

The Microservices Architecture Training provide complete knowledge about the tools and techniques, which are required to build, manage and deploy containerised Microservices. The Microservices main focus on the key containerised for well-planned Microservices architecture design. The Microservices introduces the delegates to the concepts of Microservices that are lightweight, small and process- driven component. The Microservices is a process of implementing a services oriented architecture. The Microsoft Architecture training enables the delegates to create a competitive software which is flexible, reliable and scalable.

The delegates also learn the design principles for a Microservices Architecture. Microservices architecture is a technique of developing software applications. Throughout the training, the delegates will understand the benefits of the Microservices Architecture. The delegates also get the hand on experience in the tool most famous for designing, maintaining, building and monitoring Microservices.

The delegates also understand how to apply Microservices principles to the exact business desires to build a performing and scalable solutions. With the help of Microservices architecture training the delegates able to understand the several Microservices architecture styles. The delegates also get to know how to choose appropriate architecture design. The delegate also gets familiar with the concept of Netflix and also understand how to Netflix has used Microservices to scale. At the end of the Microservices Architecture, the delegates will be able to develop and test a Microservice.

Prerequisites

There are no prerequisites for joining the Microservices Architecture Training.

Course Objectives

After the completion of the Microservices Architecture Training at Silicon Beach Training, the delegates will be able to:

- Understand and differentiate between various Microservices Architectural styles
- Identify the characteristics of popular Microservices and understand the design differences
- Understand how to apply Microservices Architecture principles
- Creating Microservices using messaging and events
- Expose an Application Program Interface for the application
- Get to know about the Service patterns: Adapters, Pipelines, Gateways and Choreography
- Understand how to make the appropriate Microservice Architecture decision
- Understand about the monitor and maintain Microservices in large ecosystems
- Review various approaches to infrastructure used in deploying Microservices

What are Microservices?

- Small and focused
- Loosely coupled
- Language-neutral
- Bounded Context
- Comparing microservices and monolithic architectures

Benefits from Microservices

- Enterprise solutions context
- Service management perspective
- Business owner perspective
- Challenges with a monolithic architecture
- Developer perspective
- Tester perspective

How is this different than service-oriented architecture?

- Case studies and most common architectural patterns
- Example scenarios using microservices
- An e-commerce discount site
- Large brick-and-mortar retailer
- Financial Services Company

What to avoid with Microservices

- keep an eye on the latency dispute
- Don't create too many microservices
- Don't start with microservices
- Don't even think about microservices without DevOps
- Don't manage your own infrastructure

Characteristics of Microservices architecture

- Evolutionary design
- Business-oriented
- Decentralized data management
- Design for failure
- Discoverability
- Dealing with complexity
- Inter-service communication design

Designing Microservices

- Use design thinking to scope and identify microservices
- Choosing the implementation stack
- Sizing the microservices

Microservices and DevOps

- Why use DevOps

REST API and messaging

- REST
- Messaging
- REST and messaging together

DevOps and Microservices

- Why you should use DevOps
- Defining DevOps
- Organize a DevOps team to support other microservices teams
- DevOps is a prerequisite to well-adopting microservices
- Organizing teams to support microservices

Microservices governance

- Centralized versus decentralized governance
- DevOps capabilities: Testing strategies for microservices
- Building a sufficient testing strategy
- Enterprise transformation for microservices
- Considerable testing methods

DevOps capabilities for Microservices architecture

- Continuous business planning
- Continuous integration and collaborative development
- Continuous release and deployment
- Continuous testing and monitoring
- Continuous customer feedback and optimization

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