

ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL
FACULTAD DE INGENIERÍA EN ELECTRICIDAD Y COMPUTACIÓN
INGENIERÍA DE SOFTWARE II 2021-I

LAB REPORT

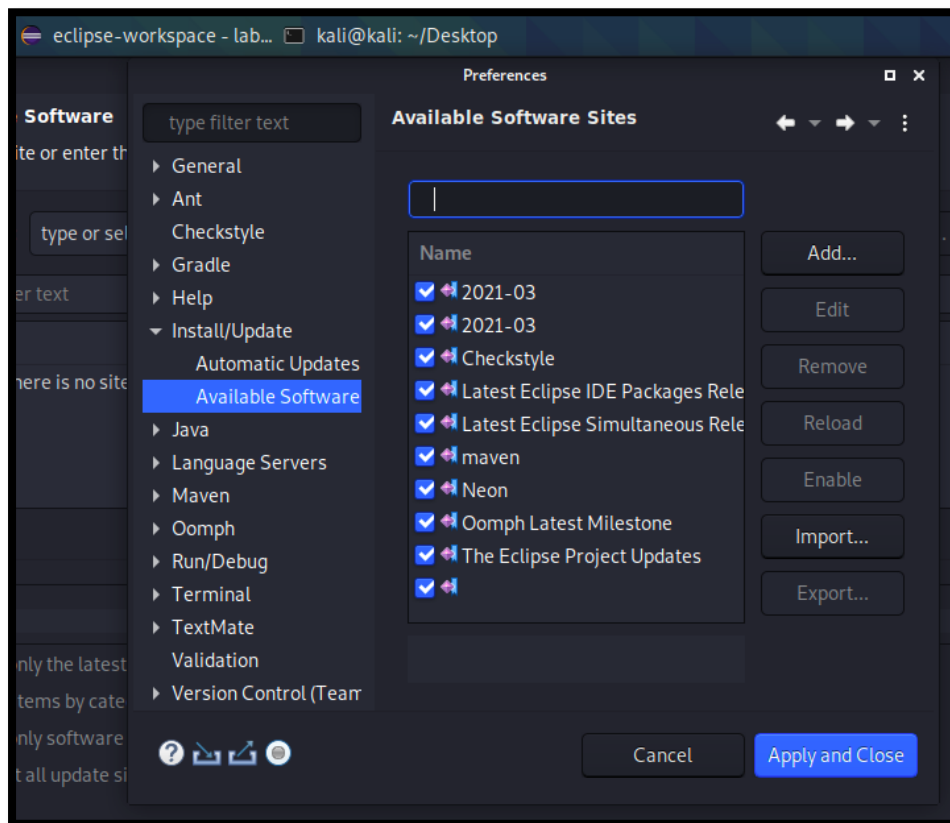
CODING STANDARDS

GROUP#4

- Oscar Guamán Pacalla
- Tomalá Vera Luis Adrián
- Zambrano Zurita Lessette Carolina

