

- ① ~~Aws cloud history -~~
- ② ~~Use Cases.~~
- ③ ~~Global infra., AWS Regions~~
- ④ ~~Availability Zones~~
- ⑤ ~~Point of Presence~~
- ⑥ IAM

① Cloud History (Aws):-

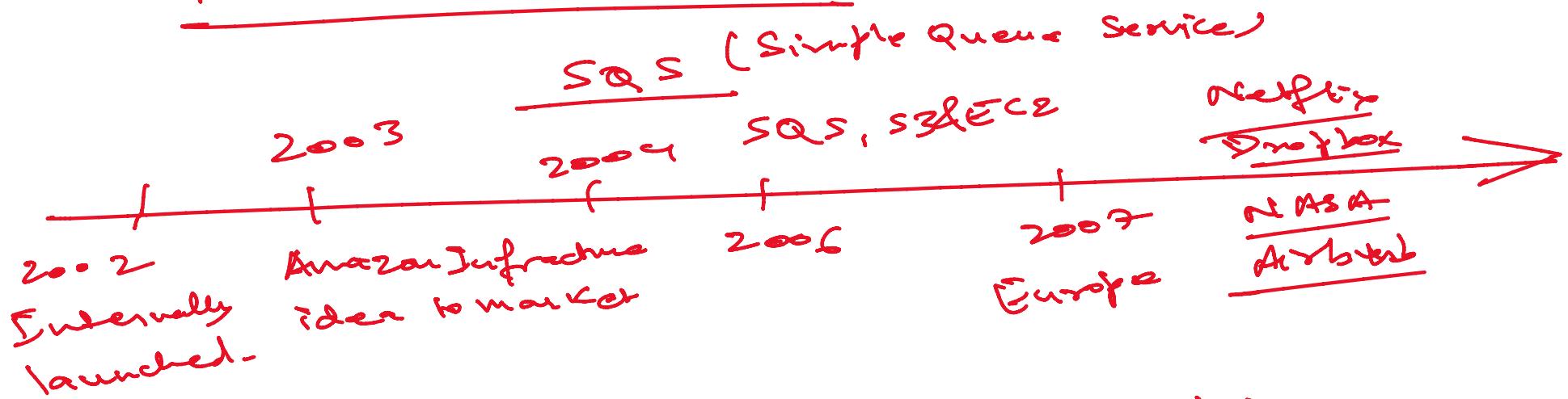
On - prem →

- ① Rent
- ② Electricity
- ③ Team (round the clock)
- ④ Patching, upgradation
- ⑤ Device maintenance ↑

AWS
MS Azure
GCP
Oracle
Alibaba
IBM cloud
⑥ upgradation.

- Cloud:-
- ① Pay as you go → Renting
 - ② Patching, upgrade ✕
 - ③ Security
 - ④ Availability, latency -
 - ⑤ Device maintenance ✕

Aws Cloud history:-



2019, AWS = \$ 35.02 Billion.

AWS 47% → 2019, Microsoft → 22%
Azure

- Enterprise Bucket - Big Data Analytics
- ① Enterprise Bucket - Big Data Analytics
 - ② Website, Mobile, Social App
 - ③ Gaming -

Aws Global Infra :-

- ① AWS Region
- ② AWS Availability Zone
- ③ AWS Data Centre
- ④ AWS Edge Location } Point of presence

- ① AWS Regions - US-east-1, eu-west-3
- ② Latency → Nearest Region ✓
 - ③ Compliance
 - ④ Available Services →

