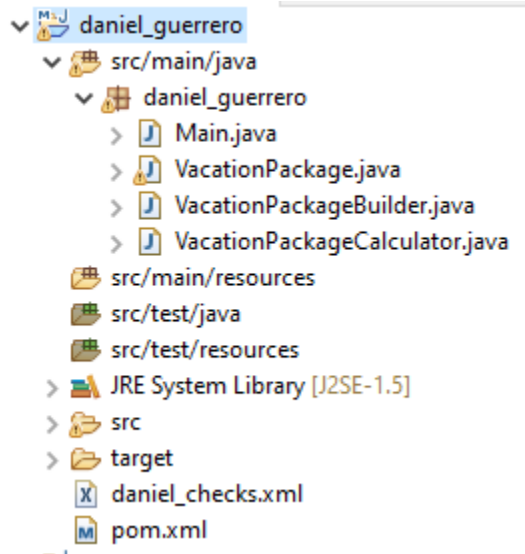# Lab Report #01

First:

The Maven project was created and the classes for the right functionality of the program was encoded.

The program works with a builder design pattern that creates the vacation package and have a list of cities that could be recognize when the user input information.

Then configurated the check configuration, setting this as a Sun Checks and create a Chekstyle document that returns an XML file. Add 3 modules and 1 header, like the following.

```
D: > ProyectosEclipse > daniel_guerrero > </> daniel_checks.xml
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    <module name="Checker">
6
7        <module name="Header">
8            <property name="header" value="// Copyright (C) 2020\n// All rights reserved"/>
9        </module>
10
11        <module name="TreeWalker">
12            <module name="LocalVariableName">
13                <property name="format" value="^[a-z](_?[a-zA-Z0-9]+)*$" />
14            </module>
15            <module name="MissingJavadocMethod ">
16                <property name="scope" value="private"/>
17                <property name="allowMissingPropertyJavadoc" value="true" />
18            </module>
19            <module name="JavadocType">
20                <property name="authorFormat" value="\S" />
21            </module>
22        </module>
23    </module>
```

Second:

Add a suppressing checkstyle test with the module SuppressionCommentFilter on Main.

```
14        //CHECKSTYLE: OFF
15⊖      public static void main(String[] args) {
16        //CHECKSTYLE: ON
```

Third:

Add checkstyle with Maven adding some plugins on the pom.xml

```
 J Main.java    M *daniel_guerrero/pom.xml ⊠
 1⊖ <project xmlns="http://maven.apache.org/POM/4.0.0"
 2   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 3   xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
 4      <modelVersion>4.0.0</modelVersion>
 5      <groupId>com.espol.edu</groupId>
 6      <artifactId>daniel_guerrero</artifactId>
 7      <version>0.0.1-SNAPSHOT</version>
 8⊖    <build>
 9⊖       <plugins>
10⊖          <plugin>
11               <groupId>org.apache.maven.plugins</groupId>
12               <artifactId>maven-site-plugin</artifactId>
13               <version>3.7.1</version>
14           </plugin>
15⊖          <plugin>
16               <groupId>org.apache.maven.plugins</groupId>
17               <artifactId>maven-project-info-reports-plugin</artifactId>
18               <version>3.0.0</version>
19           </plugin>
20       </plugins>
21    </build>
22⊖   <reporting>
23⊖      <plugins>
24⊖         <plugin>
25           <artifactId>maven-checkstyle-plugin</artifactId>
26⊖            <configuration>
27                 <configLocation>daniel_checks.xml</configLocation>
28             </configuration>
29          </plugin>
30       </plugins>
31    </reporting>
32
33 </project>
```

Then run the project as "Maven build…" and sett value site on Goals input.

