Cloud Computing Exercise #9

Hosting a Static Web Page on S3

A. Preparation

1. Sign in to your AWS account as the non-root admin user.

B. Create Bucket and Enable Website Hosting

1. Go to the S3 dashboard (Services/Storage/S3) and select “Create Bucket”. Provide a unique bucket name, Uncheck all “Block all public access”, and click on “Create Bucket”. You should see the newly created bucket in your bucket list (Amazon S3/Buckets).
2. Select your bucket and click on the “Properties” tab. Scroll all the way down to “Static Website Hosting”, and click on “Edit”. Enable static website hosting (select the “Enable” button), and specify “index.html” as the index document. This will be the default html page that will be served if a client issues an HTTP GET request to the website’s URL. Save the changes.
3. Again scroll all the way down to “Static Website Hosting” in the “Properties” tab, and note the bucket website endpoint URL. This is the URL that clients can use to access the webpage remotely.

C. Upload Files

1. Extract the files from the provided webpage.zip archive (Download it from the modules section). There are two files in it: index.html, the webpage, and the style.css style file in the CSS subdirectory containing the associated webpage styling information. Upload these two files to your S3 bucket in such a way that the subdirectory structure is preserved (that is, the style.css file should be in the CSS pseudo-folder after the upload operation). Both files should appear on the “Objects” list of your bucket. To do this correctly, click on “Add file” to upload index.html, and click on “Add folder” to upload css folder.

D. Set Access Permissions

1. Scroll down to “Bucket policy” and click “Edit”. Create a JSON bucket policy that allows anyone to read all the content of your bucket. (Hint: the policy is very similar to the example bucket policy on the class slides, but you need to use the correct ARN for your bucket. Type in the policy rather than copy/pasting it.) (To view the ARN of your bucket, go to S3 Buckets -> Properties) Then, click on “Save Changes”. If you get an error message, you will need to figure out what is wrong, fix the error and try saving again. If it is a syntax error you can check samples of AWS policy or use this website to fix the errors: <https://jsonformatter.org/>

E. Test Web Page Access

1. Open a window in another browser that you did not authenticate yourself to AWS with (e.g. if you have been working with Firefox, then launch Chrome). You can also use another device, such as your smart phone or tablet. Type in the noted bucket website endpoint URL into the address bar. You should see the example webpage (with title “Example Web Page”).

F. Clean up after yourself

1. Select the “Objects” tab of your bucket, and delete the two files from the bucket.
2. Go back to the S3 main console (Amazon S3/Buckets), select your bucket and delete it by clicking on the “Delete” button and confirming the operation. Verify that the bucket was successfully deleted.
3. Log out of AWS.