(c) Available Services →

(d) Pricing -

(2) AWS Availability Regions -

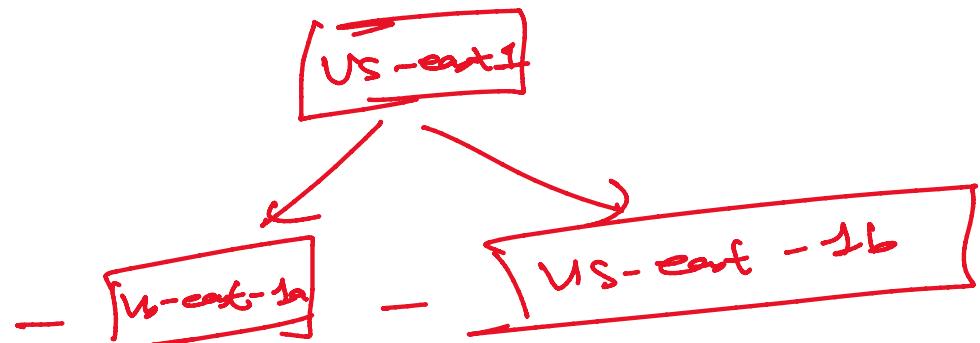
each region:
min. 3, max. 6

US-east-1

US-east-1a

US-east-1b

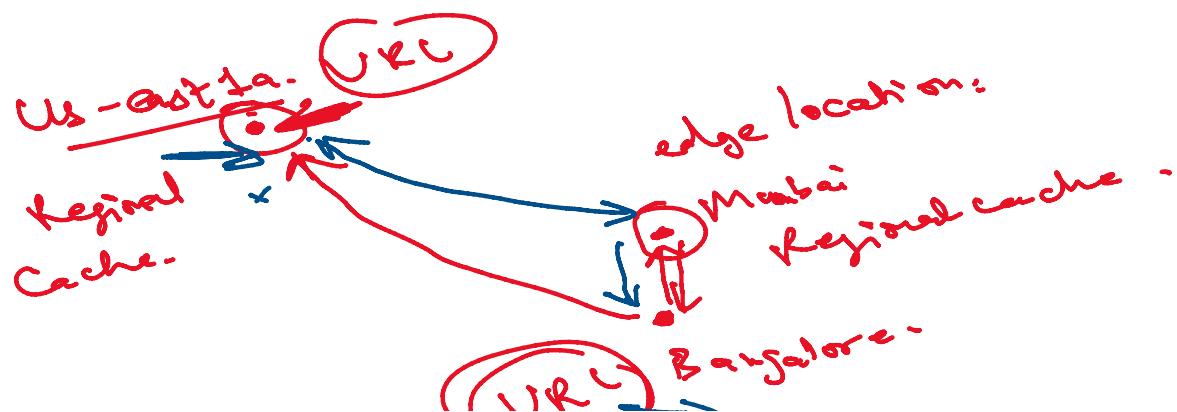
US-east-1c



(3) AWS Point of Presence (Edge location) -

400 edge location

10+ Regional Cache



URl
Bangalore

~~Route 53~~
google.com

Aws Global Services:-

- 1 IAM (Identity & Access Management)
- 2 Route 53 (DNS Service) → 10.0.0.1
- 3 Cloudfront
- 4 WAF

Region-Specific:-

- 1 EC2 (IaaS)
- 2 Elastic Beanstalk (PaaS)
- 3 Lambda (FaaS)
- 4 SaaS

IAMS - Identity & Access Management (Global Service)