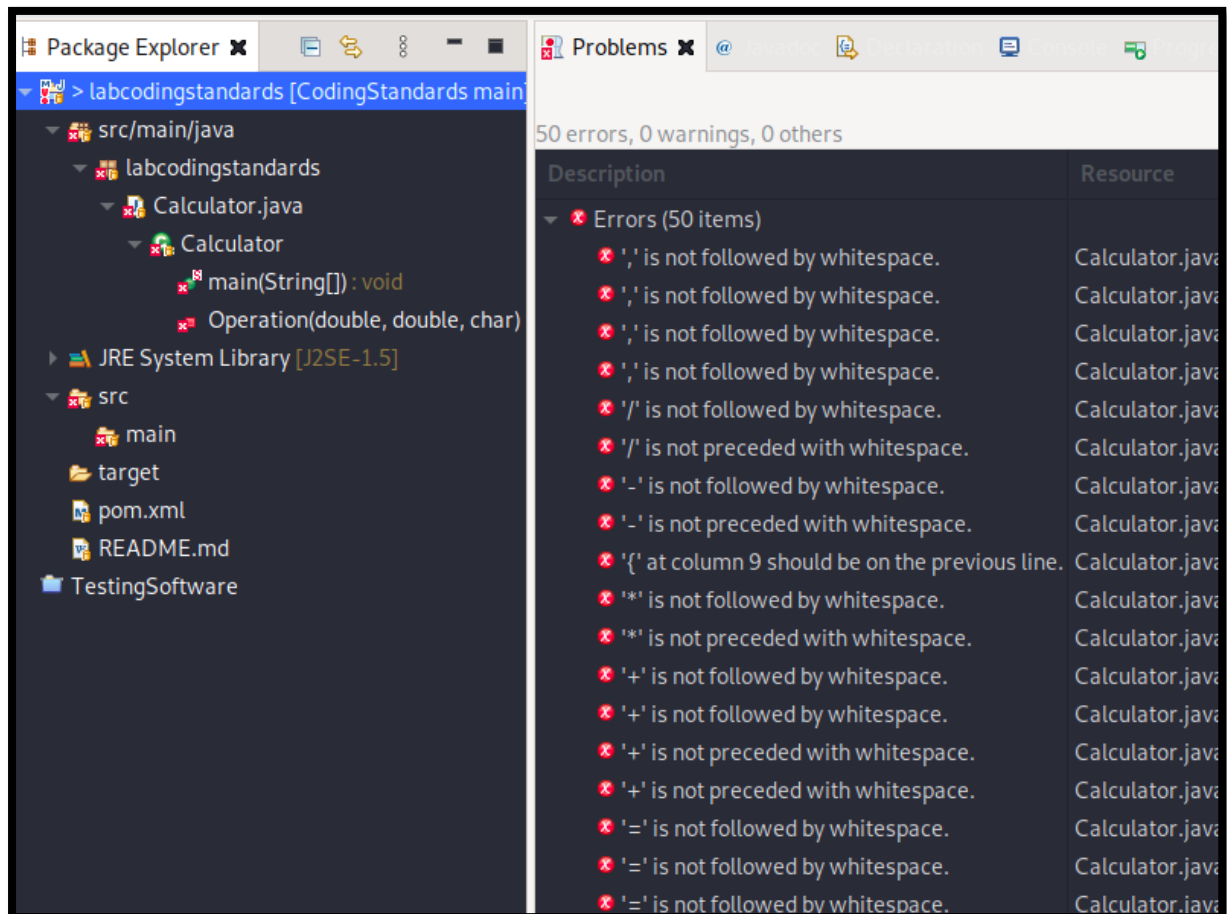
PART 1 – 2

Having Maven and Checkstyle installed.



