Build an AI App with Azure using RAG

Duration: 08 hours (1 day)

Course Outcomes:

- Deploy and manage vCore-based Azure Cosmos DB for MongoDB
- Plan and execute MongoDB migration using various tools
- Optimize, scale, and monitor Cosmos DB clusters
- Implement RAG with vector indexes in Cosmos DB
- Develop and integrate an AI copilot with Azure OpenAI
- Deploy the AI copilot using Azure Kubernetes Service (AKS)

TABLE OF CONTENT

Module 01: Implement vCore-based Azure Cosmos DB for MongoDB

- Learn vCore-based Azure Cosmos DB for MongoDB
- Create a vCore-based Azure Cosmos DB for MongoDB cluster
- Deploy a vCore-based Azure Cosmos DB for MongoDB cluster

Module 02: Migrate to vCore-based Azure Cosmos DB for MongoDB

- Migration assessment and planning
- Offline migration from MongoDB to vCore-based Azure Cosmos DB for MongoDB using MongoDB native tools
- Offline migration from MongoDB to vCore-based Azure Cosmos DB for MongoDB using Azure Data Studio
- Migrate Data from MongoDB to vCore-based Azure Cosmos DB for MongoDB using Azure Databricks
- Migrate to vCore-based Azure Cosmos DB for MongoDB with MongoDB native tools

Module 03: Manage a vCore-based Azure Cosmos DB for MongoDB cluster

- Scale and configure a vCore-based Azure Cosmos DB for MongoDB cluster
- Explore high availability in a vCore-based Azure Cosmos DB for MongoDB cluster
- Backup and restore a vCore-based Azure Cosmos DB for MongoDB cluster
- Monitor a vCore-based Azure Cosmos DB for MongoDB cluster
- Manage a vCore-based Azure Cosmos DB form MongoDB cluster

Module 04: Build your own AI copilot with vCore-based Azure Cosmos DB for MongoDB and Azure OpenAI

• Explore Azure OpenAI

- Understand vector databases, Retrieval Augmentation Generation, and embeddings in AI
- Implement Retrieval Augmentation Generation using vector indexes in vCorebased Azure Cosmos DB for MongoDB
- Develop an AI copilot using vCore-based Azure Cosmos DB for MongoDB and Azure OpenAI

Module 05: Deploy your AI Copilot with Azure Kubernetes

- Deploy applications with Azure Kubernetes Service
- Create containerized apps with Azure Kubernetes Service clusters
- Prepare your copilot application
- Create an Azure Kubernetes Service cluster