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How to use SonarLint and SonarQube (Code quality checker) with Eclipse

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**Abstract**

This document provides a concise and practical guide on harnessing the power of SonarLint and SonarQube to elevate code quality within the Eclipse Integrated Development Environment (IDE). With a focus on streamlining the development process, the document offers step-by-step instructions on integrating and configuring SonarLint, a lightweight static code analysis tool, directly into Eclipse. Additionally, it outlines the seamless integration of SonarQube, a comprehensive code quality management platform, to perform in-depth code analysis at both the individual and project levels. Developers will learn how to leverage these tools to detect and address code issues, enhance overall code maintainability, and ensure adherence to best practices.

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   1. What is SonarLint?

SonarLint is a static code analysis tool that helps developers identify and fix code quality issues as they write code. It provides real-time feedback on potential bugs, security vulnerabilities, and code smells, allowing developers to improve code quality early in the development process. SonarLint integrates seamlessly into the Eclipse IDE, IntelliJ providing instant analysis and suggestions to help developers write cleaner, more efficient, and maintainable code.

* 1. How to Use SonarLint in Eclipse for better code quality.

1. Access the following link: <https://www.sonarsource.com/products/sonarlint/>
2. Click on Install for free
3. Select the IDE you want to use out of the options listed. In this case, I would be clicking on Eclipse. It will redirect you to a page that will look like the screenshot below:

A screenshot of a search engine

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1. You can open your Eclipse Marketplace by navigating to Help -> Eclipse Marketplace on Eclipse.

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1. Once you open Eclipse Marketplace, drag and drop the Install icon onto your Eclipse Marketplace tab. This will give you a prompt as shown in the screen shot below:

A screen shot of a phone

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1. Click on “Confirm” and then click on “Trust selected”. After this, you would be asked to restart your eclipse.

A screenshot of a computer

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A screenshot of a software update

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* 1. How to Analyze using SonarLint

1. SonarLint would scan your code when you open Eclipse again. With a right-click on the desired program, choose SonarLint -> Analyze. You'll receive a comprehensive report with all the quality problems and recommended procedures as a result. A screenshot of a computer

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2. If you want a description of a particular item in the report, then go to Window -> Show view -> other.

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1. Now under the dropdown for Sonarlint select “SonarLint Rule Description” and click on open.

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1. This description will give an in detailed explanation of the problem selected.

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