Task #10 – Serverless basics

What to read/watch beforehand

- [AWS docs] What is Lambda?
 - o read the root article
 - look through the rest of the docs table of contents you might want get back to it during the practical task implementation
- [AWS docs] Lambda features
- [AWS docs] Getting started with Lambda
- [AWS docs] Lambda best practices
- [AWS docs] Lambda pricing
- [AWS docs] What is API Gateway?
- [AWS docs] API Gateway glossary
- [AWS docs] API Gateway pricing
- [AWS docs] Tutorial: creating a Lambda-backed API Gateway endpoint
- [AWS docs] S3 notifications

What's given

- your AWS account
- an SQS queue from module 8
- the web application from module 8

What to save money on

- Prefer removing the resources created using the CF template(s) while not working on any practical tasks (the CF template should allow you to quickly re-create them in one shot as needed).
- Consider stopping your RDS instance while not working on any practical tasks.
- After the demo, consider removing the scheduled CloudWatch event which was created to trigger the lambda function on schedule.
- Also, after the demo, consider removing the lambda function created in sub-task 2 point 6.

What answers to know

- 1. What ways of triggering a Lambda do you know?
- 2. What is the contract of Lambda function?
- 3. What is Lambda pricing?
- 4. How is it possible to test Lambda code without actually running it in AWS?
- 5. Which code libraries/frameworks are reasonable to use in Lambda?
- 6. How Lambda instances are reused? How to prepare the Lambda code for that?
- 7. What programming languages does Lambda support?
- 8. What is the difference between synchronous and asynchronous Lambda invocations?
- 9. What is Lambda concurrency?
- 10. What kinds of Lambda concurrency allocations are there?
- 11. What AWS resources can Lambda access? How?
- 12. What are the advantages of API Gateway endpoints over traditional web applications?

- 13. What are the typical API Gateway use cases?
- 14. What is API Gateway pricing?