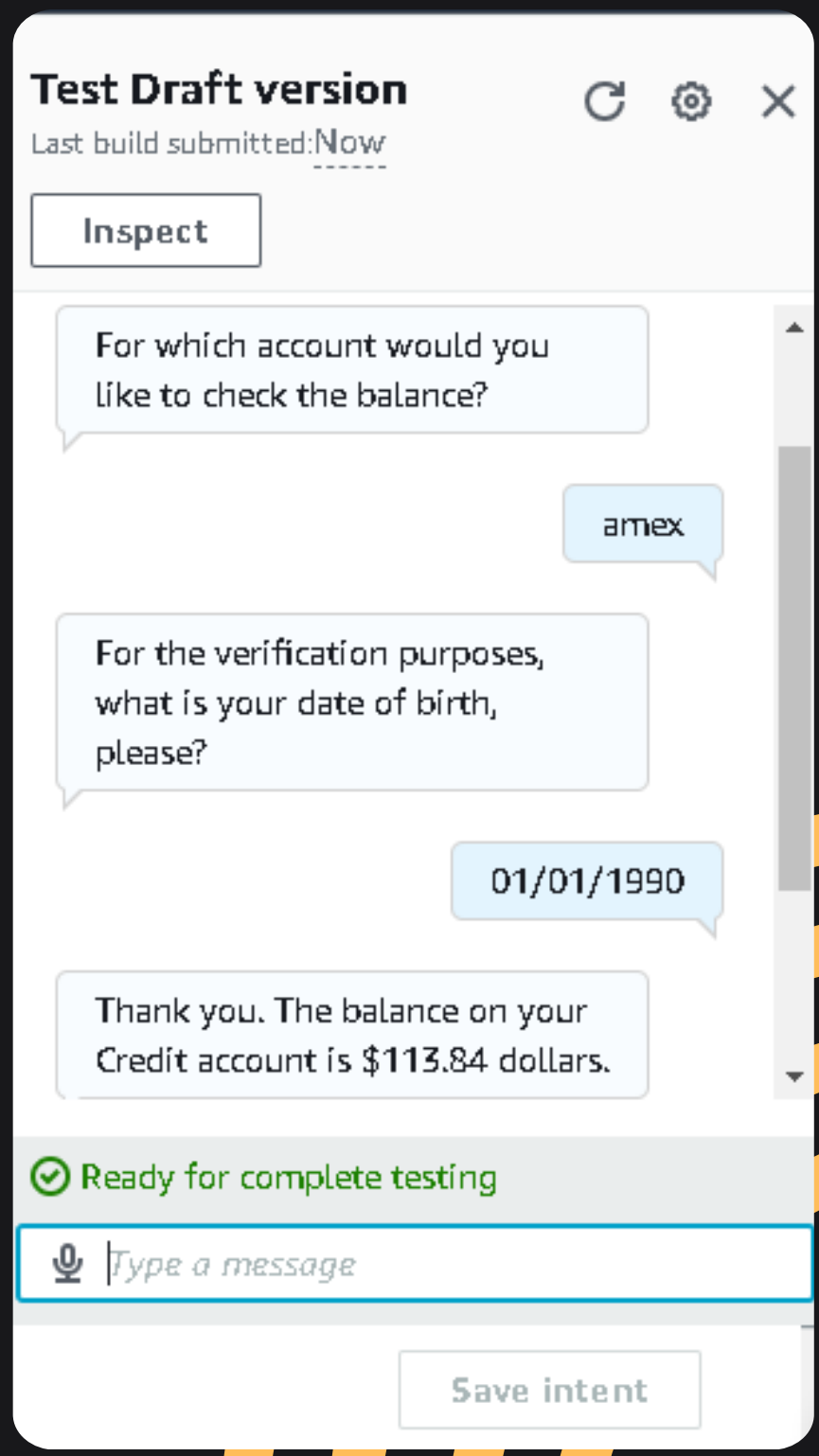
How I connected my chatbot with AWS Lambda!



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What is Amazon Lex?

What it does:

- Amzon Lex is the cloud based service which let's the users create and train the custom chat bots to respond to the user utterances.

Why it's useful:

- It could help businesses to eliminate the cost by training the bots to handle frequently asked queries.

How I'm using it in today's project:

- In this project I'm using Amazon Lex to create BankerBot, a bot that uses custormer's date of birth for the KYC purposes and respond to the basic day-to-day banking queries.

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Using AWS Lamba

- **AWS Lambda** is an AWS service is a serverless computing service that runs your code in response to events, automatically managing the underlying infrastructure, so you only pay for the compute time you use.

- In this project, a Lambda function was created to using python file to respond to the user utterances.

