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## SONARLINT GUIDE

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#### 1. Introduciton

#### 1.1. DOCUMENT OBJECTIVES

The purpose of this document is to help team members to set-up SonarLint on GoLand 2023.2.2 and IntelliJ IDEA 2023.2.2. This guide will detail all the steps to install and configure SonarLint from scratch.

Warning: due to a new project structure, Goland is no longer a used IDE.

#### 1.2. SonarLint Version

This guide has been written for SonarLint 9.1.0.75538. The team PFE\_2023\_16 does not guarantee the right functioning for other versions of SonarLint.

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#### 2. GoLAND IDE

#### 2.1. TARGET

This guide has been written for GoLand 2023.2.2. The team PFE\_2023\_16 does not guarantee the right functioning for other versions of GoLand.

Warning: due to a new project structure, Goland is no longer a used IDE.

#### 2.2. INSTALLATION

In order to install SonarLint on GoLand follow the steps below:

- Start GoLand IDE
- Click on Main Menu > File > Settings > Plugins > MarketPlace
- Write "SonarLint" in the search bar
- Click on "SonarLint" > Install
- Restart GoLand IDE

#### 2.3. CONFIGURATION

In order to set-up the rules of SonarLint on GoLand follow the steps below:

- Start GoLand IDE
- Click on Main Menu > File > Settings > Tools > SonarLint > Rules > Restore Defaults
- Activate the following rules for Go
  - o "switch" statements should have "default" clauses
  - o "switch" statements should not be nested
  - Lines should not be too long
    - Change option "maximumLineLength" to "80"
  - o Octal values should not be used
  - o Statements should be on separates lines
    - Do not activate Option "headerFormat"
  - Useless "if(true) {...}" and "if(false){...}" blocks should be removed
- Deactivate the following rule for Go until the end of the project
  - o Track uses of "TODO" tags
    - Existing TODOs will be fixed if possible depending on time left
    - Created TODOs will be fixed at the end of the project
- Click on Apply > Ok
- Restart GoLand IDE

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#### 3. INTELLIJ IDEA IDE

#### 3.1. TARGET

This guide has been written for IntelliJ IDEA 2023.2.2. The team PFE\_2023\_16 does not guarantee the right functioning for other versions of IntelliJ IDEA.

#### 3.2. INSTALLATION

In order to install SonarLint in IntelliJ IDEA follow the steps below:

- Start IntelliJ IDEA IDE
- Click on Main Menu > File > Settings > Plugins > MarketPlace
- Write "SonarLint" in the search bar
- Click on "SonarLint" > Install
- Restart IntelliJ IDEA IDE

#### 3.3. Configuration

In order to set-up the rules of SonarLint in IntelliJ IDEA follow the steps below:

- Start IntelliJ IDEA IDE
- Click on Main Menu > File > Settings > Tools > SonarLint > Rules > Restore Defaults
- Activate the following rules for Java
  - "Serializable" classes should have a "serialVersionUID"
  - "main" should not "throw" anything
  - o "switch" statements and expressions should not be nested
  - Annotated Mockito objects should be initialized
  - o Control structures should use curly braces
  - Equality operators should not be used if "for" loop termination conditions
  - Lines should not be too long
    - Change option "maximumLineLength" to "80"
  - Modulus results should not be checked for direct equality
  - o Octal values should not be used
  - Threads should not be started in constructors
    - Do not activate Option "headerFormat"
  - Wildcard imports should not be used
- Deactivate the following rule for Java until the end of the project
  - Track uses of "TODO" tags
    - Existing TODOs will be fixed if possible depending on time left
    - Created TODOs will be fixed at the end of the project
- Activate the following rules for Go
  - o "switch" statements should have "default" clauses
  - "switch" statements should not be nested
  - Lines should not be too long
    - Change option "maximumLineLength" to "80"
  - o Octal values should not be used
  - Statements should be on separates lines
    - Do not activate Option "headerFormat"
  - Useless "if(true) [...]" and "if(false)[...]" blocks should be removed

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• Deactivate the following rule for Go until the end of the project

- o Track uses of "TODO" tags
  - Existing TODOs will be fixed if possible depending on time left
  - Created TODOs will be fixed at the end of the project

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- Click on Apply > Ok
- Restart IntelliJ IDEA IDE

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