Check for the html documents created on the target folder/ site folder.
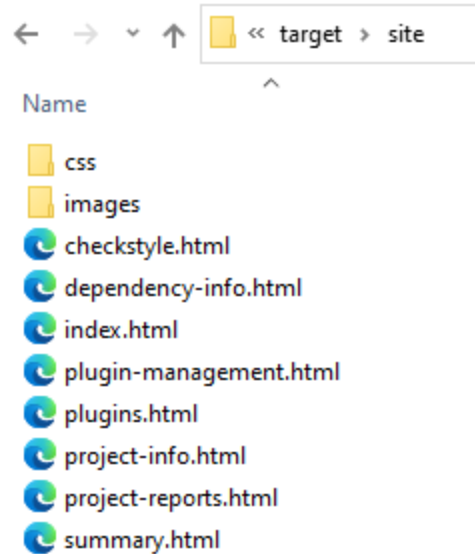
Open index.html and search for the checkstyle results.

daniel_guerrero

Last Published: 2023-05-31 | Version: 0.0.1-SNAPSHOT

daniel_guerrero

Project Documentation
- ▸ Project Information
- ▾ Project Reports
  - **Checkstyle**

Built by:
maven

Checkstyle Results

The following document contains the results of Checkstyle 🗗 9.3 with daniel_checks.xml ruleset.

Summary

Files	src="images/icon_info_sml.gif" Info	src="images/icon_warning_sml.gif" Warnings	src="images/icon_error_sml.gif" Errors
4	0	0	12

Files

File	src="images/icon_info_sml.gif" I	src="images/icon_warning_sml.gif" W	src="images/icon_error_s
daniel_guerrero/Main.java	0	0	3
daniel_guerrero/VacationPackage.java	0	0	2
daniel_guerrero/VacationPackageBuilder.java	0	0	5
daniel_guerrero/VacationPackageCalculator.java	0	0	2

Rules

Category	Rule	Violations	Severity

header	Header 🗗
	 • header
	   1: // Copyright (C) 2020
	   2: // All rights reserved
		4	src="images/icon_error_sml.gif" Error

javadoc	MissingJavadocMethod 🗗 • allowMissingPropertyJavadoc: "true" • scope: "private"	8	src="images/icon_error_sml.gif" Error

Details

Fourth:

Add 6 more modules for add rules to be checked in the above code and build again to get the new results. Module MethodName and WhitespaceAfter are obligatory.

```
25          <module name="SimplifyBooleanReturn"/>
26
27⊖         <module name="MethodName">
28             <property name="format" value="^[a-z](_?[a-zA-Z0-9]+)*$"/>
29         </module>
30
31⊖         <module name="WhitespaceAfter">
32             <property name="tokens" value="COMMA, SEMI"/>
```

Design   Source

Problems   @ Javadoc   Declaration   Console ×

<terminated> daniel_guerrero [Maven Build] C:\Users\Administrador\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.7.v20230425-1502\jre\bin

```
RNING] For this reason, future Maven versions might no longer support building such malformed projects.
FO] configuring report plugin org.apache.maven.plugins:maven-checkstyle-plugin:3.3.0
FO] 1 report detected for maven-checkstyle-plugin:3.3.0: checkstyle
FO] configuring report plugin org.apache.maven.plugins:maven-project-info-reports-plugin:3.0.0
FO] 15 reports detected for maven-project-info-reports-plugin:3.0.0: ci-management, dependencies, dependency-info
FO] Rendering site with default locale English (en)
RNING] No project URL defined - decoration links will not be relativized!
FO] Rendering content with org.apache.maven.skins:maven-default-skin:jar:1.2 skin.
FO] Generating "Checkstyle" report     --- maven-checkstyle-plugin:3.3.0:checkstyle
FO] There are 12 errors reported by Checkstyle 9.3 with daniel_checks.xml ruleset.
RNING] Unable to locate Source XRef to link to - DISABLED
RNING] Unable to locate Test Source XRef to link to - DISABLED
FO] Generating "Dependency Information" report --- maven-project-info-reports-plugin:3.0.0:dependency-info
FO] Generating "About" report          --- maven-project-info-reports-plugin:3.0.0:index
FO] Generating "Plugin Management" report --- maven-project-info-reports-plugin:3.0.0:plugin-management
FO] Generating "Plugins" report        --- maven-project-info-reports-plugin:3.0.0:plugins
FO] Generating "Summary" report        --- maven-project-info-reports-plugin:3.0.0:summary
FO] ------------------------------------------------------------------
FO] BUILD SUCCESS
FO] ------------------------------------------------------------------
FO] Total time:  8.258 s
```

