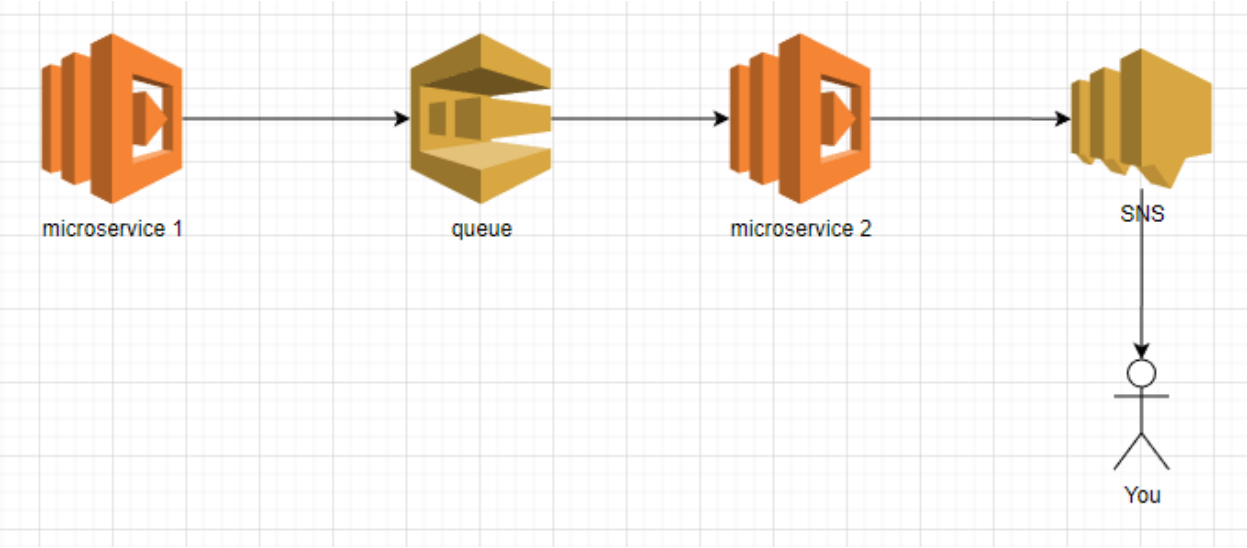
Assignment 6 – SQS, SNS, and event-driven architecture

Don't delete resources until you showed me in person in the afternoon session. They don't cost.

Task 1 – Mock microservices

Create 2 microservices decoupled with SQS. Once you received the message from microservice 1 in microservice 2, send the message to yourself via SNS.



- Create a standard queue, "myQueue".
- Create an SNS topic, "myTopic". Subscribe to it with your email.
- Build a policy with Create Policy wizard that allows Lambdas to send a message to the "myQueue" and publish a message on the "myTopic". Put the JSON in the submission.
- In microservice 1 lambda, Send a message to the queue. Refer Examples on the official AWS documentation and the SDK documentation for sending a message to the queue from the microservice 1. You just need to provide *MessageBody* and *QueueURL*.
- In microservice 2 lambda,
    - Add an SQS trigger and select your queue.
    - You will receive the message in the "event" object. Log it out to see where the message sits in the payload.
    - Send the message to the SNS topic. Refer Publishing Messages in Amazon SNS and the SDK documentation for sending a message to an SNS. You just need to provide *Message* and *TopicArn*.

Task 2 – S3 event notification with EventBridge.

Explore and play with EventBridge. Do the S3 event notification task with EventBridge that send an email to you when there is a new object in the bucket.

Task 3 – Mock services with Step Functions.

Do a task similar to task 1 using Step Functions.