

Microsoft Certified Azure Developer Associate



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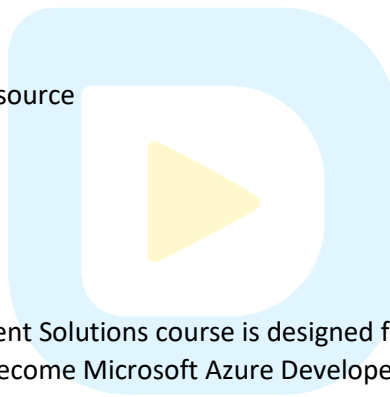
About the Course

The Microsoft Certified Azure Developer Associate Training Program makes you proficient in developing, planning, and scaling your web applications on Microsoft Azure. It includes training on Azure Infra, Azure Virtual Machines, Azure App Services, Azure Storage, Azure SQL Database, Azure AD, Container Services using real-life case studies. The curriculum has been designed by Microsoft MVPs & Industry expert to earn Microsoft Azure Developer Associate Certification (AZ-204). You can check the examination details and certification cost at [Azure Developer AZ-204](#)

Course objective

At the completion of this course, attendees will be able to;

- Describe Microsoft Azure Cloud platform
- Understand Azure Global Infra
- Create, Configure and Scale Virtual Machines
- Create Highly Available Virtual Machines
- Create and Publish ASP.NET Web application on WebApp
- Implement Serverless Architecture
- Manage SQL database on Azure
- Automate Integration with Azure Resource
- Manage Azure Active Directory
- Monitoring App on Azure



Who can do this course?

The Mastering Microsoft Azure Development Solutions course is designed for the IT professionals who want to pursue a career in Cloud Computing and become Microsoft Azure Developer Specialist. This Azure course is a best fit for:

- IT Professionals/Application Developers
- .Net Developers
- Solutions Architects
- DevOps Engineers

Pre-requisites

Anyone who wants to learn this course should have knowledge of developing application using ASP.NET and C#.

Tools/SDK/IDE

Visual Studio 2019, Azure SDK

Course Curriculum

Module 1

Azure Platform

- Introduction to Azure
- Microsoft Azure Platform History

Azure Global Infra

- Understanding Azure Global Infra
- Azure Regions
- Azure Geographies
- Azure Subscription
- Resource Group
- Role based Access

Azure Virtual Machines

- Virtualization
- Azure Virtual Machine

Configuring Azure Virtual Machines

- Virtual Machine Architecture
- Creating Windows VM
- Web Deployment Setup
- Deploying Web Application

Scaling Virtual Machines

- Introduction to Scaling
- Vertical Scaling
- Horizontal Scaling



Module 2

ARM templates

- Introduction to ARM templates
- Creating an ARM templates
- Creating Resources using ARM templates

Containers and Azure Container Service

- Introduction to Containers
- Containers vs. Virtual Machines
- Creating Images and Containers
- publish an image to the Azure Container Registry
- Run containers by using Azure Container Instance

Module 3

Azure Blob Storage

- Introduction to Azure Storage
- Azure Storage Offerings
- Access Tiers
- Azure Storage Tools
- Redundancy
- Creating and Accessing Blobs
- Performing CRUD Operations on Blobs

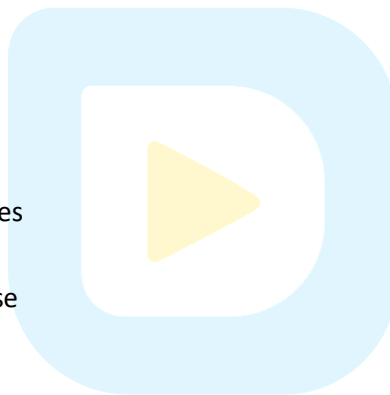
Azure Storage Accessibility

- Storage Account Security
- Authorising Access
- Managing permission at Storage Account

Module 4

Azure SQL Database Service

- Introduction to Azure SQL Database
- Azure SQL Database Service Tiers
- Database Throughput Units (DTU)
- Creating and Managing SQL Databases
- Azure SQL Database Tools
- Migrating data to Azure SQL Database



Azure Cosmos DB

- Introduction to Cosmos DB
- Comparison of Cosmos DB with Other DBs
- Customers using Azure Cosmos DB
- Azure Cosmos DB Emulator

