AZ-204: Developing Solutions for MicrosoftAzure

Implement IaaS solutions

- provision virtual machines (VMs)
- configure, validate, and deploy ARM templates
- configure container images for solutions
- publish an image to Azure Container Registry
- run containers by using Azure Container Instance

Create Azure App Service Web Apps

- create an Azure App Service Web App
- enable diagnostics logging
- deploy code to a web app
- configure web app settings including SSL, API settings, and connection strings
- implement autoscaling rules including scheduled autoscaling and autoscaling by operational or system metrics

Implement Azure Functions

- create and deploy Azure Functions apps
- implement input and output bindings for a function
- implement function triggers by using data operations, timers, and webhooks
- implement Azure Durable Functions

Develop solutions that use Cosmos DB storage

- select the appropriate API and SDK for a solution
- implement partitioning schemes and partition keys
- perform operations on data and Cosmos DB containers
- set the appropriate consistency level for operations
- manage change feed notifications

Develop solutions that use blob storage

- move items in Blob storage between storage accounts or containers
- set and retrieve properties and metadata
- perform operations on data by using the appropriate SDK
- implement storage policies, data archiving, and retention

Implement user authentication and authorization

- authenticate and authorize users by using the Microsoft Identity platform
- authenticate and authorize users and apps by using Azure Active Directory
- create and implement shared access signatures
- implement solutions that interact with Microsoft Graph

Implement secure cloud solutions

- secure app configuration data by using App Configuration or Azure Key Vault
- develop code that uses keys, secrets, and certificates stored in Azure Key Vault
- implement Managed Identities for Azure resources

Implement caching for solutions

- configure cache and expiration policies for Azure Cache for Redis
- implement secure and optimized application cache patterns including data sizing, connections, encryption, and expiration

Troubleshoot solutions by using metrics and log data

- configure an app or service to use Application Insights
- review and analyze metrics and log data
- implement application insights web tests and alerts

Implement API Management

- create an APIM instance
- create and document APIs
- configure authentication for APIs
- define policies for APIs

Develop event-based solutions

- implement solutions that use Azure Event Grid
- implement solutions that use Azure Event Hub

Develop message-based solutions

- implement solutions that use Azure Service Bus
- implement solutions that use Azure Queue Storage queues