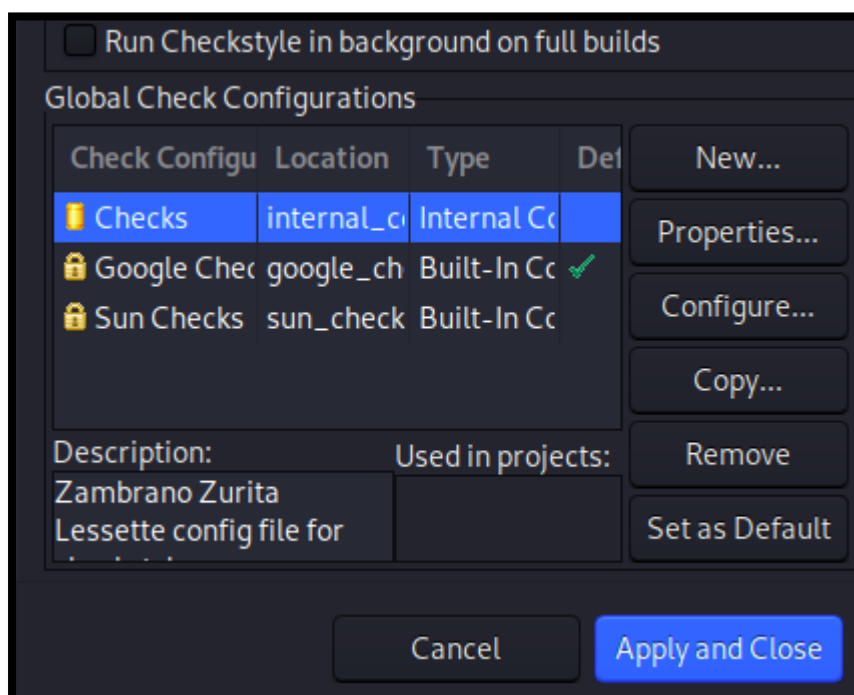
Part 3

Default Errors (without rules)



PART 4

Defining rules



```

Archivo Edición Formato Ver Ayuda
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE module PUBLIC "-//Checkstyle//DTD Checkstyle Configuration 1.3//EN" "https://checkstyle.org/dtds/configuration_1_3.dtd">

<!--
    This configuration file was written by the eclipse-cs plugin configuration editor
-->
<!--
    Checkstyle-Configuration: Checks
    Description: none
-->
<module name="Checker">
  <property name="severity" value="warning"/>
  <module name="TreeWalker">
    <module name="MissingJavadocMethod"/>
    <module name="SuppressionCommentFilter"/>
    <module name="Indentation"/>
  </module>
<!--Oscar Guaman-->
</module>

```

PART 5

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE module PUBLIC "-//Checkstyle//DTD Checkstyle Configuration 1.3//EN"
   "https://checkstyle.org/dtds/configuration_1_3.dtd">
3
4 <!--
5     This configuration file was written by the eclipse-cs plugin configuration
6     editor
7 -->
8 <!--
9     Checkstyle-Configuration: Checks
10    Description:
11    Adrian Config file for codingstandards
12 -->
13 <module name="Checker">
14   <property name="severity" value="warning"/>
15   <module name="TreeWalker">
16     <module name="MissingJavadocMethod"/>
17   </module>
18 </module>

```

PART 6

Complete with headers rules

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE module PUBLIC
3   "-//Checkstyle//DTD Checkstyle Configuration 1.3//EN"
4   "https://checkstyle.org/dtds/configuration_1_3.dtd">
5 <!-- ADRIAN TOMALA -->
6 <module name="Checker">
7   <module name="Header">
8     <property name="header" value="// Copyright (C) 2020\n// All rights reserved"/>
9   </module>
10  <module name="TreeWalker">
11    <module name="LocalVariableName">
12      <property name="format" value="^[a-z](_[a-zA-Z0-9]+)*$" />
13    </module>
14    <module name="MissingJavadocMethod">
15      <property name="scope" value="private"/>
16      <property name="allowMissingPropertyJavadoc" value="true" />
17    </module>
18    <module name="JavadocType">
19      <property name="authorFormat" value="|S" />
20    </module>
21  </module>
22 </module>

```

PART 7

Supressing Checkstyle Tests

```

1 public class Calculator {
2   //CHECKSTYLE:OFF
3   public static void main(String[] args) {
4     Scanner reader = new Scanner(System.in);
5
6     System.out.print("1. +\n2. -\n3. *\n4. /\nEnter an operator: ");
7
8     char operator = reader.nextLine().charAt(0);
9     double first;
10    double second;
11    String input;

```

PART 8

Running MAVEN BUILD- Generated Resources ZAMBRANO LESSETTE

LabCodingStandards

Last Published: 2021-06-03 | Version: 0.0.1-SNAPSHOT

About LabCodingStandards

Lab by [Lesette Zambrano](#), Software Engineering II

Project Documentation

- Project Information
- Dependency Information
- About
- Plugin Management
- Plugins
- Summary
- Project Reports