Document DB

- Introduction to Azure Document DB
- Azure Document DB Resources
- Create databases and collections
- Query documents, run Document DB queries

Module 5

Azure App Services

- App Services
- Types of App Services
- App Services Tiers and Pricing
- App Services Scaling

Azure Web App

- Introduction to Azure Web App
- Web Apps Deployment
- Web Apps deployment slots
- Create and Deploy ASP.NET MVC, ASP.NET Core Apps
- Setting Custom Domain

Module 6

Monitoring and Logging

- Introduction to Monitoring and Logging
- configure Application Insights in an app
- Analyse logs and troubleshoot solutions by using Azure Monitor

API Management

- Creating an APIM instance
- Creating an API
- Using Swagger in ASP.NET Core

Module 7

Logical Apps

- Introduction to logical App
- Creating a logic App using Twitter, One Drive and Outlook connectors
- Creating and consuming custom connector

Azure Functions

- Serve-less Architecture
- Azure Services based on Server-less Architecture
- Introduction to Azure Function
- Azure Functions Pricing
- Function App - Http Trigger
- Introducing Durable functions
- Creating Durable functions

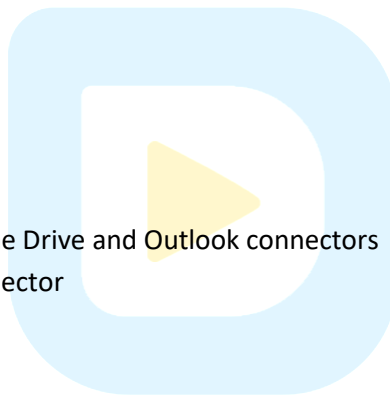
Module 8

Azure Redis Cache

- Azure Redis Cache
- Why Cache?
- Azure Redis Cache Tiers
- Implement Redis caching

Azure CDN and Front Door

- Introduction to Azure CDN



- Using Azure CDN
- Introduction to Front Door
- Creating Front Door

Module 9

Messaging Services

- Introduction to service bus
- Implementing communication using Service bus
- Implementing communication using Queue storage

Event-based Services

- Introducing Event-based communication
- Azure Event Grid
- Using Azure Event Hub

Module 10

Azure Active Directory

- Introduction Azure AD Directory
- Azure AD Tiers
- Windows Server AD vs. Azure AD
- Creating and Configuring Azure AD
- Azure AD Multi-Factor Authentication
- Azure Role-Based Access Control

Security Using OAuth2 and Azure Key Vault

- Introduction to OAuth2
- Implementing OAuth2 Authentication
- Introduction to Azure Key Vault
- Store and retrieve secrets using Azure Key Vault



Build .NET Real-Projects with Microsoft Azure

Apply your coding skills to solve real-world problems. You'll learn how to start a project from scratch by following recommended architecture, practices and deploy to server.



Build Food Delivery Website (Like Swiggy, Dominoz)

Learn to build an online food delivery website like Swiggy, Zomato, Dominoz etc.



Build Music Website (Like Gana.com, JioSaavn)

Learn to build a music website like Gana.com, JioSaavn etc.



Build Online Shopping Website (Like Flipkart, Pepperfry)

Learn to build an online shopping website like Flipkart, Pepperfry, Amazon etc.



Build Job Hunting Website (Like Naukri, Indeed)

Learn to build job hunting website like Naukri, Indeed, Shine etc.



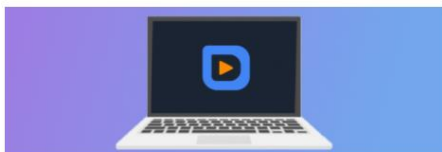
Build Doctor Consultation Website (Like Practo, 1mg)

Learn to build online doctor appointment, consultation like Practo, 1mg etc.



Build Service Offering Website (Like Urbanclap, Helpr)

Learn to build service offering websites like Urbanclap, Helpr etc.



Build Online Education Website (Like DotNetTricks, Coursera)

Learn to build service offering websites like DotNetTricks, Coursera etc.



Build Social Media Website (Like Twitter, Facebook)

Learn to build social media websites like Twitter, Facebook etc.



