

KIDS & TEENS FREELANCING TRAINING INSTITUTE

Amazon Web Services (AWS) Course Outline

Module 1: What is AWS?

- Introduction to cloud computing and AWS as a leading cloud platform
- Real-life example: Hosting a website or app using AWS services
- Key benefits of cloud computing: scalability, flexibility, cost-efficiency
- Overview of AWS global infrastructure: regions and availability zones
- Activity: Explore the AWS Management Console

Module 2: Core AWS Services

- Introduction to key AWS services: EC2, S3, RDS, Lambda
- Real-life example: Storing images in S3 or hosting an app on EC2
- Understanding how each service supports cloud-based apps
- Activity: Launch a virtual server (EC2 instance)

Module 3: AWS Storage & Databases

- Overview of storage services: S3, EBS, Glacier
- Overview of AWS databases: RDS, DynamoDB
- Real-life example: Storing backup files and customer data
- Activity: Upload files to S3 and create a simple DynamoDB table

Module 4: AWS Networking & Security

- Introduction to VPC, IAM, and security best practices
- Real-life example: Creating secure environments for web apps

- Managing permissions using IAM roles and policies
- Activity: Set up a secure user and restrict access

Module 5: Automation & Monitoring in AWS

- Introduction to CloudWatch, Auto Scaling, and CloudFormation
- Real-life example: Automatically restarting a failed instance
- Monitoring resources and automating deployments
- Activity: Set up a CloudWatch alarm

Module 6: Serverless Computing with AWS

- Understanding Lambda, API Gateway, and serverless architecture
- Real-life example: Building a function that sends emails on user signup
- Introduction to event-driven apps
- Activity: Deploy a Lambda function with API Gateway

Module 7: Real-World AWS Applications

- Case studies: how companies use AWS (Netflix, NASA, startups)
- Hosting websites, managing big data, using AI services
- Real-life example: Launching a startup with AWS tools
- Activity: Simulate deploying a small web app using AWS

Module 8: AWS Certifications & Career Path

- Overview of AWS certifications: Cloud Practitioner to Solutions Architect
- Skills and learning paths for AWS careers
- Real-life example: A day in the life of an AWS cloud engineer
- Activity: Create a career roadmap using AWS resources

Bonus Materials

- AWS glossary and service map
- Practice labs and mini projects
- AWS Free Tier usage tips

- Official links to AWS training resourcesCertificate of Completion for AWS