

Introduction to Cloud Computing & AWS

This introductory workshop provides participants with a practical foundation in Cloud Computing and Amazon Web Services (AWS). It is designed for students, fresh graduates, and IT professionals who want to understand cloud concepts and gain hands-on experience with AWS.

Workshop Overview

We will start by covering the core concepts of cloud computing, comparing Cloud vs. On-Premises infrastructure, and discussing the key benefits of moving to the cloud. Participants will gain a clear understanding of cloud service models, including IaaS, PaaS, and SaaS, along with the fundamentals of resource virtualization.

Instructor

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Content

1. Introduction to Cloud Computing 15 mins Ahmed.
 1. What is Virtualization
 2. What is Cloud Computing? Cloud vs. On-Premises
 3. Benefits of moving to the cloud
 4. Overview of Cloud Service Models (IaaS, PaaS, and SaaS)
2. Introduction to AWS 10 mins Maryam
 1. What is AWS? Market share, listing other cloud providers, why people choose AWS, choosing your cloud provider,
 2. Brief history and evolution of AWS
 3. Overview of AWS Global Infrastructure
 1. Regions
 2. Availability Zones
 3. Edge Locations
3. AWS services: 15 mins Ahmed

1. What is AWS services
2. Regional services vs global services
3. AWS services by category

4. Identity & Access Management (IAM) 20 mins Maryam
 1. Understanding IAM Users, Groups, and Policies
 2. Multifactor Authentication (MFA)
 3. IAM Roles and when to use them
 4. AWS CLI: How to install and configure the CLI

5. Amazon EC2 (Elastic Compute Cloud) 20 mins Ahmed
 1. What is EC2
 2. Instance types
 3. Security Groups
 4. Connect to EC2 instances
 5. IAM roles for EC2
 6. Exposing your hosted app using AWS load balancer

6. Hands-On Demo 30 mins Maryam from the console/ 5 mins TF script. Ahmed
 1. Tour of the AWS Management Console
 2. Launching EC2 instance
 3. Deploying a simple web application
 4. Creating an ALB

Outcome

By the end of this workshop, participants will have:

- A solid understanding of cloud computing fundamentals
- Practical exposure to AWS core services
- The confidence to start using AWS for learning, labs, or entry-level projects

Slides

https://drive.google.com/file/d/1c6W2ECSKtHilm7pnYFrWc1kOx5fydeDL/view?usp=share_link

Recording

https://drive.google.com/file/d/1liBtIMH85kt9NwKQkltzYAS8BuTv1biu/view?usp=share_link

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