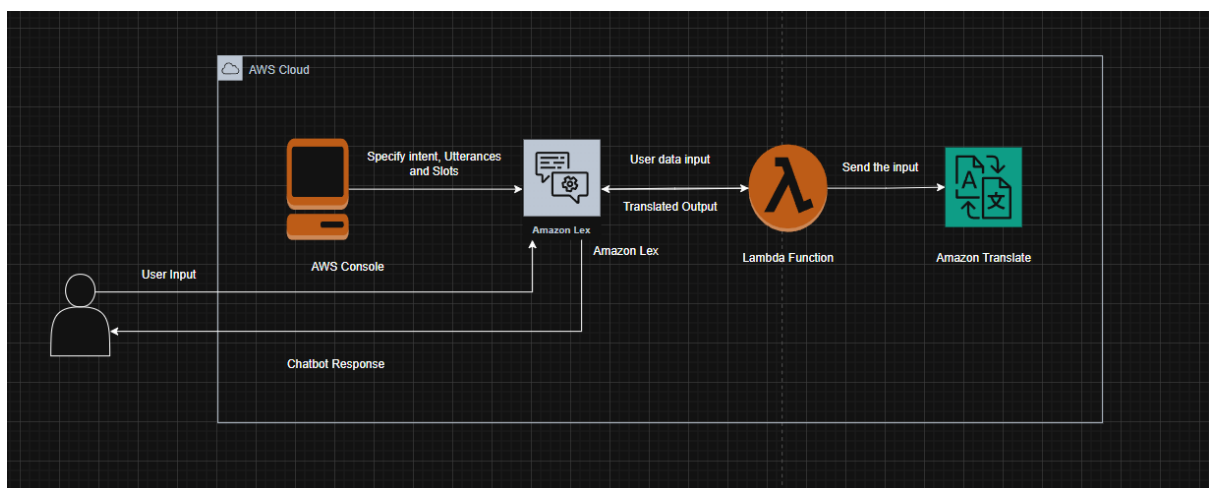
Overview

In this project I have used Amazon Lex to create a Language translator bot where it can translate any phrase into French, Japanese, Chinese, Spanish, German, Norwegian, which ever the user asks the chat bot.

Services Used:

- Amazon Lex to build the chatbot and define conversation flow.
- AWS Lambda to get the book recommendation using a third party API.
- AWS IAM to ensures secure access by managing user permissions.
- Amazon Translate is used for translation of the sentence according to the input language specified.