Built by: **maven**

Console:

```
[INFO] 25 reports detected for maven-project-info-reports-plugin:3.0.0:ci-management, u
[INFO] Rendering site with default locale English (en)
[WARNING] No project URL defined - decoration links will not be relativized!
[INFO] Rendering content with org.apache.maven.skins:maven-default-skin:jar:1.2 skin.
[INFO] Generating "Checkstyle" report --- maven-checkstyle-plugin:3.1.2:checkstyle
[WARNING] Old version of checkstyle detected. Consider updating to >= v8.30
[WARNING] For more information see: https://maven.apache.org/plugins/maven-checkstyle-pl
[WARNING] File encoding has not been set, using platform encoding UTF-8, i.e. build is p
[INFO] There are 5 errors reported by Checkstyle 8.29 with checks.xml ruleset.
[WARNING] Unable to locate Source XRef to link to - DISABLED
[INFO] Generating "Dependency Information" report --- maven-project-info-reports-plugin:3.0
[INFO] Generating "About" report --- maven-project-info-reports-plugin:3.0
```

Details

labcodingstandards/Calculator.java

Severity	Category	Rule	Message	Line
Error	header	Header	Line does not match expected header line of '// Copyright (C) 2020'.	1
Error	javadoc	JavadocType	Type Javadoc comment is missing @author tag.	13
Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	15
Error	naming	LocalVariableName	Name 'First' must match pattern '[a-z](_?[a-zA-Z0-9]+)*\$'.	21
Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	57

Running MAVEN BUILD- Generated Resources TOMALA ADRIAN

LabCodingStandards - Adrian Tomala V
Last Published: 2021-06-04 | Version: 0.0.1-SNAPSHOT

About LabCodingStandards - Adrian Tomala V
Lab by Adrian Tomala, Software Engineering II

Console Output:

```
<terminated> CodingStandards (9) [Maven Build] [Library\Java\JavaVirtualMachines\jdk-15.0.2\jdk\Contents\Home\bin\java (Jun 4, 2021, 4:27:16 PM - 4:27:25 PM)
SLF4J: Found binding in [file:/Users/adriantomala/eclipse/java-2021-03/Eclipse.app/Contents/Eclipse/configuration/org.eclipse.osgi/5/0/
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.slf4j.impl.SimpleLoggerFactory]
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.espol.edu:labcodingstandards >-----
[INFO] Building LabCodingStandards - Adrian Tomala V 0.0.1-SNAPSHOT
[INFO]
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-site-plugin:3.7.1:site (default-site) @ labcodingstandards ---
[WARNING] Input file encoding has not been set, using platform encoding UTF-8, i.e. build is platform dependent!
[INFO] configuring report plugin org.apache.maven.plugins:maven-checkstyle-plugin:3.1.2
[INFO] 1 report detected for maven-checkstyle-plugin:3.1.2: checkstyle
[INFO] configuring report plugin org.apache.maven.plugins:maven-project-info-reports-plugin:3.0.0
[INFO] 15 reports detected for maven-project-info-reports-plugin:3.0.0: ci-management, dependencies, dependency-info, dependency-manager
[INFO] Rendering site with default locale English (en)
[WARNING] No project URL defined - decoration links will not be relativized!
[INFO] Rendering content with org.apache.maven.skins:maven-default-skin:jar:1.2 skin.
[INFO] Generating "Checkstyle" report --- maven-checkstyle-plugin:3.1.2:checkstyle
```

