CPS847: Assignment 2

Created on: March 18, 2021

Assignment **due date**: April 11, 2021, 11:59 PM

This assignment is group work. Typically, a group gets the same mark for a given assignment. However, if the contribution of some group members is considered not acceptable by their peers, then a peer-review process can be enacted that may lead to a reduction of marks for these group members. Please see the slides of the first lecture for details.

1. [5%] Make your GitHub repo **public**. If you are creating a new repo for this assignment, then please add cps847-chang, tonymisic and kazi-rys-21 to GitHub account
2. Create a Travis CI YAML file that executes a unit test of your sample code [25%] and creates a code coverage report [20%] to be uploaded to codecov.io. Choose a unit test and code coverage framework that is appropriate for the language that you are using.
3. Create a Dockerfile to generate a container for your web application [10%]
4. Generate index.html page containing “Hello World” text and deploy the code to AWS ElasticBeanstalk (Container) using Travis CI [15%].
5. Install Ubuntu VM on your laptop using VirtualBox player and Ubuntu ISO (<https://www.ubuntu.com/download/desktop>) [5%]. Put a folder with the name of your group on the Ubuntu desktop.
6. [20%] Create AWS Lambda function that reads in JSON

{

"first\_name": "Jane",

"last\_name": "Doe"

}

and returns

{

"statusCode": 200,

"output": "Jane Doe"

}

You can implement this Lambda function in any language. You do not need to externalize the API.

**Deliverables**

1. To submit to D2L
   1. A snapshot of TravisCI log building and testing your code
   2. Provide the logs which was generated when containerizing your application
   3. A snapshot of Codecov.io report of your code
   4. Provide a screenshot of the your index.html on AWS EB along with the URL box of the browser.
   5. A snapshot (screen capture) of the Ubuntu desktop within your host machine
   6. Write a report on how the lambda function works.