

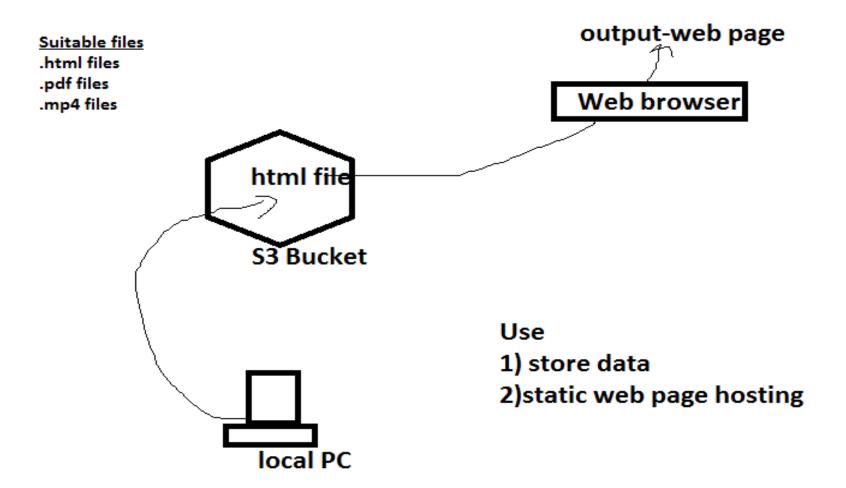




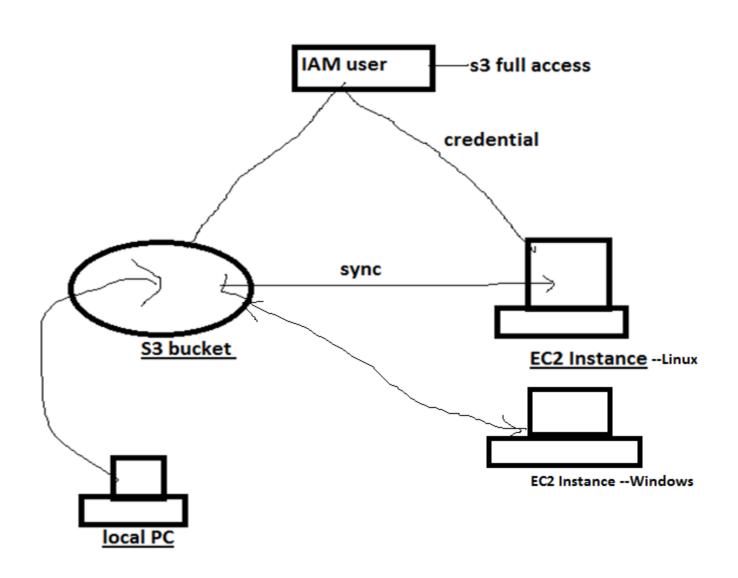
What is Amazon S3

- Amazon Simple Storage Service is storage for the Internet. It is designed to make web-scale computing easier for developers.
- Amazon S3 has a simple web services interface that you can use to store and retrieve any amount of data, at any time, from anywhere on the web. It gives any developer access to the same highly scalable, reliable, fast, inexpensive data storage infrastructure that Amazon uses to run its own global network of web sites. The service aims to maximize benefits of scale and to pass those benefits on to developers.

S3 --Simple Storage Service



Sync S3 bucket with EC2 instance



Topics to be covered

- 1) Creating Bucket
- 2) Uploading different files and accessing it
- 3) Cross region replication (CRR)
- 4) Versioning

What is Amazon S3—In short

- 1) To host static website
- 2) Use as storage

Most suitable files to upload for static website

- 1) .pdf
- 2) .mp4
- 3).html

AWS Free Tier

As part of the AWS Free Tier, you can get started with Amazon S3 for free. Upon sign-up, new AWS customers receive 5GB of Amazon S3 storage in the S3 Standard storage class; 20,000 GET Requests; 2,000 PUT, COPY, POST, or LIST Requests; and 15GB of Data Transfer Out each month for one year.

