

Microsoft Azure Syllabus



Cloud Computing Introduction

- What is Cloud Computing
- Cloud Characteristics
- Cloud Computing Service Models
- Deployment Models in Cloud Computing
- Advantages and Disadvantages of Cloud Computing

Getting Started with Azure and Installation process

- Introduction to Azure
- Difference between Amazon and Microsoft Cloud
- Azure Hosting Models

- Azure Services
- Subscribing to Microsoft Azure
- Azure Portals
- Installing Microsoft Azure SDK

Global Infrastructure

- What is Region
- How to choose region

Resource Group

- What is Resource Group
- Use of Resource Group
- Create a resource group
- Assign Resources to resource group
- Transfer resource from one resource group to another
- Delete a resource group

Azure App Service Plan

- What is App Service Plan?
- Why we need it?
- How to choose App service plan?
- Create an App Service Plan
- Delete an App Service Plan
- Up Scale and Down scale App service Plan

Billing Process in Azure

- What is billing Process
- How bill will be generated
- How resources are charged
- Understand Cost Analysis
- How Cost Alert works?
- How to set Budgets?

Developing Azure App Services - Web

- Introduction
 - What is App Service?
 - What is App service Type?
 - What is WebApp?
 - Develop Web application in Web app
 - Deploy Web application in Web app

- Web Application Setting
- What is deployment slots
- How to create it
- How to swap between different environment
- Benefit of Web App
- App Types
- Deploying Web App directly from Visual Studio.
- Scaling a Web Apps
- Publish setting in Web App

Azure Web Jobs Development

- Introduction
- Developing and Hosting Web Jobs Application
- Azure Web Jobs SDK
- Sample Application including Web-Apps and Web-Jobs with visual studio.

SCM in Azure

- What Is SCM
- Why SCM
- What is the Benefits of SCM

CDN in Azure(30 min)

- What is CDN?
- How to Implement CDN
- How it works
- Why CDN?

Error Handling in Web App(60 min)

- How to Enable Log Web application in Azure
- Types of Error Levels in Azure
- How to Debug Azure Web App hosted in Server
- How to Generate Log in Remote?
- How to Check the Generated Log?
- How to get log from FTP?

Azure Application Insights

- Introduction
- Application insight architecture
- Check the performance using Application Insight

- Integrate this with web application
- Important feature of application insights
- Check the Availability, Failure and Live data

App Service - API Apps in Azure

- Introduction
- Creating an API App
- Deploying an API App

Developing Windows Azure SQL

- Introduction/Overview.
- Deployment models in SQL Azure
- Understand the Elastic pooling
- Creating and Using SQL Server and SQL Database.
- Add Database to a server
- Understand query editor in azure
- Import database
- Export database
- User creation in Azure SQL
- Difference between SQL Azure and SQL Server
- Azure SQL Database Tools.
- Elastic Storage.
- Azure SQL Database vs On-Premise SQL Server
- Access SQL Azure DB from Visual studio

Developing Azure Storage

- About Azure Storage
- C# / MS.NET Azure Storage SDK
- Working with Blob Storage Using Visual Studio
 - What is Blob and its Purpose
 - Creating a blob programmatically
 - Storing data to a blob programmatically
 - Retrieve data from a blob programmatically
 - Delete a blob programmatically
- Working with Tables Storage Using Visual Studio
 - What is Table and its Purpose
 - Creating a table programmatically
 - Storing data to a table programmatically
 - Retrieve data from a table programmatically
 - Delete a table programmatically

- Working with Queues Storage Using Visual Studio
 - What is Queue and its Purpose
 - Creating a table programmatically
 - Storing data to a table programmatically
 - Retrieve data from a table programmatically
 - Delete a table programmatically

- Working with Files Storage
 - What is file storage
 - How its different from other storage
 - How we can store and transfer file using file storage

Azure App Service – Logic Apps

- Introduction
- Creating a Simple Logic App
- Understanding Triggers and Actions
- Using Custom API App in Logic
- How logic app works?

App Azure Cloud Service

- What is Cloud Service
- Cloud Service vs App Service
- Understand Cloud Service Roles
- Developing Cloud Service Application with Web Role
- Deploying Cloud Service Application
- Adding Worker Role to the Solution.
- Scaling a Cloud Service

Managing Azure with Windows PowerShell

- Installing the required modules
- Login to Azure Portal
- Creating Resource Group
- Creating WebApp,WebJob using PowerShell

Azure Security

- Introduction to Azure Security

- Why Azure security
- What is Access Control (IAM)?
- Role Management in Azure

Azure Functions Development

- Introduction to Azure function
- Create Azure function using C#
- Executing Azure function

Azure Resource Manager Development

- What is ARM?
- What is its use?
- Advantages of ARM
- How can we modify ARM?
- How to deploy the ARM?

Azure Resource Manager Development

- What is Redis Cache?
- What is its use?
- How to create?
- How to Implement to the project?

Azure Service Bus

- What is Service Bus
- How to create a service bus
- What is Service bus queue
- How to create it
- How we can send message and receive message from or to queue
- Advantages of it
- What is Service bus topic
- How to create it
- How we can send message and receive message from or to topic
- Advantages of it
- What is Service bus Relay
- What is WCF relay
- How to create it
- How to communication can be established between azure website and on-premise
- Why we need Relay
- Advantages of relay

Interview Question related to above topic