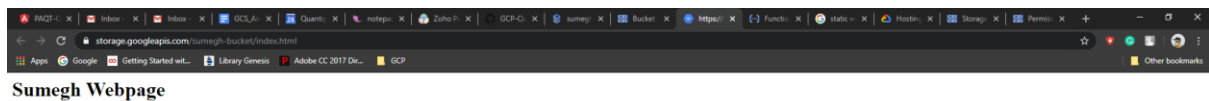


## **CloudSql & GCS Assessment**

### **1. Host a static website using GCS bucket.**

1. Create a bucket in GCS
2. Upload a html file (staticwebsite.html)
3. In the file options, click on Edit Permissions
4. Click on Add Item
5. Enter the following in the respective columns  
Entity-User  
Name-allUsers  
Access- Reader
6. Click on Save
7. Public Access is assigned to the file
8. Click on the IP generated



**2. Create a folder structure in the bucket as follows (manually) :**

- folder1
  - file1.txt
- folder2
  - file2.txt

**Download the entire folder (folder1) on the local (cloud shell or vm) using python3 with standard library.**

**Code:**

```
from google.cloud import storage
import os

BUCKET_NAME = 'sumegh2'
DOWNLOAD_FOLDER = 'folder1'
DESTINATION_FOLDER = 'final/'
try:
    os.mkdir(DESTINATION_FOLDER)
except Exception as e:
    print('Folder already exists.')

def main():
    client = storage.Client()
    bucket = client.get_bucket(BUCKET_NAME)
    blobs = bucket.list_blobs()

    for b in blobs:

        fold = DESTINATION_FOLDER + ''

        if b.name.startswith(DOWNLOAD_FOLDER) and b.name[-1] != '/':

            folder_struct = b.name.split('/')

            for folder in folder_struct[:-1]:
                fold += folder + '/'
                try:
                    os.mkdir(fold)
                except Exception as e:
                    pass
            b.download_to_filename(fold + folder_struct[-1])
            print('Replicated')
if __name__ == '__main__':
    main()
```

```
sumegh_anglekar@cloudshell:~ (pe-training)$ ls
dl download hello.py newdir README-cloudshell.txt test_ testdir test.py
sumegh_anglekar@cloudshell:~ (pe-training)$ python3 test.py
Replicated
sumegh_anglekar@cloudshell:~ (pe-training)$ ls
dl download final hello.py newdir README-cloudshell.txt test_ testdir test.py
sumegh_anglekar@cloudshell:~ (pe-training)$ cd final/
sumegh_anglekar@cloudshell:~/final (pe-training)$ ls
folder1
sumegh_anglekar@cloudshell:~/final (pe-training)$ cd folder1/
sumegh_anglekar@cloudshell:~/final/folder1 (pe-training)$ ls
file1.txt folder2
sumegh_anglekar@cloudshell:~/final/folder1 (pe-training)$ cd folder2/
sumegh_anglekar@cloudshell:~/final/folder1/folder2 (pe-training)$ ls
file2.txt
sumegh_anglekar@cloudshell:~/final/folder1/folder2 (pe-training)$
```