



AWS Practitioner ⌚ 17 hours of content | 75 hours of practice | Final project

1. Introduction

- Course Introduction
- Creating an AWS Account

2. Cloud Computing

- What is cloud computing
- Types of cloud computing
- AWS cloud overview
- Shared Responsibility model
- AWS Acceptable Policy

3. IAM

- IAM Introduction:
 - Users, Groups, Policies
- IAM Policies
- IAM MFA
- AWS Access Keys
- AWS CloudShell
- IAM Roles for AWS Services
- IAM Security Tools
- IAM Best Practice

4. EC2

- AWS Budget Setup
- EC2 with EC2 User Data
- EC2 Instance Types basics
- Security Groups
- Classic Ports Overview
- SSH Overview
- EC2 Purchasing options
- Shared Responsibility model

5. EC2 Instance Storage

- AWS Budget Setup
- EC2 with EC2 User Data
- EC2 Instance Types basics
- Security Groups
- Classic Ports Overview
- SSH Overview
- EC2 Purchasing options
- Shared Responsibility model

6. EC2 Instance Storage

- Elastic Load Balancing (ELB)
- Auto Scaling Groups (ASG)
- Auto Scaling Groups (ASG) Strategies

7. S3

- S3 Overview
- S3 Security: Bucket Policy
- S3 Website
- S3 Versioning
- S3 Server Access logging
- S3 Replication
- S3 Storage Classes
- S3 Glacier Vault Lock
- S3 Object Lock
- S3 Encryption
- AWS Snow Family
- Storage Gateway

8. Databases & Analytics

- Databases Introduction
- RDS & Aurora
- RDS Deployments Options
- ElastiCache
- DynamoDB
- Redshift
- EMR
- Athena
- QuickSight
- DocumentDB
- Neptune
- QLDB
- Managed Blockchain
- DMS
- Glue

9. ECS , Lambda , Lightsail

- ECS, Fargate & ECR
- Lambda
- API
- Batch
- Lightsail

10. Deployment & Infrastructure

- CloudFormation
- CDK
- Beanstalk
- CodeDeploy
- CodeCommit
- CodeBuild
- CodePipeline
- CodeArtifact
- CodeStar
- Cloud9
- Systems Manager (SSM)
- OpsWorks

11. AWS Global Infrastructure

- Route53
- Cloud Front
- S3 Transfer Acceleration
- AWS Global Accelerator
- AWS Outposts
- AWS WaveLength
- AWS Local Zones
- Applications Architecture

12. Cloud Integrations

- Cloud Integrations
- SQS
- SNS
- Kinesis
- Amazon MQ

13. Cloud Monitoring

- CloudWatch Metrics
- CloudWatch Alarms
- CloudWatch Logs
- CloudWatch Events
- EventBridge
- CloudTrail
- X-Ray
- CodeGuru
- Service Health Dashboard
- Personal Health Dashboard

14.VPC & Networking

- VPC, Subnet, Internet gateway
- Nat Gateways
- Security Groups
- Network Access Control List
- VPC Flow Logs & VPC Peering
- VPC Endpoints
 - Interface & GateWay
- Direct Connect
- Site-to-Site VPN
- Transit Gateway

15.Security & Compliance

- DDOS Protection: Waf & Shield
- Encryption with KMS
 - CloudHSM
- AWS Certificate Manager (ACM)
- Secrets Manager
- Artifact
- GuardDuty
- Inspector
- Config
- Macie
- Security Hub
- Amazon Detective

16.Machine Learning

- Rekognition
- Transcribe
- Polly
- Translate
- Lex + Connect
- Comprehend
- SageMaker
- Forecast
- Kendra
- Personalize
- Textract

17. Account MGMT & Billing

- Organizations
- Consolidated Billing
- AWS Control Tower
- Pricing Models of the cloud
- Compute Optimizer
- Billing & Costing Tools
- Estimating Costs in the cloud
 - Pricing Calculator
- Tracking Costs in the cloud
 - Billing Dashboard
 - Cost Allocation tags, Reports
- Monitoring Costs in the cloud
 - Billing Alarms & AWS Budgets
- AWS trusted Advisor
- Support Plans for AWS

18. Advanced Identity

- Security Token Service (STS)
- Cognito
- Directory Services
- Single Sign-On (SSO)

19.Other Services

- WorkSpaces
- AppStream 2.0
- Sumerian
- IOT Core
- Elastic Transcoder
- Device Farm
- AWS Backup
- Disaster Recovery Strategies
- AWS Elastic Disaster Recovery (DRS)
- AWS DataSync
- AWS Fault injection simulator (FIS)

20.AWS Architecting

- AWS WhitePapers
- Well-Architected Framework
- Operational Excellence
- Security
- Reliability
- Performance Efficiency
- Cost Optimization
- Sustainability
- AWS well-Architected Tool
- Right Sizing
- AWS Ecosystem
- AWS Knowledge center