**Assignment 4 Submission:**

Task 1:

Make sure that your AWS credentials are present. Maven in eclipse was used for the whole project.

Main Files:

**Client.java:** Takes the imagepath as an argument, puts it into s3 bucket, and sends a message to the inbox queue.

**Server.java:** This is the ec-2 worker which processes the image. It gets message from inbox, downloads the image from s3 and then flips the image vertically by 180 degrees. After this it again uploads the image to s3, and sends a message to the outbox queue.

.jar file generated will have this file along with all the dependencies. Follow the instructions mentioned in the pom.xml file. Current default setting in the pom.xml file (plugins) is for generating a jar file. Use Maven build and then enter “package” as a goal for the .jar file.

Even without generating jar file, you can run Client.java and Server.java separately.

Task 2:

Main files:

Client.java:

Website/index.html: This is a basic client facing website where they upload the image and few seconds/minutes later a processed image will be downloaded. Make sure you change the url where post request is sent to “<domain> :8080/Assignment4-0.0.1-SNAPSHOT/flipImage”. <domain> can be either localhost or your ec2 instance public ip.

Servlet.java: This is the servlet file which will handle post request from users and call a processing method present in Client.java.

In order to generate .jar file, follow the instructions in pom.xml file.

1. <groupId>com.projects</groupId>
2. <artifactId>Assignment4</artifactId>
3. <version>0.0.1-SNAPSHOT</version>
4. <!-- In order to build war files, change this "jar" to "war" -->
5. <packaging>jar</packaging>
6. <name>Assignment4</name>
7. <url>http://www.example.com</url>

Change <packaging> value to war

And comment the existing jar plugins and uncomment all the remaining plugins which will help in creating a .war file. Use Maven build and then enter “package” as a goal for creating the .war file. Place this .war file in the webapps folder of apache-tomcat and if you go to   
“<domain> :8080/Assignment4-0.0.1-SNAPSHOT/flipImage”, if you see a “Your Server is running” message then you were successful.

Link to .jar and .war file onedrive:  
https://connecthkuhk-my.sharepoint.com/:f:/g/personal/murtaza\_connect\_hku\_hk/EjTUg-My46BKjgzRKdFTubcBieP9evNSzipyqKydNpcmOA?e=kRFfvJ