**Your goals**

* Know about AWS Fundamentals Course
* Be familiar with "The Six Pillars of AWS"
* Understand "Shared Responsibility Model"
* Have an idea about AWS CLI
* Learn about Tags
* Know about AWS Support
* Learn about AWS Quotas
* Know about AWS Cost Management
* Get brief familiarity with AWS provided services and domains
* Budget alerts

AWS Cloud Overview:

**Amazon Web Services (AWS)** is the world’s most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centers globally.

AWS has the most extensive global cloud infrastructure.

No other cloud provider offers as many Regions with multiple Availability Zones connected by low latency, high throughput, and highly redundant networking.

AWS has 80 Availability Zones within 25 geographic regions around the world and has announced plans for 15 more Availability Zones and 5 more AWS Regions.

The platform is developed with a combination of infrastructure as a service (IaaS), platform as a service (PaaS) and packaged software as a service (SaaS) offerings.

Amazon Web Services (AWS) is a cloud computing platform that offers a wide range of services and tools for businesses and individuals. Some of the specific AWS services include:

1. EC2 (Elastic Compute Cloud): This service provides resizable compute capacity in the cloud, making it easy to deploy and manage applications.
2. S3 (Simple Storage Service): This is a scalable and highly durable storage service that is ideal for storing and retrieving large amounts of data.
3. RDS (Relational Database Service): This is a managed database service that makes it easy to set up, operate, and scale a relational database in the cloud.
4. Lambda: This is a serverless computing service that allows you to run your code in response to events and automatically manages the underlying infrastructure.
5. Elastic Load Balancing: This service distributes incoming traffic across multiple instances to ensure that your applications are always available and responsive.
6. CloudFront: This is a content delivery network (CDN) that securely delivers data, videos, applications, and APIs to customers globally.
7. Amazon DynamoDB: Amazon DynamoDB is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability. DynamoDB is designed to support both document and key-value data models, making it a versatile database for a wide range of use cases. Benefits of DynamoDB include fast and predictable performance, seamless scalability, and automatic data replication across multiple availability zones.

AWS has several benefits over other large cloud providers, including:

1. Pricing: AWS has a flexible pricing model that allows users to pay only for the resources they consume, which can result in significant cost savings.
2. Scalability: AWS makes it easy to scale your infrastructure up or down as your needs change, so you don't have to worry about overprovisioning or underprovisioning.
3. Security: AWS offers a wide range of security features, including identity and access management, encryption, and network security, to ensure that your data is always protected.
4. Reliability: AWS has a highly reliable infrastructure that ensures your applications are always available and responsive.
5. Innovation: AWS is constantly innovating and releasing new services and features, which means that users always have access to the latest and greatest technology.

AWS Fundamentals:

The AWS Fundamentals Course will be divided into five modules. Each module will follow the following format:

* **Intro**: A short description of the pillar we will be focusing on
* **Mental Model**: A guiding mental model to help you understand the concepts introduced in each pillar
* **Concepts**: Key concepts covering broad foundational topics for each pillar
* **Conclusion**: Summary of what we discussed
* **Further Reading**: Additional links and resources

The Six Pillars:

1. ***Operational Excellence***,
2. ***Security***,
3. ***Reliability***,
4. ***Performance Efficiency***,
5. ***Cost Optimization***, and
6. ***Sustainability***

Shared Responsibility Model:

Security and Compliance is a shared responsibility between AWS and the customer. This shared model can help relieve the customer’s operational burden as AWS operates, manages and controls the components from the host operating system and virtualization layer down to the physical security of the facilities in which the service operates.

The customer assumes responsibility and management of the guest operating system (including updates and security patches), other associated application software as well as the configuration of the AWS provided security group firewall.

Customers should carefully consider the services they choose as their responsibilities vary depending on the services used, the integration of those services into their IT environment, and applicable laws and regulations.

The nature of this shared responsibility also provides the flexibility and customer control that permits the deployment. As shown in the chart below, this differentiation of responsibility is commonly referred to as Security “of” the Cloud versus Security “in” the Cloud.