

# Understanding SonarQube

**Duration:** 1 Day

**Hands-On Format:** This hands-on class is approximately 70/30 lab to lecture ratio, combining engaging lecture, demos, group activities and discussions with comprehensive machine-based practical programming labs and project work.

## **Module 1 – Introduction and Architecture**

Introduction to SonarQube  
Architecture Overview  
SonarQube Components  
Code Quality Introduction  
SonarQube Server UI Overview

## **Module 2 – Installation and Setup**

SonarQube Server Installation  
Sonar Scanner Installation and Demo

## **Module 3 – Integration with Build Tools**

Sonar Scanner Integration with Apache Maven  
Sonar Scanner Integration with Gradle  
Sonar Scanner Integration with Apache Ant

## **Module 4 – Integration with DevOps Tools**

Configuring Sonar Scanner with Jenkins  
Trigger Sonar Scanner Analysis from Jenkins

## **Module 5 – SonarQube Deep Dive**

Cognitive and Cyclomatic Complexity  
Quality Gates  
Quality Profiles  
Rules and Rule Templates  
Users, Groups and Permissions