How Amazon S3 works

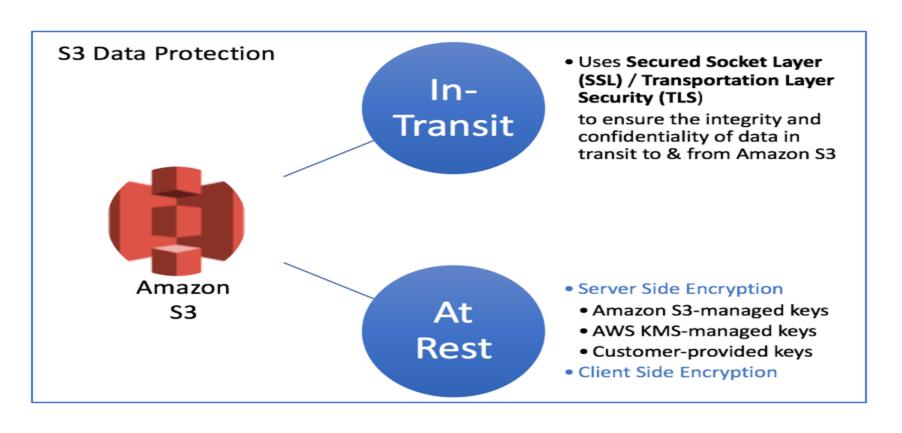
- Amazon S3 is an object storage service, which differs from block and file cloud storage. Each object is stored as a file with its metadata included and is given an ID number. Applications use this ID number to access an object. Unlike file and block cloud storage, a developer can access an object via a REST API.
- The S3 cloud storage service gives a subscriber access to the same systems that Amazon uses to run its own websites. S3 enables customers to upload, store and download practically any file or object that is up to five terabytes (TB) in size, with the largest single upload capped at five gigabytes (GB).

Amazon S3 storage classes

- Amazon S3 comes in three storage classes: S3 Standard, S3 Infrequent Access and Amazon Glacier.
- S3 Standard is suitable for frequently accessed data that needs to be delivered with low latency and high throughput. S3 Standard targets applications, dynamic websites, content distribution and big data workloads.
- S3 Infrequent Access offers a lower storage price for data that's needed less often, but that must be quickly accessible. This tier can be used for backups, disaster recovery and long-term data storage.
- Amazon Glacier is the least expensive storage option in S3, but it is strictly
 designed for archival storage because it takes longer to access the data.
 Glacier offers variable retrieval rates that range from minutes to hours.

Protecting your data

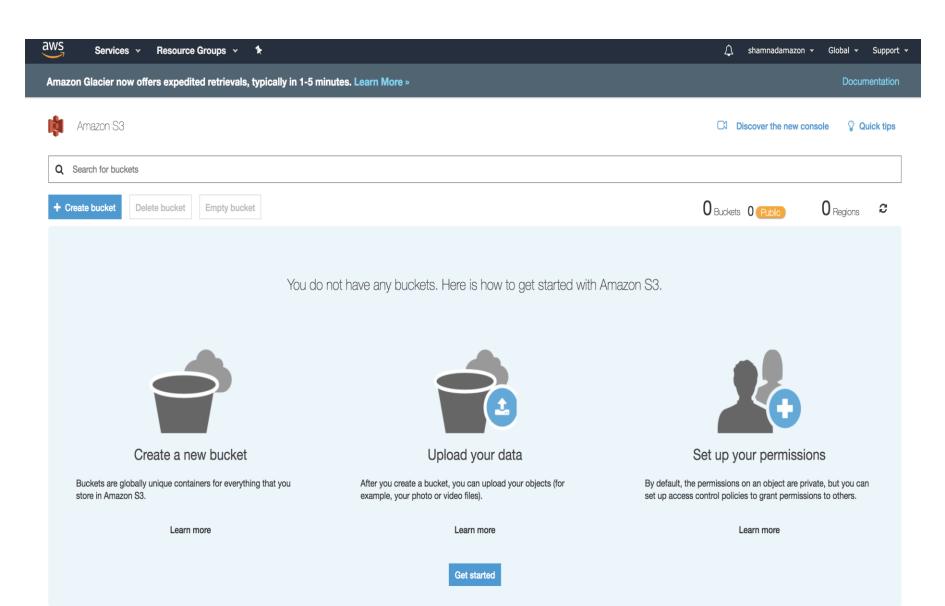
User data is stored on redundant servers in multiple data centers. S3 uses a simple web-based interface -- the Amazon S3 console -- and encryption for user authentication.



