Event Driven/Asynchronous Messaging and Queues

Assumptions

- Students have seen threading in Java or pthreads in a systems class.
- Students have completed the lecture on serverless/lambda.
- Students have an AWS account and a basic understanding of how AWS authentication works.

Out of class learning activities

- Watch:
    - From a course on distributed systems at Safari Books https://www.safaribooksonline.com/videos/distributed-systems-in/9781491924914/9781491924914-video215283 (duration 6:27)
    - More in depth from a course in Enterprise Messaging, also from Safari Books https://learning.oreilly.com/videos/enterprise-messaging/9781491911839/9781491911839-video191636 (duration 32:59) If this link doesn't work for you, login to Safari Temporary Access using a BYU email address first, then visit the link again.
- Read:
    - Blog posts about Kafka use at Netflix https://medium.com/netflix-techblog/evolution-of-the-netflix-data-pipeline-da246ca36905 https://medium.com/netflix-techblog/kafka-inside-keystone-pipeline-dd5aeabaf6bb
- Do:
    - Review SQS documentation starting with: https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/welcome.html
    - Follow these steps to create a SQS message queue (that you will use in class) https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-getting-started.html