Severity	Category	Rule	Message	Line
src="images/icon_error_sml.gif" Error	header	Header	Line does not match expected header line of '// Copyright (C) 2020'.	1
src="images/icon_error_sml.gif" Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	15
src="images/icon_error_sml.gif" Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	48

daniel_guerrero/VacationPackage.java

Severity	Category	Rule	Message	Line
src="images/icon_error_sml.gif" Error	header	Header	Line does not match expected header line of '// Copyright (C) 2020'.	1
src="images/icon_error_sml.gif" Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	8

daniel_guerrero/VacationPackageBuilder.java

Severity	Category	Rule	Message	Line
src="images/icon_error_sml.gif" Error	header	Header	Line does not match expected header line of '// Copyright (C) 2020'.	1
src="images/icon_error_sml.gif" Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	8
src="images/icon_error_sml.gif" Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	13
src="images/icon_error_sml.gif" Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	18
src="images/icon_error_sml.gif" Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	23

daniel_guerrero/VacationPackageCalculator.java

Severity	Category	Rule	Message	Line
src="images/icon_error_sml.gif" Error	header	Header	Line does not match expected header line of '// Copyright (C) 2020'.	1
src="images/icon_error_sml.gif" Error	javadoc	MissingJavadocMethod	Missing a Javadoc comment.	4

Fifth:

Debug the program as the checkstyle report and run for last time the maven build to confirm the code its clean.

Package Explorer ✕

- daniel_guerrero
  - src/main/java
    - daniel_guerrero
      - Main.java
      - VacationPackage.java
      - VacationPackageBuilder.java
      - VacationPackageCalculator.java
  - src/main/resources
  - src/test/java
  - src/test/resources
  - JRE System Library [J2SE-1.5]
  - src
  - target
  - daniel_checks.xml
  - pom.xml
- robinson_flores

Tabs: daniel_checks.xml | Main.java | VacationPackage.java ✕ | VacationPackageBuilder.java | VacationPackageCalculator.java

```java
1  //Copyright (C) 2020
2  // All rights reserved
3  package daniel_guerrero;
4  public class VacationPackage {
5      private String destination;
6      private int numTravelers;
7      private int duration;
```

Problems | **Javadoc** | **Declaration** | **Console** ✕

```
<terminated> daniel_guerrero (1) [Maven Build] C:\Users\Administrador\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.7.v20230425-1502
[WARNING] For this reason, future Maven versions might no longer support building such malformed projects.
[INFO] configuring report plugin org.apache.maven.plugins:maven-checkstyle-plugin:3.3.0
[INFO] 1 report detected for maven-checkstyle-plugin:3.3.0: 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, dependenc
[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:3.3.0:checkstyle
[INFO] There are 4 errors reported by Checkstyle 9.3 with daniel_checks.xml ruleset.
[WARNING] Unable to locate Source XRef to link to - DISABLED
[WARNING] Unable to locate Test Source XRef to link to - DISABLED
[INFO] Generating "Dependency Information" report --- maven-project-info-reports-plugin:3.0.0:dependency-info
[INFO] Generating "About" report           --- maven-project-info-reports-plugin:3.0.0:index
[INFO] Generating "Plugin Management" report --- maven-project-info-reports-plugin:3.0.0:plugin-management
[INFO] Generating "Plugins" report         --- maven-project-info-reports-plugin:3.0.0:plugins
[INFO] Generating "Summary" report         --- maven-project-info-reports-plugin:3.0.0:summary
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  9.679 s
[INFO] Finished at: 2023-05-31T23:21:04-05:00
[INFO] ------------------------------------------------------------------------
```

daniel_guerrero

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Project Documentation
- Project Information
- Project Reports
  - Checkstyle

Built by:
maven

Checkstyle Results

The following document contains the results of Checkstyle 9.3 with daniel_checks.xml ruleset.

