SWE 642 HW1 – Kevin Leary

Part 1:

First creation of the homepage. I used my current website to do this. To create the S3 and host the website was simple. I uploaded the files from my blog to the newly created S3 bucket. I then had to enable static hosting from the S3 bucket Properties tab which is a simple edit and change to allow an index.html to be hosted. Since my files contained an index.html, this was an easy change. I then had to edit the public access of the S3 bucket. This was also a simple edit in the S3 bucket Permissions tab to remove the blocking of all public access to allow all public access. Then we need to add a policy to the bucket to ensure that read access is granted from the publicly accessible URL. The policy was available online and in AWS instructions to allow the content of the S3 bucket to read from public Ips. We needed to configure the policy to contain our bucket name in the resource key:value pair but that was the online change needed. Then bam it was accessible.

The Class Homepage S3 website is accessible at:
http://kevinlearyhomepage.s3-website.us-east-2.amazonaws.com/

Part 2:

The Computer Science Department Website is also hosted as an S3 bucket using the same directions for part one.

The Computer Science Department S3 website is accessible at:
http://kevinlearyhomework1.s3-website.us-east-2.amazonaws.com

For the EC2 instance, we deployed a standard Amazon Machine Image (AMI) of Amazon Linux and utilized everything accessible to the free-tier users. 20GB of storage was provisioned and a new PEM ssh key created also so that we can connect on our local machine. Once the EC2 was up and running, I connected to it via the PEM key. This needs the correct permissions and you also need to get the public EC2 instance IP and name to connect with. The connect command on MacOS via terminal looks like.

```
ssh -i keyvalue.pem
ec2-user@ec2-XXX-XXX-XXX-XXX.us-east-2.compute.amazonaws.
com
```

Now I have to provision an apache web server to actually serve our website. I installed the apache web server and some necessary dependencies as well. Then I configured the security group provisioned on

the EC2 to allow for HTTP 80 inbound connections. Make sure that SSH connections on port 22 are still allowed inbound. Once that is done and the apache server is configured, you can then transfer your website files over. I did that by zipping my application up and uploading it via an scp command in terminal like such. `scp -i XXX.pem ~/work/SWE642/HW1/Part\ 2/app.zip ec2-user@ec2-XXX-us-east-2.compute.amazonaws.com:HW1/ `

Extracting the contents of the zip to the `/var/www/html` webserver path finished the necessary steps for the hosted web server for our application.

The EC2 instance is accessible here: http://ec2-3-17-76-48.us-east-2.compute.amazonaws.com/