Get started with Azure Cosmos DB NoSQL development (DP-3015)

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

Overview:

Learn to utilize Azure Cosmos DB for NoSQL API and SDK.
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. They are familiar with C# programming. They also have experience writing code that interacts with a SQL or NoSQL database platform.

Objectives:

- Get started with Azure Cosmos DB for NoSQL
- Plan and implement Azure Cosmos DB for NoSQL
- Connect to Azure Cosmos DB for NoSQL with the SDK
- Access and manage data with the Azure Cosmos DB for NoSQL SDKs
- Execute queries in Azure Cosmos DB for NoSQL
- Define and implement an indexing strategy for Azure Cosmos DB for NoSQL
- Integrate Azure Cosmos DB for NoSQL with Azure services
- Implement a data modeling and partitioning strategy for Azure Cosmos DB for NoSQL
- Design and implement a replication strategy for Azure Cosmos DB for NoSQL
- Optimize query and operation performance in Azure Cosmos DB for NoSQL
- Monitor and troubleshoot an Azure Cosmos DB for NoSQL solution
- Manage an Azure Cosmos DB for NoSQL solution using DevOps practices
- Create server-side programming constructs in Azure Cosmos DB for NoSQL

Content:

Module 1: Get started with Azure Cosmos DB for NoSQL

- Introduction to Azure Cosmos DB for NoSQL
- Try Azure Cosmos DB for NoSQL

Module 2: Plan and implement Azure Cosmos DB for NoSQL

- Plan Resource Requirements
- Configure Azure Cosmos DB for NoSQL
- Move data into and out of Azure Cosmos DB for NoSQL

Module 3: Connect to Azure Cosmos DB for NoSQL with the SDK

- Use the Azure Cosmos DB for NoSQL SDK
- Configure the Azure Cosmos DB for NoSQL SDK

Module 4: Access and manage data with the Azure Cosmos DB for NoSQL SDKs

- Implement Azure Cosmos DB for NoSQL point operations
- Perform cross-document transactional operations with the Azure Cosmos DB for NoSQL
- Process bulk data in Azure Cosmos DB for NoSQL

Module 5: Execute queries in Azure Cosmos DB for NoSQL

- Query the Azure Cosmos DB for NoSQL
- Author complex queries with the Azure Cosmos DB for NoSQL

Module 6: Define and implement an indexing strategy for Azure Cosmos DB for NoSQL

- Define indexes in Azure Cosmos DB for NoSQL
- Customize indexes in Azure Cosmos DB for NoSQL

Module 7: Integrate Azure Cosmos DB for NoSQL with Azure services

- Consume an Azure Cosmos DB for NoSQL change feed using the SDK
- Handle events with Azure Functions and Azure Cosmos DB for NoSQL change feed
- Search Azure Cosmos DB for NoSQL data with Azure Cognitive Search

Module 8: Implement a data modeling and partitioning strategy for Azure Cosmos DB for NoSQL

- Implement a non-relational data model
- Design a data partitioning strategy

Module 9: Design and implement a replication strategy for Azure Cosmos DB for NoSQL

- Configure replication and manage failovers in Azure Cosmos DB
- Use consistency models in Azure Cosmos DB for NoSQL
- Configure multi-region write in Azure Cosmos DB for NoSQL

Module 10: Optimize query and operation performance in Azure Cosmos DB for NoSQL

- Customize an indexing policy in Azure Cosmos DB for NoSQL
- Measure index performance in Azure Cosmos DB for NoSQL
- Implement integrated cache in Azure Cosmos DB for NoSQL

Module 11: Monitor and troubleshoot an Azure Cosmos DB for NoSQL solution

- Measure performance in Azure Cosmos DB for NoSQL
- Monitor responses and events in Azure Cosmos DB for NoSQL
- Implement backup and restore for Azure Cosmos DB for NoSQL
- Implement security in Azure Cosmos DB for NoSQL

Module 12: Manage an Azure Cosmos DB for NoSQL solution using DevOps practices

- Write management scripts for Azure Cosmos DB for NoSQL
- Create resource template for Azure Cosmos DB for NoSQL

Module 13: Create server-side programming constructs in Azure Cosmos DB for NoSQL

- Build multi-item transactions with the Azure Cosmos DB for NoSQL
- Expand query and transaction functionality in Azure Cosmos DB for NoSQL

Further Information:

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

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