A peek into the Python code I uploaded into AWS Lambda!

```python
    return(decimal.Decimal(random.randrange(1000, 50000))/100)

def get_slots(intent_request):
    return intent_request['sessionState']['intent']['slots']

def get_slot(intent_request, slotName):
    slots = get_slots(intent_request)
    if slots is not None and slotName in slots and slots[slotName] is not None:
        return slots[slotName]['value']['interpretedValue']
    else:
        return None

def get_session_attributes(intent_request):
    sessionState = intent_request['sessionState']
    if 'sessionAttributes' in sessionState:
        return sessionState['sessionAttributes']

    return {}

def elicit_intent(intent_request, session_attributes, message):
    return {
        'sessionState': {
            'dialogAction': {
                'type': 'ElicitIntent'
            },
```

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Connecting ++ Lambda with Lex

There were two steps to connecting the Lambda function with my chatbot:

Step 1

- To connect Lambda with my chatbot alias, I choose the default **TestBotAlias.**

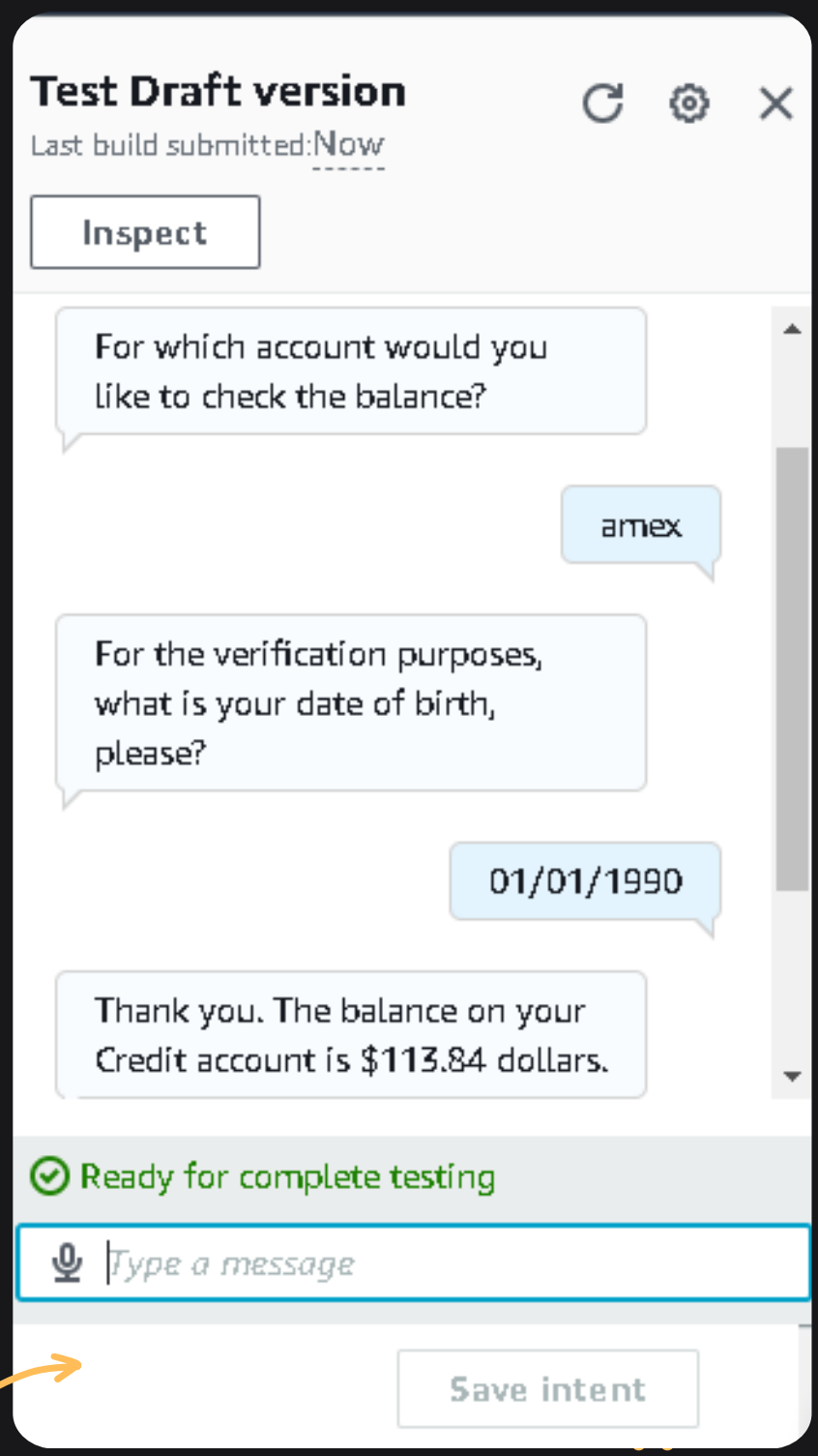
Step 2

- Another intent setting to configure is **code hooks**.

- A code hook is A code hook is a small piece of code designed to intercept and manipulate the flow of a program at a specific point.

- In this project, I had to use code hooks because it uses AWS Lambda to automate the process.

After connecting Lambda with my Lex bot, my bot could respond to the users with random balance inquires.



My chatbot now returns a bank balance number thanks to Lambda!

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My Key Learnings

01

AWS Lambda is a service that lets you run your code in response to events without having to manage any servers, and you only pay for the actual time your code is running.

02

You connect Amazon Lex with AWS Lambda when you need to add custom logic or handle data processing that Lex can't do on its own.

03

To connect Amazon Lex with AWS Lambda, go to your Lex bot's intent settings and enter the ARN of your Lambda function in the fulfillment section.

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Final thoughts...

- This project took me 65 minutes of completion time.
- Let's 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! My BankerBot will remember key details like the user's birthday during a session for a smoother experience 🎂

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