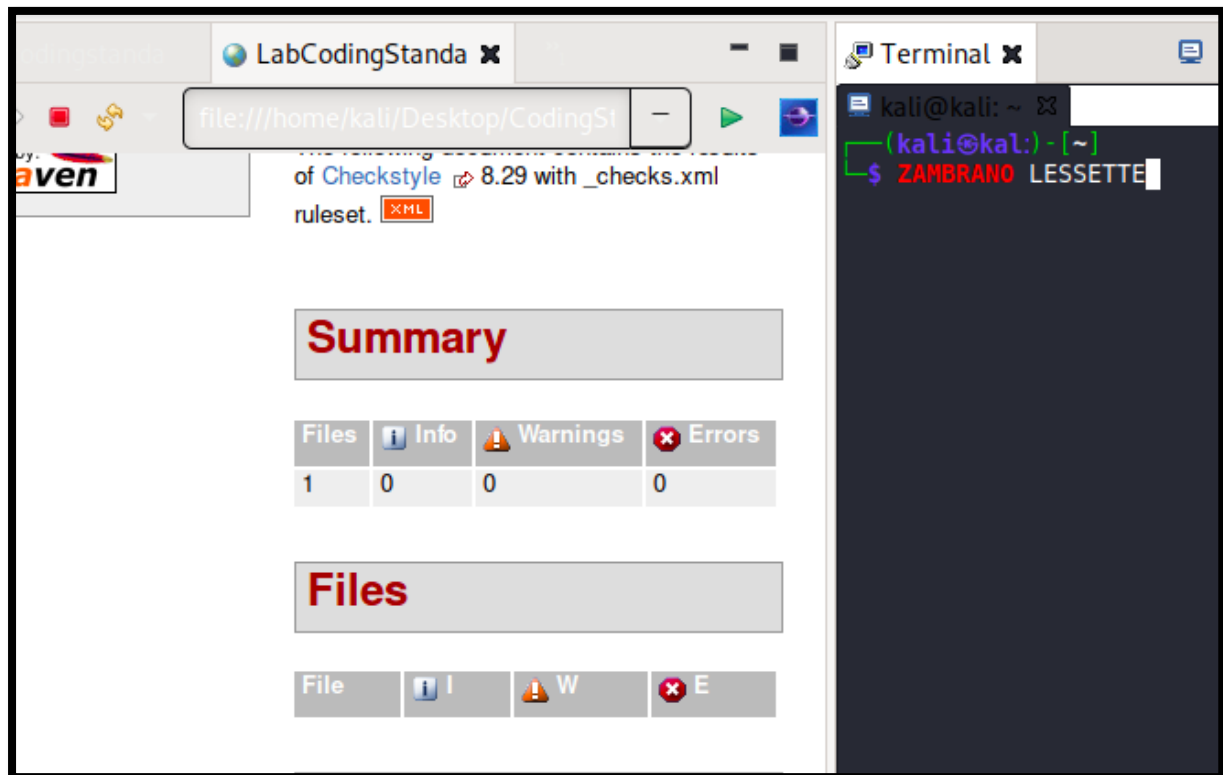
Details

labcodingstandards/Calculator.java

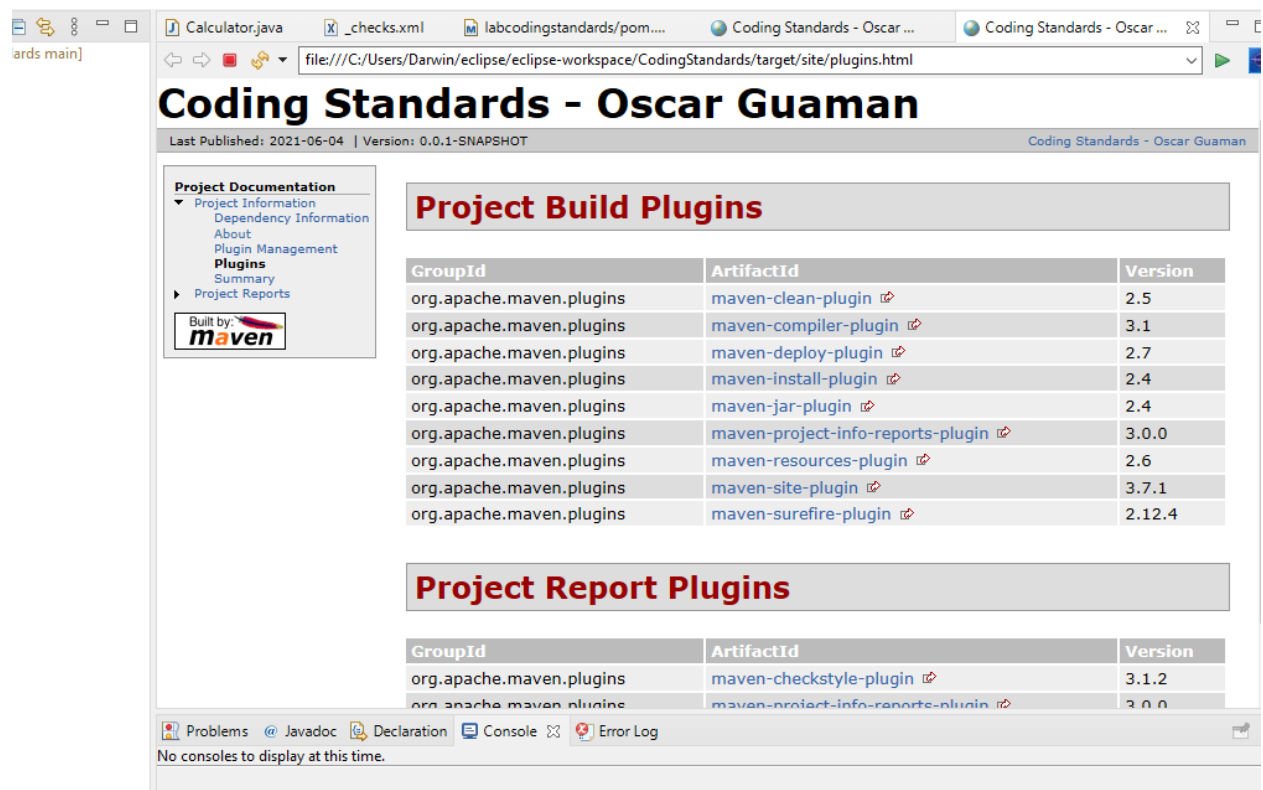
Severity	Category	Rule	Message	Line
Error	header	Header	Line does not match expected header line of '/* Copyright (C) 2020'.	1
Error	javadoc	JavadocType	Type Javadoc comment is missing @author tag.	13
Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	15
Error	naming	LocalVariableName	Name 'first' must match pattern '^([a-z]([a-zA-Z0-9])*)\$'.	21
Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	56

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Checkstyle report without errors ZAMBRANO LESSETTE



With errors.



The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure for 'labcodingstandards'. The main editor shows the 'Coding Standards - Oscar Guaman - Checkstyle Results' window. It lists errors for 'Calculator.java':

- authorFormat: "\s"
- MissingJavadocMethod (Line 2): allowMissingPropertyJavadoc: "true", scope: "private"

The 'Details' section shows the following table:

Severity	Category	Rule	Message	Line
Error	header	Header	Line does not match expected header line of '// Copyright (C) 2020'.	1
Error	javadoc	JavadocType	Type Javadoc comment is missing @author tag.	12
Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	14
Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	57

The bottom editor shows the 'pom.xml' file with the following content:

```
<module name="FreeWalker">
```

Without errors

The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure for 'labcodingstandards'. The main editor shows the 'Coding Standards - Oscar Guaman - Checkstyle Results' window. It displays the 'Checkstyle Results' summary:

The following document contains the results of Checkstyle 8.29 with _checks.xml ruleset. [View](#)

Summary

Files	Info	Warnings	Errors
1	0	0	0

Files

File	I	W	E
1			

The bottom editor shows the 'pom.xml' file with the following content:

```
1 // Copyright (C) 2020
2 // All rights reserved
3
4 namespace labcodingstandards:
```