

## README file

### Part 1- Create the homepage using AWS S3

- Create a new bucket in Amazon s3 with a name of your preference. Mine is **"swe645g01477305hw1"**
- We enable static web hosting, by going into the bucket properties and choosing Enable. We enter our index and error files there, mine are **index1.html** and **error.html**
- Under Permissions, we edit Block Public Access Settings by clearing it and saving it
- Then we add a bucket policy so that it is readable publicly. Under Permissions > Bucket Policy we add the following code:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "PublicReadGetObject",
      "Effect": "Allow",
      "Principal": "*",
      "Action": "s3:GetObject",
      "Resource": "arn:aws:s3:::swe645g01477305hw1/*"
    }
  ]
}
```

- Upload all the necessary files with index and error files and test the website endpoint which is under Properties.

My website endpoint URL: <http://swe645g01477305hw1.s3-website-us-east-1.amazonaws.com>

URL for homepage: <https://swe645g01477305hw1.s3.amazonaws.com/index1.html>

URL for error: <https://swe645g01477305hw1.s3.amazonaws.com/error.html>

### Part 2- Create the survey page using AWS EC2

- Create a new bucket in EC2 with the name of your preference, mine is **"windowsproj"**.
- We select the Amazon Linux AMI with the free tier eligible instance, default t2.micro instance type
- We set a new key pair name and download that pem file. Mine is **newpair.pem**
- We can select any subnet and the launch the instance. We wait till 2 checks are passed
- We then connect the instance to our local machine through a series of commands

```
C:\Users\gopal\OneDrive\Desktop>scp -i "C:\Users\gopal\Downloads\newpair.pem" -r "C:\Users\gopal\OneDrive\Desktop\swe645_hw1\survey" ec2-user@3.83.187.106:/home/ec2-user/
```

gmlogo.png	100%	15KB	1.5MB/s	00:00
Header_logo.png	100%	25KB	2.1MB/s	00:00
styles.css	100%	3710	308.3KB/s	00:00
survey.html	100%	11KB	1.0MB/s	00:00

```
C:\Users\gopal\OneDrive\Desktop>ssh -i "C:\Users\gopal\Downloads\newpair.pem" ec2-user@3.83.187.106
```

```
      _#_
     ~\  #####          Amazon Linux 2023
    ~~~ \#####\
    ~~~  \####|
    ~~~   \|###|
    ~~~    \#/  --- https://aws.amazon.com/linux/amazon-linux-2023
           V~!  !-->
         ~~~~~
        ~~~~ /
       ~~~//
      ~/m/i'
Last login: Fri Sep 20 17:43:57 2024 from 129.174.182.34
[ec2-user@ip-172-31-64-90 ~]$ ls
survey
[ec2-user@ip-172-31-64-90 ~]$ sudo systemctl start nginx
[ec2-user@ip-172-31-64-90 ~]$ sudo mv /home/ec2-user/survey /usr/share/nginx/html/
[ec2-user@ip-172-31-64-90 ~]$ sudo chmod -R 755 /usr/share/nginx/html/survey
```

With these commands,

1. We securely copy the survey folder from local file into the instance server through the ssh key pair
  2. Authenticate the instance server through the local ssh connection using the jey pair
  3. We then move the files from instance home to the required path i.e, nginx and change permissions
- The survey folder contains all my files related to survey, including **survey.html** asked in part-2 of the assignment.
  - Then we go to instance security > security groups > Actions > edit inbound rules > add new rule > select type HTTP and source 0.0.0.0/0 and save
  - Now our website is up and running

**My website public DNS url:** <http://ec2-3-83-187-106.compute-1.amazonaws.com/survey/survey.html>

Or another url: <http://3.83.187.106/survey/survey.html>