

Getting Started with Cosmos DB NoSQL Development

Duration: 1 Day **Course Code: M-DP3015** **Delivery Method: Company Event**

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.

Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

Target Audience:

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

Objectives:

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

Prerequisites:

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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