



# ADDITIONAL TOPICS

**Design and Develop a  
Serverless Event-Driven  
Microservice-Based Solution**



# Monitoring and Troubleshooting Serverless Applications

Strategies for Effective Serverless Monitoring



# Why Does It Matter

**Performance**

**Reliability**

**Scalability**

**User Experience**



# Key Metrics to Monitor

**Invocation  
Metrics**

**Duration**

**Error Rates**

**Throttles**

**Cold Starts**



# Monitoring Tools

**Azure Monitor**

**AWS  
CloudWatch**

**Google Cloud  
Monitoring**

**Third-Party**



# Logging

**Structured  
Logging**

**Centralized Log  
Storage**

**Log Levels**



# Distributed Tracing

**Purpose**

**Tools**

**Benefits**



# Alerting and Notifications

**Threshold-  
Based Alerts**

**Anomaly  
Detection**

**Notification  
Channels**





# Troubleshooting Common Issues

**Cold Starts**

**Timeouts**

**Memory Leaks**

**Concurrency  
Limits**



# Best Practices

**Instrument  
Code**

**Test Thoroughly**

**Regular Audits**

**Documentation**



# Conclusion



# Scaling and Performance Optimization

Maximizing Efficiency in Serverless Solutions