Diagram



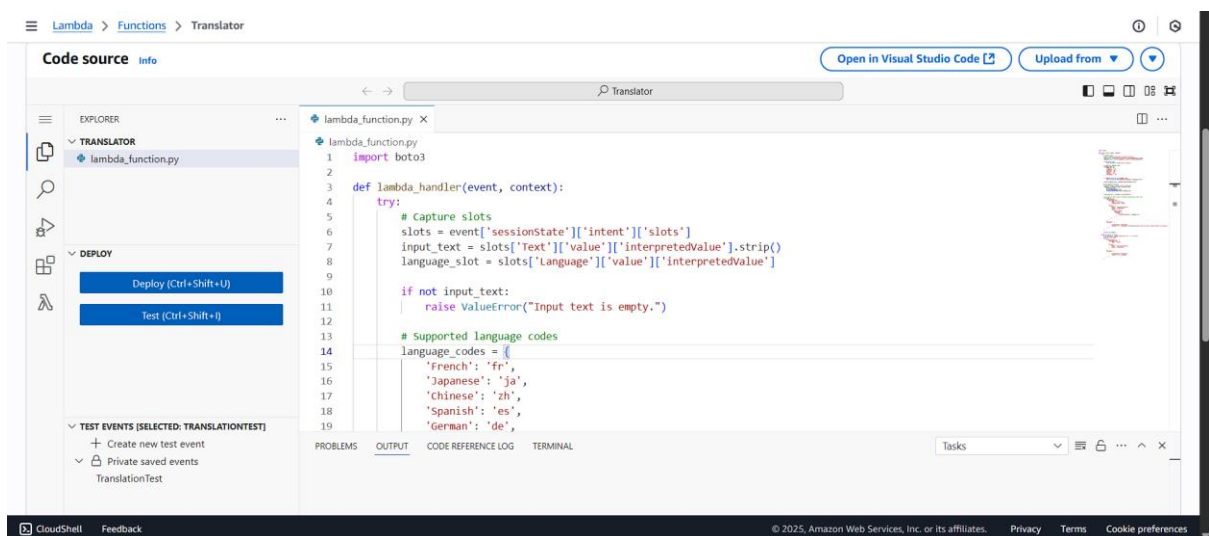
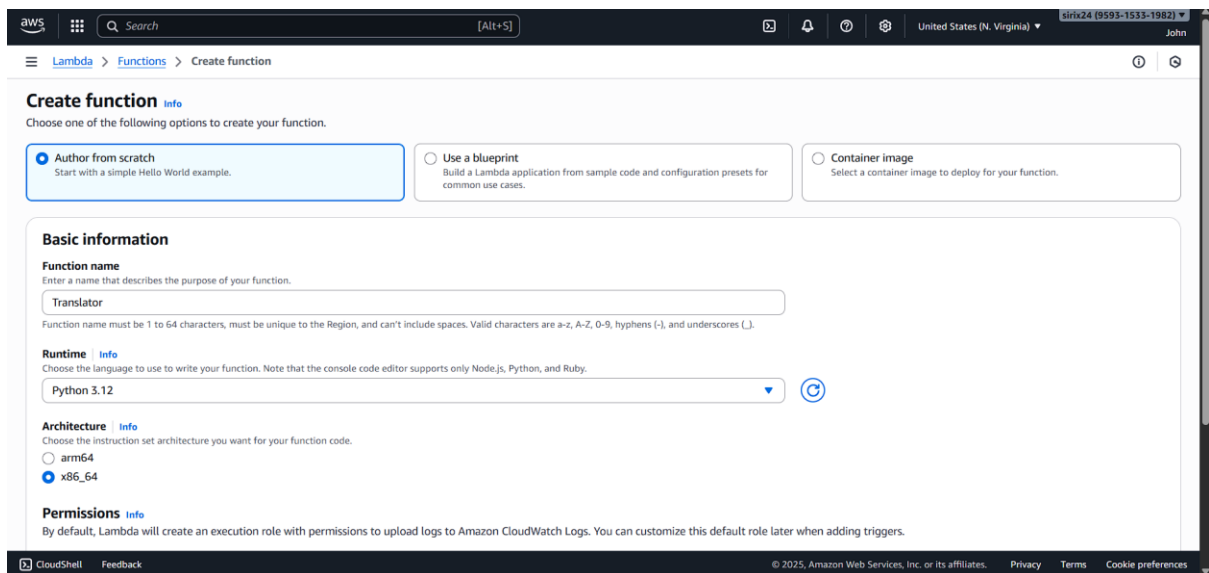
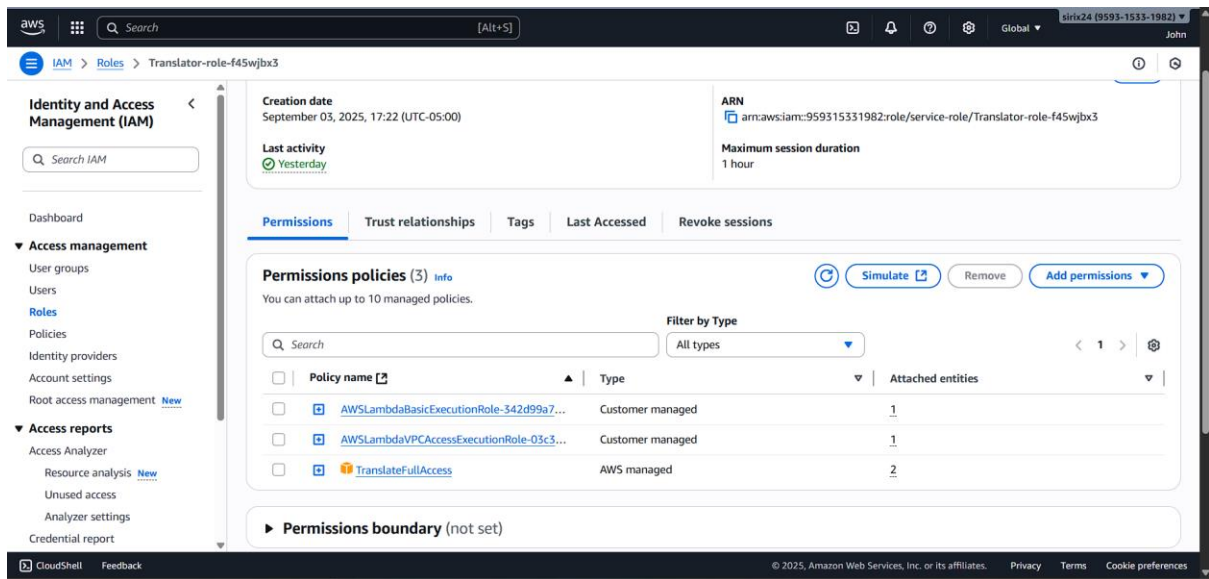
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This screenshot shows the 'Intent details' page in the Amazon Lex console. The interface includes a top navigation bar with the AWS logo, a search bar, and user information. The left sidebar shows the 'Amazon Lex' console with a search bar and a list of intents: 'translationIntent' and 'FallbackIntent'. The main content area is titled 'Draft version' and 'English (US)', with a 'Successfully built' status. It contains a 'Conversation flow' section and an 'Intent details' section. The 'Intent details' section includes fields for 'Intent name' (translationIntent), 'Intent and utterance generation description' (This intent will translate the text.), and 'ID' (SGLBRTMLIX). Buttons for 'Build', 'Test', 'Editor', 'Visual builder', and 'Save intent' are visible.