Summary

Files	src="images/icon_info_sml.gif" Info	src="images/icon_warning_sml.gif" Warnings	src="images/icon_error_sml.gif" Errors
4	0	0	0

Files

File	src="images/icon_info_sml.gif" I	src="images/icon_warning_sml.gif" W	src="images/icon_error_sml.gif" E

Rules

Category	Rule	Violations	Severity

Details

Challenge:

Download and configurate eslint for react projects.


```json
{
    "env": {
        "browser": true,
        "es2021": true
    },
    "extends": [
        "eslint:recommended",
        "plugin:react/recommended",
        "plugin:prettier/recommended",
        "prettier"
    ],
    "overrides": [
    ],
    "parserOptions": {
        "ecmaFeatures": {
            "jsx":true
        },
        "ecmaVersion": "latest",
        "sourceType": "module"
    },
    "plugins": [
        "react"
    ],
    "rules": {
        "react/react-in-jsx-scope": "off",
        "react/prop-types": "off"
    }
}
```
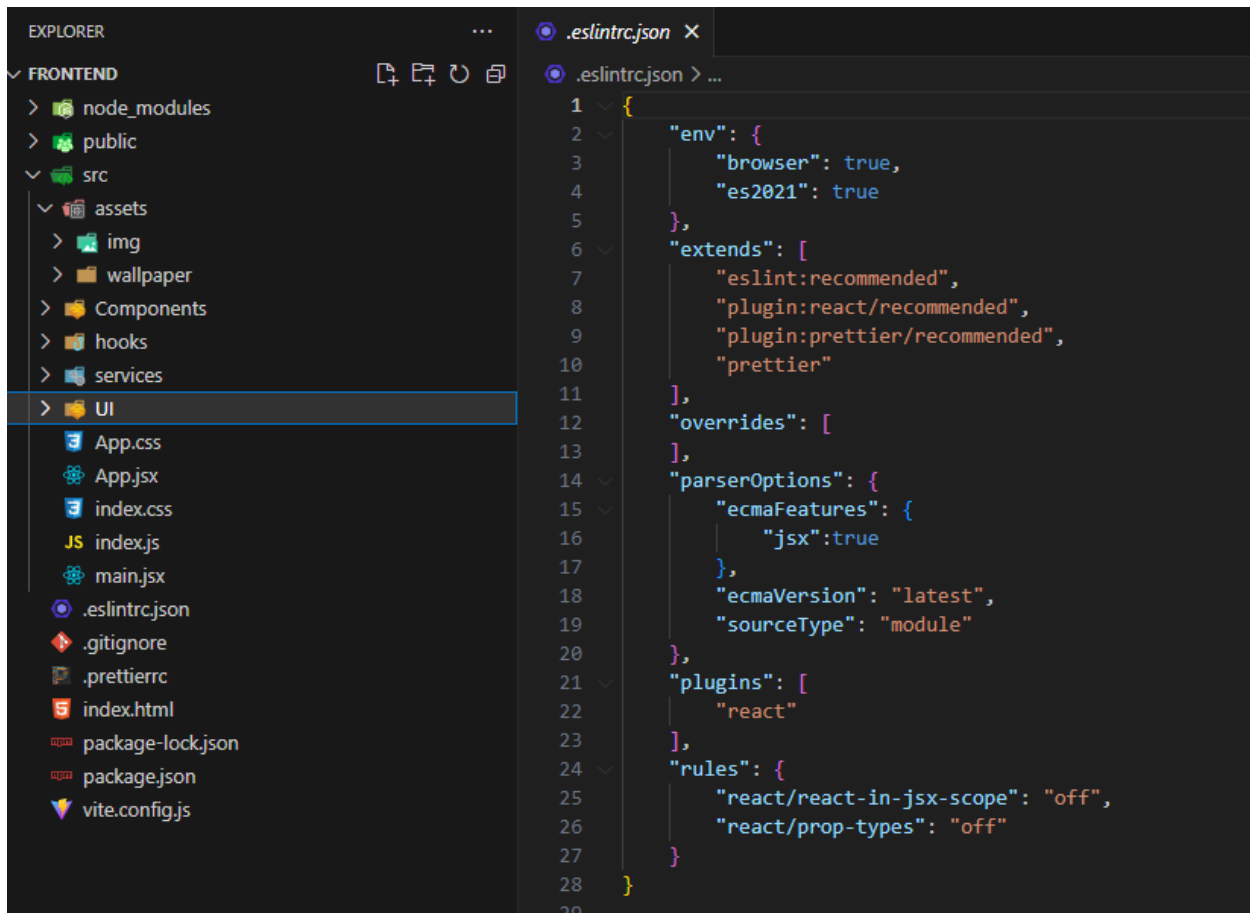
See the eslint problems and fix it.
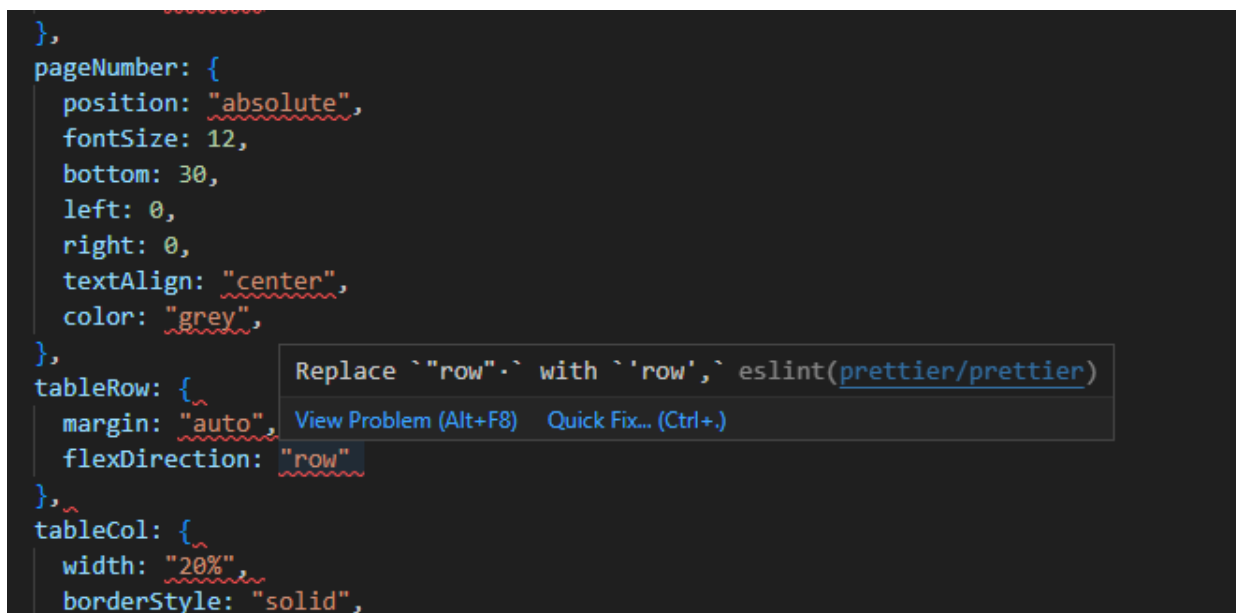

```
    },
    pageNumber: {
        position: "absolute",
        fontSize: 12,
        bottom: 30,
        left: 0,
