

# **ECE1779 Introduction to Cloud Computing**

## **ASSIGNMENT 2 Amazon Web Services**

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## 1. Project prerequisites:

Install Python (3.5.2)

Install Python Wand ImageMagick bindings

Install gunicorn

<Please notice that packages flask\_wtf, pymysql and passlib have been installed on Python3.5. If you use other version of python, make sure you've already installed those three packages.>

Configure AWS command line interface with access key pair (assume you already install AWS command line interface):

- Type '**aws configure**' in command line.
- Type 'access key Id' and 'secret access key' we provide.
- Type '**us-east-1**' as region.
- Type '**json**' as output type.

## 2. Deployment Instruction

### User UI

To use application as a general user, just type load balancer's DNS name '**...elb.amazonaws.com**' in web browser. Enjoy it!

### Manager UI

To check manager instance, use .pem file we provided to ssh into manager instance. The IP address of manager instance is '**...**'. The password for VNC connection is '**...**'.

- Move pem file "ECE\_1779.pem" to the directory ".ssh".
- SSH into the manager instance using the command:  
**ssh -i .ssh/ECE\_1779.pem ubuntu@... -L 5901:localhost:5901**
- Use the VNC client to log into the manager instance. Here we use the VNC port 5901. The managerUI should already be there. And worker pool is shown on the right side for managerUI.

To restart managerUI:

- type '**cd /home/ubuntu/Desktop/Web\_application\_ImageBay/manager**' in shell
- type '**python3 run.py**' in shell.
- type '**...**' in web browser to check managerUI.

To check the database on manager instance:

- type '**mysql-workbench**' in command line and then login in as '**root**' user with password '**ece1779pass**'.

To check the worker instance:

- Since we randomly delete worker instance in shrinking process, it is hard to provide a static IP address for worker instance. But basically, the userUI is the same as A1 except that we save images to S3 bucket. To check userUI, just type provided DNS name of load balancer in web browser.