This screenshot shows the 'Sample utterances' page in the Amazon Lex console. The interface is similar to the previous one, but the main content area is titled 'Sample utterances (9)'. It includes a 'Filter' bar and a 'Sort by added (ascending)' dropdown. Below these are several sample utterances listed in a table: 'I want to translate', 'Can you help me translate', 'Translate for me', 'Please translate this', 'Translate this sentence', 'Could you translate this for me?', and 'I want to convert this into another language'. Buttons for 'Preview', 'Plain text', 'Editor', 'Visual builder', and 'Save intent' are visible.

This screenshot shows the 'Slots' configuration page in the Amazon Lex console. The interface is similar to the previous ones, but the main content area is titled 'Slots (2) - optional'. It includes an 'Add slot' button and a 'Filter' bar. Below these are two slots configured for the 'Language' slot type. The first slot is named 'Language' and is marked as 'Required for this intent'. The second slot is also named 'Language' and is marked as 'Optional'. Buttons for 'Editor', 'Visual builder', and 'Save intent' are visible.

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The screenshot displays the Amazon Lex console interface for a bot named "TextTranslator". The top navigation bar shows the AWS logo, a search bar, and the region "United States (N. Virginia)". A green banner at the top indicates "Successfully built language English (US) in bot: TextTranslator".

On the left sidebar, under "Amazon Lex", there is a link to "Back to intents list (2)". Below this is a search bar and a dropdown menu set to "Sort by last updated". Two intents are listed: "translationIntent" (highlighted in orange) and "FallbackIntent".

The main editor area shows a list of sample utterances for the "translationIntent":

- I want to translate
- Can you help me translate
- Translate for me
- Please translate this
- Translate this sentence
- Could you translate this for me?
- I want to convert this into another language

At the bottom of the editor are tabs for "Editor", "Visual builder", and "New".

On the right, the "Test Draft version" panel is open, showing a conversation flow:

- User: "In which language would you like to translate the text?"
- Bot: "French"
- User: "What is the text that you want to translate?"
- Bot: "What are you doing"
- User: "Translated: Qu'est-ce que tu fais You can enter another phrase to translate."

The panel also shows a status "Ready for complete testing" and a "Save intent" button.

The footer of the console includes "CloudShell", "Feedback", and copyright information: "© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences".