Microsoft Azure Cloud Training Syllabus

Cloud Computing Introduction

1. What is Cloud Computing
2. Cloud Characteristics
3. Cloud Computing Service Models
4. Deployment Models in Cloud Computing
5. Advantages and Disadvantages of Cloud Computing

Getting Starting with Azure

1. Introduction to Azure
2. Azure Hosting Models
3. Azure Services
4. Subscribing to Microsoft Azure
5. Azure Portals
6. Azure Resource Group
7. Installing Microsoft Azure SDK

Azure App Services - Web Apps

1. Introduction
2. App Types
3. Deploying Web App directly from Visual Studio
4. Automate deployment from Dropbox
5. Continuous Delivery using Visual Studio Team Service
6. Scaling a Web Apps
7. Traffic Manager
8. Application Settings Configuration
9. Understanding Deployment Slots
10. Configure a custom domain name
11. Enable SSL for your custom domain
12. Monitoring, Debugging and Diagnosis

Windows Azure SQL Database

1. Introduction/Overview
2. Comparing SQL Azure Database to Azure / On-Premise SQL Server
3. Creating and Using SQL Server and SQL Database
4. Azure SQL Database Tools
5. Using Azure SQL Database with EF Code First
6. Migrating on premise database to SQL Azure
7. Create Excel Report with data from Azure SQL Database.

DocumentDB Service

1. Understanding DocumentDB database Schema

2. Creating and Saving Documents
3. Reading Documents

Azure Storage

1. About Azure Storage
2. C# / MS.NET Azure Storage SDK
   - Working with Blob Storage
   - Working with Tables Storage
   - Working with Queues Storage
   - Working with Files Storage
3. REST API
   - Working with Storage Tables
   - Working with Azure Queues

Azure Web Jobs

1. Introduction
2. Developing and Hosting Web Jobs Application
3. Azure WebJobs SDK
4. Sample Application including WebApps and WebJobs.

App Service – Mobile Apps

1. Mobile Apps Introduction
2. Creating Server and Client Projects
3. Working with Easy tables using Azure Portal
4. Developing Windows 8 Client Application
5. Mobile App Authentication
   - Facebook Authentication
   - Azure Active Directory Authentication
6. Enabling Offline Sync
7. Implementating Push Notification

App Service - API Apps

1. Introduction
2. Creating an API App
3. Deploying an API App
4. Consuming an API App
5. Using API App in Logic App

Azure App Service – Logic Apps

1. Introduction
2. Creating a Simple Logic App
3. Handling array of Items using for-each and condition
4. Understanding Triggers and Actions
5. Using Custom API App in Logic App

Azure Cloud Service

1. What is Cloud Service
2. Cloud Service vs App Service
3. Understand Cloud Service Roles
4. Developing Cloud Service Application with Web Role
5. Deploying Cloud Service Application
6. Production and Staging Slots
7. Using Azure Database in Cloud Service
8. Adding Worker Role to the Solution.
9. Delete deployments and a cloud service
10. Configure application for SSL
11. Configure Roles for Remote Desktop Login
12. Running Multiple Websites
13. Scaling a Cloud Service
14. Debugging an Azure Cloud Service
15. Transient Fault Handling
16. To Configure and Run Startup Tasks for a Cloud Service
17. Enable Communication for Role Instances in Azure
18. Using the .NET SDK to access an endpoint.
19. Network traffic rules to control role communication

Managing Azure with Windows PowerShell

1. Installing the required modules
2. Login to Azure Portal
3. Creating Resource Group
4. Managing Storage Accounts using PowerShell
5. Understanding and Working with ARM Templates

Azure Service Bus

1. Service Bus Basics
2. Hosting WCF Service in Azure
3. Relayed Messaging
4. Service BusQueues
5. Topics and Subscriptions
6. Handling Sessions
7. Handling Transactions

Azure Media Service

1. What is Media Services
2. Media Service in Azure Portal
   1. Create an Azure Media Service Account
   2. Upload and Encode Video/Audio
   3. Publish and Play Content
3. Media Services Development with .NET
   1. Uploading Media File Programmatically
4. Uploading .WMV Encoding to MP4 Format

Azure Virtual Networks

1. Overview of Azure Networking
2. Virtual Network Benefits
3. Understanding Network Resources
4. Create a VNet using Azure Portal
5. Create a Subnet
6. Create a Network Security Group
7. Create NIC and PublicIP
8. Understanding and Using Azure DNS
9. Using PowerShell Commands

Azure Virtual Machine

1. Introduction
2. Comparing VM with Web Apps and Cloud Services
3. Create a Windows Virtual Machine using Portal / PowerShell
4. Understanding and Capture VM Images
5. Deploy a New VM Instance from the captured Image
6. Deploy popular application frameworks by using Azure Resource Manager templates
7. Understanding and Creating Availability Sets.
8. Load Balancing between multiple Virtual machines

Redis Caching

1. Caching Overview
2. What is Redis Cache
3. Creating a Redis Cache
4. Developing Redis Cache Client
5. Controlling Expiration

Azure Active Directory

1. Azure AD Introduction
2. Relationship between AD DS and Azure AD
3. Managing Active Directories
4. Adding a custom domain name to Azure AD
5. Managing Users, Groups and Devices
6. Adding Co-Administrators for a Subscription
7. Configuring Role Based Access Control
8. Integrating On-Premise AD Identities with Azure AD
9. Integrating Gallery Applications with Azure AD
10. Integrating On-Premise Applications with Azure AD
11. Implementing Azure AD B2B Collaboration
12. Implementing Azure AD B2C Collaboration