Introduction to Microservices

Course Content –

- **Chapter 1: The Emergence of Microservices Architecture**
  - Explore the ideal software development practice
  - Learn how a fine-grained Service-Oriented Architecture (SOA) can help to achieve the ideal
  - Learn how Microservices attempts to achieve the ideal

- **Chapter 2: Microservice Design Principles**
  - Designing small microservices
  - Designing independent microservices
  - Designing resilient microservices

- **Chapter 3: Integrating Microservices**
  - Understand design goals when integrating microservices
  - Explore effective message formats and lightweight inter-service communication approaches
  - Review the pros and cons of various service communication patterns

- **Chapter 4: Microservice Technologies**
  - Learn about popular technologies that enable the development, deployment, and support of microservices

- **Chapter 5: Decomposing the Monolith**
  - Understand monolithic decomposition as an approach towards application modernization
  - Review successful decomposition patterns
  - Understand helpful practices when decomposing a monolithic application

- **Chapter 6: Deploying and Maintaining Microservices**
  - Explore the intersection of DevOps and microservices
  - Learn to leverage virtual, cloud, and containerized environments for microservice deployment
  - Discover how to monitor a microservices environment and take appropriate action to enable scaling or react to system faults