

**Day - 1**

**Platform Overview and Backend Performance Monitoring**

- **Introduction to New Relic and Observability Concepts**
  - Observability vs. Monitoring
  - Overview of the New Relic One platform
  - Capabilities and data ingestion methods
- **APM Deep Dive**
  - Transactions, errors, throughput, and response time
  - Profiling backend services and APIs
  - Database performance analysis
- **Distributed Tracing and Bottleneck Analysis**
  - Understanding distributed tracing fundamentals
  - Trace analysis to detect latency and performance issues
  - Analyzing call stacks and service dependencies

**Day - 2**

**Frontend Performance and Synthetic Monitoring**

- **Browser Monitoring**
  - Page load performance metrics
  - Real User Monitoring (RUM) setup and interpretation
  - Core Web Vitals and performance breakdown
- **Mobile Monitoring (Optional Advanced Segment)**
  - Mobile agent installation
  - Mobile user experience and crash analytics
- **Synthetic Monitoring and Testing**
  - Creating scripted and ping monitors
  - Measuring availability and performance from global locations
  - Simulating user flows and SLAs

## Infrastructure, Cloud, Dashboards and Optimization

- **Infrastructure and Cloud Observability**

- Installing infrastructure agents and monitoring servers
- AWS, Azure, GCP integration
- Monitoring Kubernetes, containers, and services

- **Performance Dashboards and NRQL**

- Using NRQL to build custom dashboards
- KPI visualizations and performance baselines
- Reporting on throughput, errors, and latency

- **Optimization and Recommendations**

- Correlating data across the stack
- Identifying recurring performance patterns
- Strategies for performance tuning and architectural improvements