Build Modern Applications with AWS NoSQL Databases

Category: Cloud Platforms | **Vendor:** Amazon Web Services

Duration: 8.00 hours (1 days) **6.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This course is for developers, architects, and database engineers who want to build applications that involve complex data characteristics and millisecond performance requirements from their databases. In this course, you use AWS purpose-built databases to build a typical modern application with diverse access patterns and real-time scaling needs. By the end of the class, you should be able to describe advanced features of Amazon DynamoDB, Amazon DocumentDB (with Mongo compatibility), and Amazon ElastiCache for Redis.

About This Course

This course is for developers, architects, and database engineers who want to build applications that involve complex data characteristics and millisecond performance requirements from their databases. In this course, you use AWS purpose-built databases to build a typical modern application with diverse access patterns and real-time scaling needs. By the end of the class, you should be able to describe advanced features of Amazon DynamoDB, Amazon DocumentDB (with Mongo compatibility), and Amazon ElastiCache for Redis.

Who Should Attend

This course is intended for:

- Database developers
- Solutions architects
- Database engineers

Prerequisites & Entry Requirements

General Prerequisites:

We recommend that attendees of this course have:

- Familiarity with cloud computing concepts
- Familiarity with data modeling for relational or NoSQL databases
- Working experience with Amazon DynamoDB table design
- Working experience with Amazon DocumentDB table design
- Working experience with ElastiCache for Redis
- Familiarity with AWS Lambda and Amazon API Gateway database services
- Familiarity with Python scripting

Learning Outcomes

Upon successful completion of this course, participants will be able to:

- Build modern applications for the cloud using AWS purpose-built NoSQL databases
- Illustrate solutions using AWS purpose-built databases for handling key-value, document, and in-memory data categories
- Analyze business use cases and apply advanced features of Amazon DynamoDB, ElastiCache, or DocumentDB to implement a scalable solution
- Implement event-driven architectures using change streams and AWS Lambda
- Learn how to build solutions faster with Amazon CodeWhisperer

Detailed Course Outline

Module 1: Analyze Use Cases for NoSQL Databases

- Business overview
- Workload solution overview
- AWS NoSQL database portfolio
- Design decisions for a modern application

Module 2: Advanced Amazon DynamoDB Concepts

- Review business workloads for Amazon DynamoDB
- Analyze access patterns and key design
- Create the data model
- Design for performance
- Design event-driven architectures using DynamoDB Streams
- Guided Tour: Design tables using NoSQL Workbench for DynamoDB
- Guided Tour: Use DynamoDB Streams with AWS Lambda
- Hands-on Lab: Implement Fleet and Trip Data Management using Amazon DynamoDB Tables,

Indexes, and Change Streams

Module 3: Advanced Amazon DocumentDB Concepts

- Review business workloads for Amazon DocumentDB
- Analyze access patterns
- Create the data model
- Design for performance
- Use Amazon DocumentDB aggregation framework
- Design event-driven architecture using Amazon DocumentDB
- Guided Tour: Document and collection design
- Guided Tour: Aggregation framework
- Guided Tour: Use Amazon DocumentDB Change streams with AWS Lambda
- Hands-on Lab: Implement and Optimize User Profile Data Management Workload on Amazon DocumentDB

Module 4: Advanced Amazon ElastiCache for Redis Concepts

- Review business workloads for Amazon ElastiCache for Redis
- Analyze access patterns
- Create the data model
- Use optimal data structures for the workload
- Guided Tour: Use Amazon ElastiCache for Redis to apply geospatial queries
- Guided Tour: Use Amazon ElastiCache for Redis to natively store and access JSON data
- Guided Tour: Use Amazon ElastiCache for Redis with leaderboards
- Hands-on Lab: Implement Geospatial Bike Searches, User Profile Caching, and Leaderboards with Amazon ElastiCache for Redis

Module 5: Course Summary

- Course review
- AWS Certification levels

- Continue your learning, Analyze Use Cases for NoSQL Databases, Advanced Amazon DynamoDB concepts, Advanced Amazon DocumentDB concepts, Advanced Amazon ElastiCache for Redis Concepts, Course Summary

Skills You Will Learn:

- Build modern applications for the cloud using AWS purpose-built NoSQL databases
- Illustrate solutions using AWS purpose-built databases for handling key-value, document, and in-memory data categories
- Analyze business use cases and apply advanced features of Amazon DynamoDB, ElastiCache, or DocumentDB to implement a scalable solution
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Frequently Asked Questions

Q: What delivery options are available for Build Modern Applications with AWS NoSQL Databases?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 1-day Build Modern Applications with AWS NoSQL Databases course provides up to 6.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Build Modern Applications with AWS NoSQL Databases training?

The training takes place over 1 day(s), with each day lasting approximately 8.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Build Modern Applications with AWS NoSQL Databases?

Yes, we provide corporate training, dedicated training, and closed classes for Build Modern Applications with AWS NoSQL Databases. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Build Modern Applications with AWS NoSQL Databases, AWS Development, BMAND, Amazon Web Services, vILT

Q: Why choose Nexus Human for Build Modern Applications with AWS NoSQL Databases?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Build Modern Applications with AWS NoSQL Databases training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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