kod szkolenia: AWS-PL-DES-DATA / PL AA 3d

Planning and Designing Databases on AWS

Przeznaczenie szkolenia

This course is intended for learners in the following roles:

- Solutions architects
- Database architects
- Developers

Korzyści wynikające z ukończenia szkolenia

In this course, you will learn how to do the following:

- Summarize the AWS Well-Architected Framework for designing database solutions.
- Choose an appropriate purpose-built database service for a given workload.
- Design a relational database solution to solve a business problem.
- Design a NoSQL database solution to solve a business problem.
- Analyze data from multiple databases to solve a business problem.
- Discuss the security considerations for your database solution

Oczekiwane przygotowanie słuchaczy

We recommend the following prerequisites for attendees of this course:

- Familiarity with AWS database services
- Understanding of database design concepts and/or data modeling for relational or nonrelational

databases
- Familiarity with cloud computing concepts
- Familiarity with general networking and encryption concepts
- Completion of the digital course Introduction to Building with AWS Databases

Język szkolenia

- Szkolenie: polski
- Materiały: angielski

Szkolenie obejmuje

This course provides opportunities for you to apply concepts through various activities. It includes instructorled presentations, demonstrations, individual and group activities, knowledge checks, and hands-on labs to
apply concepts.

Czas trwania

3 dni / 21 godzin

Agenda szkolenia

Course outline
Day 1
Module 0: Course Introduction
- Course overview

Module 1: AWS Purpose-Built Databases
- Discussing well-architected databases
- Analyzing workload requirements

- Choosing the data model
- Choosing the right purpose-built database
- Knowledge check

Module 2: Amazon Relational Database Service (Amazon RDS)

- Discussing a relational database
- What is Amazon RDS?
- Why Amazon RDS?
- Amazon RDS design considerations
- Knowledge check

Module 3: Amazon Aurora

- What is Amazon Aurora?
- Why Amazon Aurora?
- Aurora design considerations
- Knowledge check

Challenge Lab 1: Working with Amazon Aurora databases

Day 2

Class Activity 1: Choose the Right Relational Database

Module 4: Amazon DynamoDB

- Discussing a key value database
- What is DynamoDB?
- Why DynamoDB?
- DynamoDB design considerations
- Knowledge check

Module 5: Amazon Keyspaces (for Apache Cassandra)

- Discussing a wide-column database
- What is Apache Cassandra?
- What is Amazon Keyspaces?
- Why Amazon Keyspaces?
- Amazon Keyspaces design considerations
- Knowledge check

Module 6: Amazon DocumentDB (with MongoDB compatibility)

- Discussing a document database
- What is Amazon DocumentDB?

Why Amazon DocumentDB?

- Amazon DocumentDB design considerations
- Knowledge check

Module 7: Amazon Quantum Ledger Database (Amazon QLDB)

- Discussing a ledger database
- What is Amazon QLDB?
- Why Amazon QLDB?
- Amazon QLDB design considerations

- Knowledge check

Class Activity 2: Choose the Right Nonrelational Database

Challenge Lab 2: Working with Amazon DynamoDB Tables

Day 3

Module 8: Amazon Neptune

- Discussing a graph database
- What is Amazon Neptune?
- Why Amazon Neptune?
- Amazon Neptune design considerations
- Knowledge check

Module 9: Amazon Timestream

- Discussing a timeseries database
- What is Amazon Timestream?
- Why Amazon Timestream?
- Amazon Timestream design considerations
- Knowledge check

Module 10: Amazon ElastiCache

- Discussing an in-memory database
- What is ElastiCache?
- Why ElastiCache?
- ElastiCache design considerations
- Knowledge check

Module 11: Amazon MemoryDB for Redis

- What is Amazon MemoryDB (for Redis)?
- Why Amazon MemoryDB?
- Amazon MemoryDB design considerations
- Knowledge check

Class Activity 3: Let’s Cache In

Module 12: Amazon Redshift

- Discussing a data warehouse
- What is Amazon Redshift?
- Why Amazon Redshift?
- Amazon Redshift design considerations
- Knowledge check

Module 13: Tools for Working with AWS Databases

- Data access and analysis with Amazon Athena
- Data migration with SCT and DMS

Class Activity 4: Overall Picture

Challenge Lab 3: Working with Amazon Redshift clusters