

DEVOPS

ADVANCED

5 DAYS

Code Quality Analysis with SonarQube

Build a strong foundation in code quality management using SonarQube to analyze, secure, and improve application code. Learn how to detect code smells, bugs, and vulnerabilities, apply language specific rules, and integrate SonarQube into CI/CD workflows to reduce technical debt and enforce coding standards.

Why SonarQube?

Improved Code Quality

SonarQube helps you identify code smells, bugs, security vulnerabilities, and other issues in your codebase.

Enforced Coding Standards

SonarQube allows you to define and enforce coding standards across your development team.

Early Issue Detection

SonarQube performs static code analysis, which means it can catch issues early in the development process. By integrating SonarQube into your CI/CD pipelines, you can automatically analyze code changes as part of the build process.

What you'll be able to do

- ✓ Getting familiar with SonarQube's capabilities, features, and benefits as a code quality analysis tool.
- ✓ Learn how to set up and configure SonarQube specifically for analyzing code
- ✓ Gain knowledge of identifying code smells, bugs, security vulnerabilities, and adherence to coding standards in serverless code
- ✓ Understand how to leverage language-specific analyzers and rule sets provided by SonarQube
- ✓ workflow, including integration with CI/CD pipelines and IDEs for real-time feedback.
- ✓ Gain experience in techniques for improving code quality, reducing technical debt, and promoting better coding practices.

Who this is for

- Developers
- Software Architects
- Quality Assurance/Testers
- Technical Leads/Team Leads
- DevOps Engineers
- Project Managers

Curriculum

01 SonarQube and Code Quality Foundations

- Apply sonarqube and code quality foundations with SonarQube in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
- Validate outcomes, logs, and failure modes
- Capture reusable patterns for team standards

02 Setup and Project Configuration

- Apply setup and project configuration with SonarQube in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
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03 Static Analysis and Results

- Apply static analysis and results with SonarQube in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
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04 Code Smells, Bugs, and Vulnerabilities

- Apply code smells, bugs, and vulnerabilities with SonarQube in practical DevOps workflows
- Complete hands-on labs with realistic scenarios
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05 Quality Gates and Standards

- Apply quality gates and standards with SonarQube in practical DevOps workflows
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06 IDE Integration

- Apply ide integration with SonarQube in practical DevOps workflows
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07 CI/CD Integration

- Apply ci/cd integration with SonarQube in practical DevOps workflows
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08 Customization and Rules

- Apply customization and rules with SonarQube in practical DevOps workflows
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09 Metrics and Continuous Improvement

- Apply metrics and continuous improvement with SonarQube in practical DevOps workflows
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10 Security Scanning Patterns

- Apply security scanning patterns with SonarQube in practical DevOps workflows
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11 Governance and Reporting

- Apply governance and reporting with SonarQube in practical DevOps workflows
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12 Team Rollout Practices

- Apply team rollout practices with SonarQube in practical DevOps workflows
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- Capture reusable patterns for team standards