

Document Title: Cloud Computing Learning Roadmap

1. Start:

- Begin with the interest in learning about Cloud Computing.

2. Understanding Cloud Computing:

- Learn the basics of Cloud Computing and its advantages.

3. Cloud Service Models:

- Understand Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS).

4. Cloud Deployment Models:

- Learn about Public Cloud, Private Cloud, Hybrid Cloud, and Multi-Cloud deployments.

5. Cloud Service Providers:

- Explore major cloud service providers (AWS, Azure, Google Cloud, etc.).
- Understand their offerings, pricing models, and global infrastructure.

6. Setting Up Cloud Accounts:

- Create accounts on one or more cloud platforms.
- Understand billing, resource management, and access control.

7. Virtualization:

- Learn about virtualization technologies that underlie cloud computing.

8. Compute Services:

- Explore virtual machines, containers, and serverless computing.
- Understand services like AWS EC2, Azure Virtual Machines, and Google Compute Engine.

9. Storage Services:

- Learn about cloud storage options (object storage, block storage, file storage).
- Understand services like Amazon S3, Azure Blob Storage, and Google Cloud Storage.

10. Networking in the Cloud:

- Understand cloud networking concepts, VPCs, subnets, and security groups.
- Explore services like AWS VPC, Azure Virtual Network, and Google VPC.

11. Database Services:

- Explore managed database services like AWS RDS, Azure SQL Database, and Google Cloud SQL.

12. Identity and Access Management (IAM):

- Understand IAM concepts for controlling access to cloud resources.

13. Security in the Cloud:

- Learn about cloud security best practices, encryption, and compliance.
- Explore services like AWS Identity and Access Management (IAM), Azure Active Directory, and Google Cloud Identity and Access Management.

14. Monitoring and Logging:

- Understand how to monitor and log activities in the cloud.
- Explore services like AWS CloudWatch, Azure Monitor, and Google Cloud Logging.

15. Load Balancing and Auto Scaling:

- Learn how to distribute traffic and scale applications dynamically.
- Explore services like AWS Elastic Load Balancing, Azure Load Balancer, and Google Cloud Load Balancing.

16. Serverless Computing:

- Understand the serverless paradigm and services like AWS Lambda, Azure Functions, and Google Cloud Functions.

17.Container Orchestration (Optional):

- Explore container orchestration platforms like Kubernetes.

18.Cloud DevOps:

- Understand DevOps practices in a cloud environment.
- Explore CI/CD tools and practices.

19.Hybrid and Multi-Cloud Strategies:

- Learn about hybrid cloud architectures and multi-cloud strategies.

20.Cloud Cost Management:

- Understand strategies for optimizing and managing cloud costs.

21.Certifications (Optional):

- Consider cloud certifications for AWS Certified Solutions Architect, Microsoft Certified: Azure Solutions Architect, Google Cloud Professional Cloud Architect, etc.

22.Continuous Learning:

- Stay updated with new features and services in cloud platforms.

23.End:

- You've successfully navigated the Cloud Computing roadmap!