AWS Solution Architect Online Training Course Content

Introduction to Cloud Computing
- What is Cloud Computing
- Deployment models of Cloud Computing
- Service Models of Cloud Computing
- Benefits of Cloud Computing

Introduction to AWS
- Short history of AWS
- AWS platform with Core services
- Overview of AWS certifications

Elastic Compute Cloud
- On Demand, Spot and Reserved instances
- Launching Linux and Windows EC2 instance
- Setting up the security groups
- Private IP, Public IP, Elastic IP
- Logging into instances Linux and Windows
- Creating AMI, Copying AMI
- Tagging EC2 instances, Bootstrapping

Virtual Private Cloud
- Using VPC wizard, setup different network types
- Creating new VPC
- Managing NACL and Security groups
- Public and private subnets
  - Route tables, IGW,
  - VPC Peering
  - VPC flowlog

Simple Storage Service
- Managing S3 buckets
- Adding objects to buckets
- Uses of S3 storage
- Permissions of S3
- Versioning and Life cycles in S3
- Data archiving and backups in Glacier
- Cross region replication
- Static Website Hosting
CloudFront
- Cloudfront overview and lab

Elastic Block Store
- Creating and Deleting Volumes
- Attaching and detaching volumes
- Creating snapshots
- Increasing volume size
- Mounting and un-mounting volumes

Elastic Load Balancer
- Creating load balancer
- Internal and external load balancer
- Load balancing Protocols
- Configuring health check
- Attaching instances to load balancer
- Troubleshooting “Out of Service”

Relational Database Service
- Creating and managing RDS instances
- Connecting to RDS instances
- Creating and restoring snapshots
- RDS security groups, parameter groups, Subnet groups
- What is Multi-AZ

Amazon DynamoDB
- Create DynamoDB tables, read and write data.
- Queries and scans.
- Importing the data into the tables
- Exporting the data from tables

Identity and Access Management
- Creating users in IAM
- Setting up MFA
- Creating groups, policies and roles
- Access keys and secret keys
- Delegation of permissions to users
Policy simulator

**AWS Route53**
- Managing hosted zones
- Creating record sets
- Types of routing policies
- Creating health checks

**Cloud Watch and Simple Notification Service**
- Monitoring AWS service health dashboard
- Different services under cloud watch and there metrics
- Setting up notifications
- Creation of topics
- Subscribing to topics
- Setting notification for EC2

**AWS auto scaling**
- Configuring Launch configuration
- Configuring auto scaling policies
- Using auto scaling with Load balancer
- Knowing elasticity, scalability, HA, DR concepts

**AWS CloudFormation**
- Creating template, knowing its basic building blocks
- Executing stack

**AWS CloudTrail**

**AWS Calculator**
- Estimating the monthly cost using calculator

**AWS Lambda**
- Creating the Lambda Function and adding the Trigger