**(4) Create an S3 bucket and deploy the reactjs static application on it and provide with the public url for use.**

**Theory:**

**S3:**

Amazon S3 (Simple Storage Service) provides object storage, which is built for storing and recovering any amount of information or data from anywhere over the internet. It provides this storage through a web services interface. While designed for developers for easier web-scale computing, it provides 99.999999999 percent durability and 99.99 percent availability of objects. It can also store computer files up to 5 terabytes in size.

**AWS Buckets and Objects**

An object consists of data, key (assigned name), and metadata. A bucket is used to [store objects](https://aws.amazon.com/s3/features/). When data is added to a bucket, Amazon S3 creates a unique version ID and allocates it to the object.

**S3 is object-based. Objects consist of the following:**

* Key: It is simply the name of the object. For example, hello.txt, spreadsheet.xlsx, etc. You can use the key to retrieve the object.
* Value: It is simply the data which is made up of a sequence of bytes. It is actually a data inside the file.
* Version ID: Version ID uniquely identifies the object. It is a string generated by S3 when you add an object to the S3 bucket.
* Metadata: It is the data about data that you are storing. A set of a name-value pair with which you can store the information regarding an object. Metadata can be assigned to the objects in Amazon S3 bucket.
* Subresources: Subresource mechanism is used to store object-specific information.
* Access control information: You can put the permissions individually on your files.

**To deploy the reactjs static application on it and provide with the public url for use**

**Step 1** : Click on create bucket

**Step 2** : Now provide bucket name,region and now disable all the public access.

**Step 3** : Enable the bucket versioning and click on create bucket

**Step 4** : Now add the bucket policy and save it

**Step 5** : Now enable the static website hosting

**Step 6** : open the command prompt and check whether it has nodejs or not using the command “node -v”

**Step 7** : Now install reactjs using the command

“npm install -g create-react-app”

**Step 8** : Now create a react application using the command

“create-react-app application\_name”

**Step 9** :Now change the directory to the application”

**Step 10** : Now run the command “npm start” and run npm run build command

**Step 11** : Now run the command “npm install -g serve” and then execute the command “serve -s build”.And now browse the given link then you can get react website page.