WHAT IS CLOUD

Cloud is a virtual storage space on the internet where you can store files, run programs and use services without needing to have physical hardware or software on your own computer

Its like renting a space where all your tools and services are available of which you can make use to grow your business

It eventually makes things easier and faster because you don't have to worry about maintaining the technology itself

So eventually Cloud is some resource that can be accessed over the internet

In a cloud there are different way to access the Cloud Services, these are often called as Cloud service models

SaaS (Software as a Service): it's more like renting a platform where you can build and run your own apps, but you don't have to worry about setting up the hardware or the software

For Example: Gmail or Netflix (you pay for Netflix access and everything is handled for you)

PaaS (Platform as a service): renting your software where you can build your own app without worrying about hardware or software

It's for developer who wants to build the application but does not want to maintain the technology stack underneath it

For example: Google App Engine

Aisa (Infrastructure as a service): It gives you access to virtual machine, storage and networking, so you can build your own IT networking. It's like renting a virtual computer

Like Amazon Web Services (AWS)

What is the major cloud provider

- Amazon Web Services (AWS)
- Microsoft Azure
- Google Cloud
- IBM Cloud
- Oracle Cloud
- Alibaba Cloud
- BMC
- Apple

How is the AWS costing Decided

PAY AS YOU GO

Basically, it means you only pay for the services you actually use, here how are the cost are decided

Computing (like virtual computer): you pay based on how powerful the virtual computer is and how long you use it

The bigger and more powerful the computer the more it will cost

Storage (like online storage files): you pay on how much storage you use to store files, and how quickly you need to access them

Data Transfer (data moving around): you pay when you move data into or out of AWS, especially when it across different areas

Other Services: AWS has a lot of services like databases or machine learning tools and cost depend on how much you use them

WHAT ARE AWS ACCOUNT REGISTRATION STEPS

- Go to was website
- On the right corner you will find was account registration
- Enter the email and password
- Create the was account
- Provide contact Information
- Add payment information
- Verify your identity

- Select a support plan
- Review and complete your registration
- Sign in to your AWS Management Console

WHY AWS HAS DIFFERENT REGION FOR DIFFERENT PLANS

- <u>Faster and more responsive</u> AWS place data center around the world so that your services are closer to you. That makes website and apps load faster
- <u>Backup and reliability</u> if one data center go down AWS can make use of another nearby one to keep everything running smoothly
- <u>Follow the law –</u> some countries have rules about how and where to store the data
- <u>Lower your cost</u> -The cost to run services can be different in each regionals let you choose cheaper region if you want to save money
- <u>Disaster Recovery</u> in case of natural disaster AWS can quickly move the services to another region

In India AWS has 2 data storage one in India and other in Hyderabad.

AVAILABITY ZONE

Availability zone is separate data center within a single region, like for disaster recovery one can face floods or earthquake and hence if one falls down the other should be available therefore one region should have minimum 2 and maximum 3 availability zone

For example, Mumbai has 2 Gurgaon and Vashi

HOW DO YOU KNOW THAT YOUR ACCOUNT IS FULLY VERIFIED

One can check whether the account is fully verified from the going through the billing and cost management

If the billing and credit card details are cleared then we can eventually say that the account is verified

WHAT IS EC2 (Elastic Compute Cloud)

Ec2 is like renting a computer, instead of buying a physical server, you can use EC2 to get virtual computer (called an instance) over the internet

You can pay for what you want and if you don't need the computer, you can turn it off and stop paying

It is fast and flexible