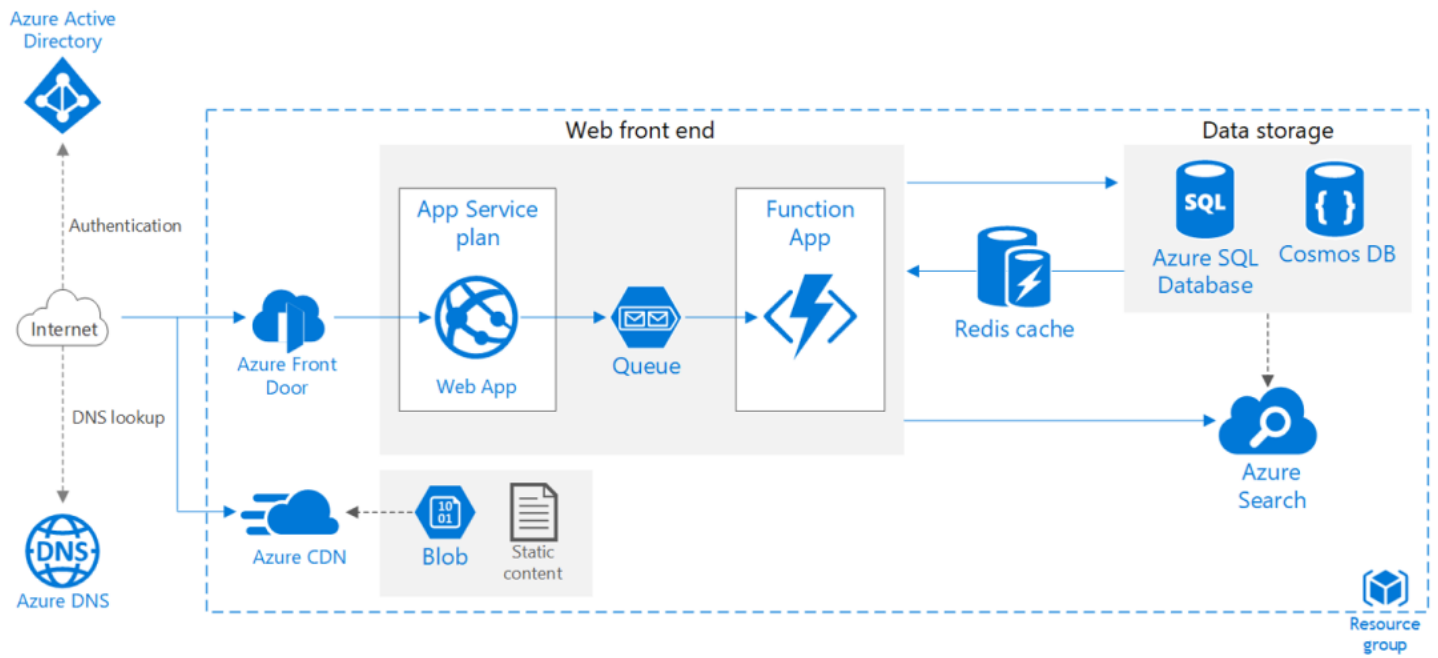
Build Online Booking Website (Like MakeMyTrip, OYO)

Learn to build online booking websites like MakeMyTrip, OYO etc.

Microsoft Azure Project Architecture

The primary purpose of an application architecture is to support the development life cycle of the system. Good architecture makes the system easy to understand, easy to develop, easy to maintain, and easy to deploy. The ultimate benefit of architecture is to minimize the lifetime cost of the system and to maximize programmer productivity.

The goal of the given architecture is to learn and implement important principles and design patterns to build various domains applications like eCommerce, edTech, Food Delivery or other Service based industries applications.



What you will learn through project?

At the completion of project, attendees will be able to;

- Build project using Azure PaaS Services.
- Build project using Azure IaaS Services.
- Store and manage data using Azure SQL and Cosmos DB.
- Store and manage documents using Azure Blob storage.
- Scale Application resources on demands.
- Implement Azure Messaging Services for communication.
- Implement Caching using Redis.
- Manage static content using Azure CDN.
- Manage Authentication using Azure Active Directory.
- Monitoring App on Azure.

Contact Us

- For more information about the course, visit: <http://www.dotnettricks.com/masters-program/microsoft-azure>
- Feel free to call us at +91 9999 123 502/03 or email us at info@dotnettricks.com