New Relic Certified Reliability Engineer - Professional (REP) Training

Curriculum 3 Days

Day - 1

Core Reliability Engineering Concepts and Alerting

- **Introduction to Site Reliability Engineering (SRE)**
  - What is SRE?
  - Principles of reliability and availability
  - Core responsibilities of a Reliability Engineer
- **Overview of New Relic Platform**
  - Navigating the New Relic One platform
  - Data sources: agents, integrations, APIs
  - Account structure and access control
- **Alert Policies and Conditions**
  - Types of alerts (static, baseline, anomaly)
  - Alert conditions, thresholds, and notification channels
  - Alert muting rules and workflows

Day - 2

Service Level Management & Observability

- **SLIs, SLOs, and Error Budgets**
  - Defining service-level indicators and objectives
  - Error budget policies and burn rate calculations
  - Monitoring and visualizing SLO compliance
- **Incident Management and Workflows**
  - Detecting, triaging, and resolving incidents
  - Integration with PagerDuty, Opsgenie, Slack, and webhooks
  - Runbooks and incident response automation
- **Logs and Distributed Tracing**
  - Ingesting logs from services and cloud platforms
  - Correlating logs with traces and metrics
  - Using log patterns and anomaly detection for root cause analysis

Day - 3

Infrastructure, Cloud, Networking, and Automation

- **Infrastructure and Cloud Observability**
  - Deploying and configuring Infrastructure agents
  - Integrating AWS, Azure, GCP services
  - Monitoring containers (Docker, Kubernetes)
- **Networking, Dependencies, and Service Maps**
  - Understanding traffic flow and service health
  - Visualizing dependencies with maps and traces
  - Identifying bottlenecks in distributed systems
- **Automation and Reporting**
  - Automating reliability checks with Terraform/API
  - Creating dashboards for operational metrics
  - Reporting uptime, SLIs/SLOs, and alert compliance