Users & Group

Foot Account \rightarrow Default

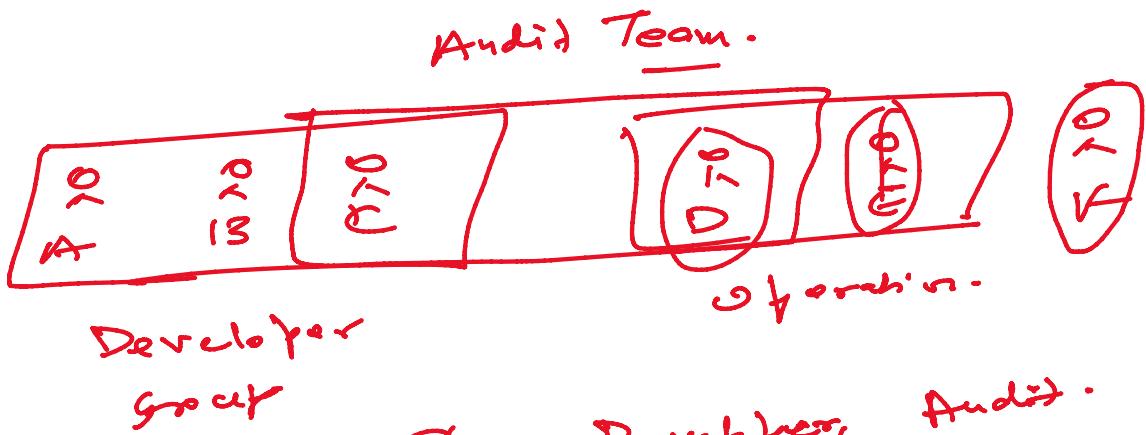
JSON → Users

Policy: Group → User

↓ ← Developer →

Data Engineering

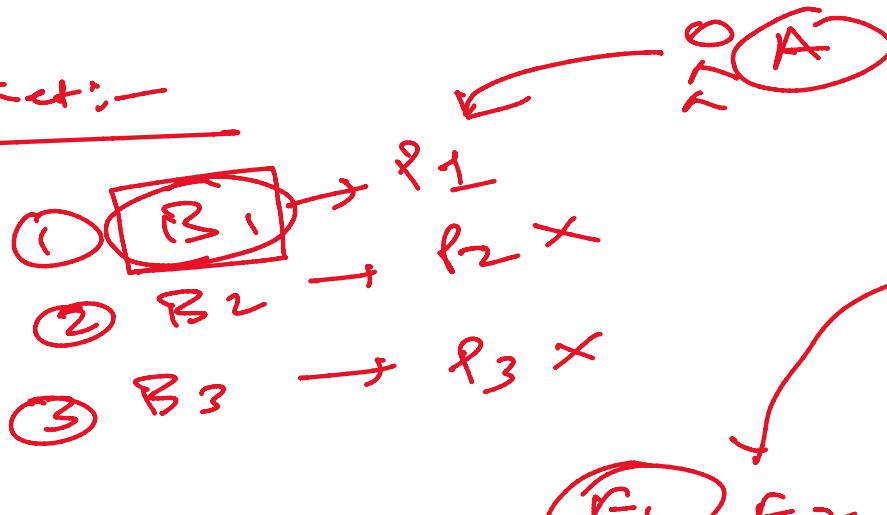
Q 2 v o b
Solving Archi. -



C → Developers, Audit.

D → operation, Audit.

S3 Bucket:-

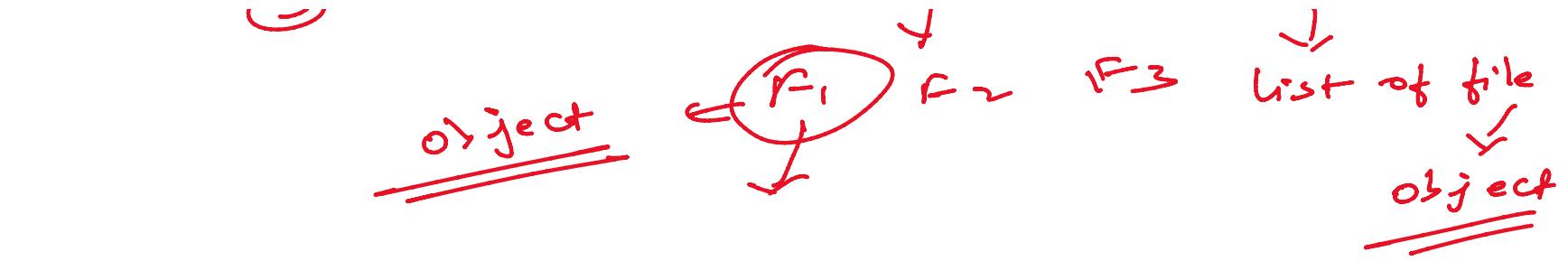


AP ->
Amazon Resource
Name -

$$\underline{A} \xrightarrow{\frac{B}{C} \cdot \frac{1}{1}} \boxed{AB \in SB3}$$

List Read Access

File \rightarrow list of file



MFA → Password + MFA

- Virtual MFA

Security → Yubikey

Software

② EC2 (Elastic cloud compute) → Iaas

① Sizing & Configuration

② User Data

③ Instance Type

④ Security group (Firewall)

- ⑤ Linux servers
- ⑥ Window servers
- ⑦ Purchasing options

- ① Rent VM
- ② Store data in virtual drives
- ③ ELB
- ④ ASG → Horizontal, Vertical

m5.2xlarge

m: → instance class

5: → generation

2xlarge → size within instance

- ① General purpose → t2.micro → high performance processor
- ② Compute optimized → C

③ Memory optimized:-

Large dataset in memory

④ Storage optimized I

DWH

