**Prerequisites for this course**

Devops Background

Linux Working Experience

Linux commands basics

**Tools Coverage**

Prometheus on Linux (standalone)

PromQL

Grafana on Linux (standalone)

ELK – Elastic Search, Logstash and Kibana (standalone)

Monitoring walkthrough in GCP (Prometheus and Grafana) – additional demo

**Day 1 - Monitoring Intro and Prometheus Overview, Hands-On**

Intro

Agenda

Lab walkthrough

Devops perspective

Architecture

Options for monitoring and logging

Basics

Github site and repo checkout

Basics of Monitoring from DevOps and in general perspective

Monitoring tool --> Prometheus

Setup, configuration, probing

Architecture, components, etc

Hands-on exercises

**Day 2 - Prometheus Additional Coverage with Hands-On**

Prometheus Components

AlertManager

Pushgateway

Java App Instrumentation

PromQL Advanced Queries

Walkthrough/Demo of Prometheus Managed service in Google Cloud

**Week 2**

**Day 3**

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Visualization

Grafana

Architecture

Integration with Prometheus

Dashboards

Implement Container Monitoring

Implement Alerting for System Health

Using PromQL in Dashboards

**Day 4**

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**Logging and importance in Devops**

**Architecture of ELK**

**Elastic Search**

**LogStash**

**Kibana**

**Hands-on Labs**

**Project Implementation Approach**

**Wrap-up**