        right: 0,
        textAlign: "center",
        color: "grey",
    },
    tableRow: {
        margin: "auto",
        flexDirection: "row"
    },
    tableCol: {
        width: "20%",
        borderStyle: "solid",
```

Replace `"row"` with `'row',` eslint(prettier/prettier)

View Problem (Alt+F8)   Quick Fix... (Ctrl+.)

```
    textAlign: "center",
    color: "grey",
  },
  tableRow: {                    Insert `,` eslint(prettier/prettier)
    margin: "auto",              View Problem (Alt+F8)    Quick Fix... (Ctrl+.)
    flexDirection: 'row'|
  },
  tableCol: {
    width: "20%",
```

```
  tableRow: {
    margin: "auto",
    flexDirection: 'row',|
  },
  tableCol: {
```

```
table: {
    display: "table
    width: "auto",         Delete `·` eslint(prettier/prettier)
    borderStyle: "s View Problem (Alt+F8)    Quick Fix... (Ctrl+.)
    borderWidth: 1,
    borderRightWidth: 0,
    borderBottomWidth: 0
  },
:
```

```
table: {
    display: 'table',
    width: 'auto',
    borderStyle: 'solid',
    borderWidth: 1,
    borderRightWidth: 0,
    borderBottomWidth: 0,
  },|
```

Cleaning code following the prettier rules form eslint.