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## **AWS Solution Architect Course Content**

### **Course Description:**

Amazon Web Services (AWS) Certified Solution Architect has more value among IT and cloud computing certifications in the global market. According to Forrester's research, the AWS platform is expected to reach \$236B by 2020 at a CAGR of 22%. AWS Solutions Architect is an IT professional who has the responsibility of building services or applications on AWS cloud computing platforms. The main focus of a solutions architect is to deliver technical decisions and solutions for better business outcomes. The average salary of AWS solutions architect is \$141,000 in the US - LinkedIn

One who doesn't have prior knowledge of Amazon Web Services can also learn easily AWS platform. Hachion online training for the AWS Certified Solution Architect course will be delivered by industry experts. All the components of AWS features and fundamentals for computing applications, managing databases, cloud environment, delivering software, and analytic process. By the end of the course, you can get complete knowledge of AWS architecture and hands-on experience in computing, networking, database, and storage processes using AWS services. As you gain practical skills and knowledge, you are able to confidently take AWS CSA - Associate/ Professional exam to qualify as an AWS Certified Solution Architect.

### **Course Content:**

#### **AWS Overview**

- Description of AWS
- History and Evolution of AWS
- Overview of AWS Products and Services

#### **Designing highly available, cost-efficient, fault-tolerant, scalable systems**

- How to Design Cloud Services
- Planning and Designing
- Monitoring and Logging
- Hybrid IT Architectures
- Practice Assignment: Designing Hybrid Storage Page

#### **Identity and Access Management (IAM)**

- IAM Overview
- IAM Policies
- IAM Groups
- IAM Users
- IAM Roles
- IAM best practices

#### **Amazon Virtual Private Cloud (VPC)**

- Amazon VPC Overview
- Amazon VPC
- IP Addresses
- Reserved Instance pricing
- Internet Gateway
- NAT Devices
- Security groups
- Choosing the AMI
- Practice Assignment: Designing a Custom VPC
  - What is VPC?
  - VPC configuration
  - VPC security
  - Elastic IP's Inbound and outbound ACL's

## **Amazon Simple Storage Service (S3)**

- S3 Buckets
- Amazon S3 Lifecycle Management
- Security and Encryption
- Import/Export & Snowball
- Amazon S3 Best Practices
- Amazon S3 Costs
- Practice Assignment: Create an Amazon S3 bucket

## **CloudFront**

- Use of cloudfront
- Creating a cloudfront distribution
- Hosting a website of cloudfront distribution
- Implementing restrictions
- Configuring origins and behaviors

## **EBS (Elastic Block Storage)**

- Create EBS volumes
- Delete EBS Volumes
- Attach and detach EBS volumes
- Mounting and unmounting EBS volume
- Creating and deleting snapshots
- Creating volumes from snapshots S3 (Simple Storage Service)

## **Route53**

- Creating zones
- Hosting a website
- Understanding routing policies

- Weighted simple and failover policies

## **Direct Connect**

What is S3:

- RRS (Reduced Redundancy storage)
- S3 durability and redundancy
- S3 Buckets
- S3 Uploading Downloading
- S3 Permissions
- S3 Object Versioning
- S3 Lifecycle Policies

## **EBS**

- Create EBS volumes
- Attach and detach EBS volumes
- Mounting and unmounting EBS volume
- Creating and deleting snapshots
- Creating volumes S3 (Simple Storage Service)
- S3 Lifecycle Policies

## **Relational Database Service (RDS)**

- Selecting the Database type
- Configuring the database
- Creating database
- Configuring backups
- Configuring the maintenance windows
- Connecting to the database

## **Dynamo DB**

- Creating a Dynamo DB
- Configuring alarms
- Adding data manually

## **AWS Solution Architect Professional Sysops**

- **IAM**
  - Creating Users and Groups
  - Applying policies
  - Password Policy
  - Roles
- **Directory Service**
- **Cloud Watch**
  - Cloudwatch dashboard

- Configuring Monitoring services
- Setting thresholds
- Configuring actions
- Creating a cloudwatch alarm
- Getting statistics for ec2 instances
- Monitoring other Aws Solution Architect Professional services
- Configuring Notifications
- Integrating cloudwatch with Autoscaling
- **Cloud Formation**
  - What is cloud formation?
  - Deploying template
  - Create Stack
  - Delete Stack
  - Monitoring the resources
- **Cloud Trial**
- **Trust Advisor**
- **ELB**
  - Create an Application Load Balancer
  - Create a Network Load Balancer
  - Create a Classic Load Balancer
- **Auto Scaling**
  - Boot strapping
  - Create a launch configuration
  - Create an Auto Scaling group Create a policy for your Auto Scaling group
  - Set up an auto-scaled, load-balanced Amazon EC2 application
- **Simple Notification Service (SNS):**
  - What is SNS
  - Creating a topic
  - Create subscription
  - Subscribed to the subscription
- **SQS**
- **SES**
- **Bootstrapping Ec2 With OPS Work Chef**
- **Billing Analysis**