# ITMO 544-444 Mini-Project 3

# **Objectives**

The objectives of this project for **Graduates** are as follows:

- 1. Learn how to interact with Cloud Based APIs and SDKs
- 2. Learn to create dashboards to help operations and developer introspection

### Outcomes

At the conclusion of this MP you will have successfully built a local application that will create a dashboard that grants introspection to all the processes currently running in your cloud native application.

## **Background:**

This project, MP3, assumes that you have completed all or at least the critical feature set of MP1 and MP2. Create a folder in Github named MP3, and place all necessary code. All code will be delivered via Github with a submission to Blackboard of your Github URL.

#### **Deliverable items**

- 1. Create a dashboard of all of the status' of jobs in the database
  - a. For this you need to create a Read-Replica of your RDS instance and make all reads go to that instance (Use a SQL statement to retrieve this)
- 2. Create a dashboard of all of the items in the SQS Queue
  - a. Jobs pending and jobs completed jobs visible, jobs invisible, number of messages sent (Use CloudWatch Metrics to retrieve this)
- 3. Create a dashboard of all of the metrics (Cloudwatch 7) for monitoring CPU usage for your instances (and report the number of instances)
  - a. Create a large scale test (multiple large number of images which I will provide)
- 4. Format and align the application with usability in mind
- Include a ReadMe.md with all relevant information to build the application
- **Due Date:** Saturday December 2<sup>nd</sup> 11:59 PM (last day of the semester that work can be accepted)

## **Grading:**

- 86 100 points all aspects work as detailed
- 80 84 points implement 3 of the 4 items above
- 70 79 points implement 2 of the 4
- Below 70 1 or none implemented