

Getting Started with Cosmos DB NoSQL Development

Duration: 1 Day Course Code: M-DP3015

Overview:

This course teaches developers to utilize Azure Cosmos DB for NoSQL API and SDK. Students will learn query execution, resource configuration, SDK operations, and design strategies for non-relational data modeling and data partitioning.

Target Audience:

Software engineers tasked with authoring cloud-native solutions that leverage Azure Cosmos DB for NoSQL and its various SDKs.

Objectives:

- During this course you will learn:
 - query execution,
 - resource configuration,
 - SDK operations,
 - and design strategies for non-relational data modeling and data partitioning.

Prerequisites:

■

Content:

MODULE 1 : Introduction to Azure Cosmos DB for NoSQL

- Evaluate whether Azure Cosmos DB for NoSQL is the right database for your application.
- Describe how the features of the Azure Cosmos DB for NoSQL are appropriate for modern applications.

MODULE 2 : Try Azure Cosmos DB for NoSQL

- Create a new Azure Cosmos DB for NoSQL account
- Create database, container, and item resources for an Azure Cosmos DB for NoSQL account

MODULE 3 : Plan Resource Requirements

- Evaluate various requirements of your application

MODULE 4 : Configure Azure Cosmos DB for NoSQL database and containers

- Compare the various service and throughput offerings for Azure Cosmos DB
- Migrate between standard and autoscale throughput

MODULE 5 : Use the Azure Cosmos DB for NoSQL SDK

- Integrate the Microsoft.Azure.Cosmos SDK library from NuGet
- Connect to an Azure Cosmos DB for NoSQL account using the SDK and .NET

MODULE 6 : Configure the Azure Cosmos DB for NoSQL SDK

- Configure the SDK for offline development
- Troubleshoot common connection errors
- Implement parallelism in the SDK
- Configure logging using the SDK

MODULE 7 : Implement Azure Cosmos DB for NoSQL point operations

- Perform CRUD operations using the SDK
- Configure TTL for a specific item

MODULE 8 : Query the Azure Cosmos DB for NoSQL

- Create and execute a SQL query
- Project query results
- Use built-in functions in a query

MODULE 9 : Author complex queries with the Azure Cosmos DB for NoSQL

- Implement a correlated subquery
- Create a cross-product query

MODULE 10 : Implement a non-relational data model

- Determine access patterns for data.
- Apply data model and partitioning strategies to support an efficient and scalable NoSQL database.

MODULE 11 : Design a data partitioning strategy

- Manage relationships between data entities by using advanced modeling and partitioning strategies.
- Maintain the referential integrity of your data by using change feed.
- Implement pre-aggregating and denormalizing data strategies to improve data-model performance and scaling.
- Optimizing storage and compute by mixing entity types in a single container

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

info@globalknowledge.co.uk

www.globalknowledge.com/en-gb/

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK