CS 553 Cloud Computing
Programming Assignment 3
SujayGunjal (CWID: A20351746)
Manual

Note:-

1) User should keep all code of client, Remote and Animoto in one eclipse project and create runnable jar file from eclipse. Copy that jar file to amazon Ec2 instance along with credentials file and workload.txt file.

2) Keep credentials file and workload.txt file on same location where jar is copied.

1) Below are the steps to execute Local Code:-

Create workload file first:-

- JavacWorkload_File_Creator.java
- Java Workload_File_Creator

  You will be asked to enter number of jobs and sleep time for job. Workload.txt file will be created which will have all sleep tasks.

  Example:-

  Thread.sleep(100);

- javac Local_Client.java
- javaLocal_Client –s LOCAL -t 1 -w Workload.txt

  This will start execution of local program which will create number of worker threads mentioned in command line after -t and 2 client threads 1 will input jobs in Incoming_Queue and other thread will check if execution is complete or not in Response_Queue.

2) Below are the steps to execute Remote Code:-

- java -cp PA3_Code.jar Workload_File_Creator

  You will be asked to enter number of jobs and sleep time for job. Workload.txt file will be created which will have all sleep tasks.

  Example:-

  Thread.sleep(100);

- java -cp PA3_Code.jar Create_QueueIncoming_Queue

  Above command will create two queues in your amazon account one is SQS Incoming_Queue queue other is SQS Response_Queue and DynamoDb table Job_Id_Check.

- java -cp PA3_Code.jar Worker –s Incoming_Queue -t 1

  Above command will start worker with 1 thread and will create one worker thread and will connect Incoming_Queue ,Response_Queue and Job_Id_Check table. This thread will continuously check Incoming_Queue for any job.

- java -cp PA3_Code.jar Client –s Incoming_Queue -w Workload.txt

  Above command will start client and will connect Incoming_Queue and Response_Queue. This will start putting jobs in Incoming_Queue for execution and other thread will continuously will check response queue for completion of jobs.

- java -cp PA3_Code.jar Delete_QueueIncoming_Queue

  Once execution is completed by user. Above command will delete Incoming_Queue ,Response_Queue.

3) Below are the steps to execute Animoto Code:-

- java -cp PA3_Code.jar Input_File_Creator

  Above command will create Animoto_Workload.txt file and will input below jobs in file.

  /home/sujay/Desktop/Assignment3/PA3_Jar_files/Image_Link.txt

  Above path is the location of file which as 60 images.

- java -cp PA3_Code.jar Animoto_Client –s Animoto_Input_Queue -w Animoto_Workload.txt

  Above command will start client and will create Animoto_Input_Queue, Animoto_Response_Queue and Animoto_Job_IdDynamoDB table in your amazon Aws account and will load jobs in incoming queue.

- java -cp PA3_Code.jar Animoto_Worker –s Animoto_Input_Queue -t 1

  Above command will start worker with 1 thread and will create bucket in s3 and will connect to Animoto_Input_Queue, Animoto_Response_Queue for processing jobs.