Lab-Creating bucket –uploading files

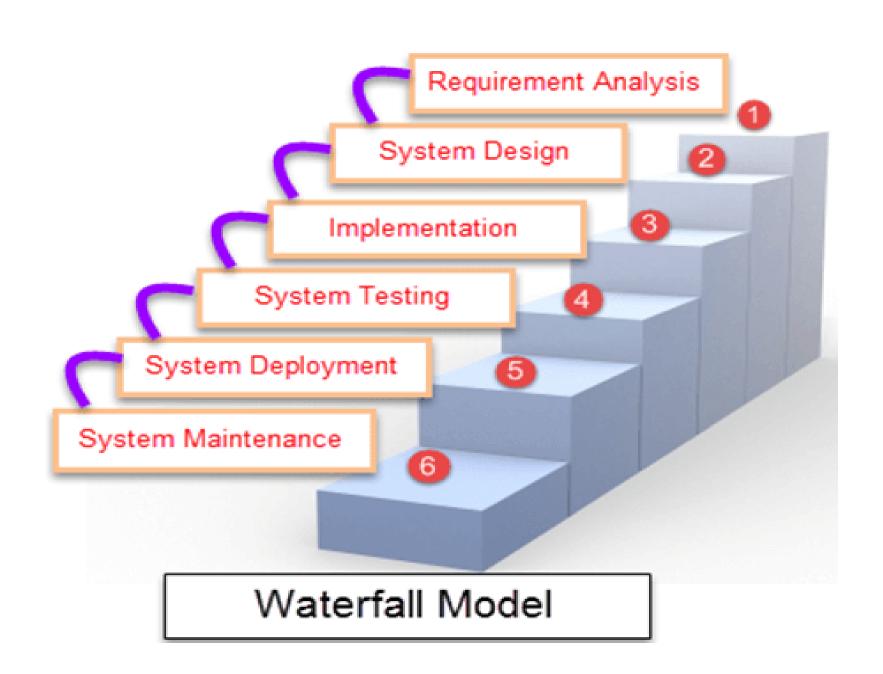
- Services –S3 –create bucket –given bucket name and select region –next—select (check) –keep all versioning next—uncheck block all public access—I acknowledge-----create
- 2) Open the created bucket –upload files –select any file open –next—upload

3) Open uploaded file—make public –scroll down –copy the URL and paste in new tab

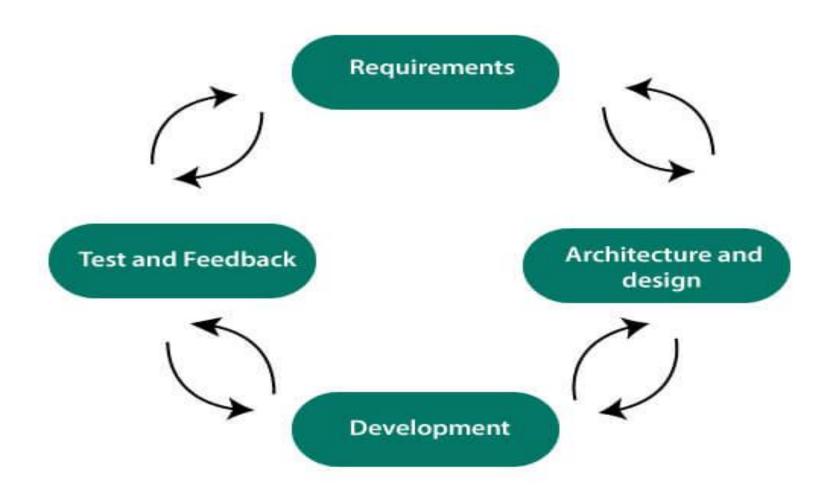


SDLC





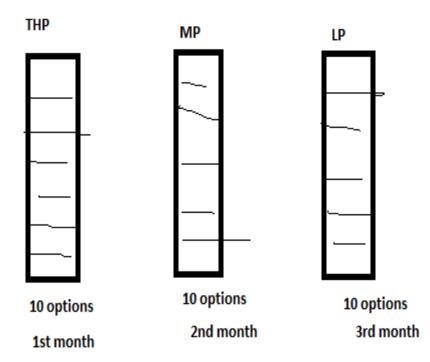
SDLC Agile model



Full Project-- 30 options

Agile Process





S3 bucket file versioning

- 1)AWS S3 bucket keeps record of all version of file
- 2) Create one html file –upload it –and open it
- 3) Do modification in same file and upload again -open it
- 4) Do modification in same file and upload again -open it
- 5) Open bucket –file –check all version will be there—delete anyone in case getting error

Cross Region Replication(CRR)

S3 CRR is configured to a source **S3 bucket** and replicates objects into a destination **bucket** in another **AWS** Region. **Amazon S3 CRR** automatically replicates data between **buckets** across different **AWS** Regions.



Cross Region Replication(CRR)

