Katherine Alexandra Tumbaco Sellan   202104485

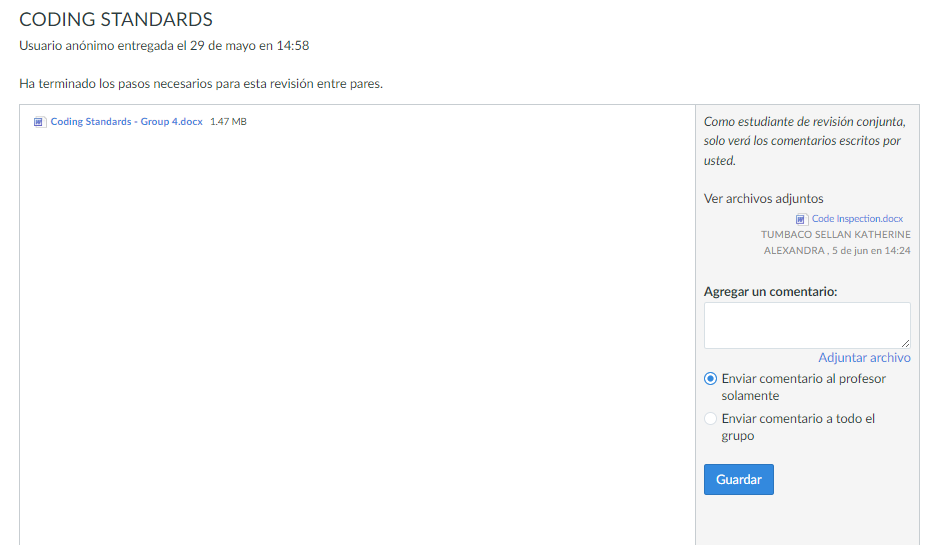
Link: [GitHub - mbravop/CodingStandardsPY: Repository for Coding Standards Workshop, section A](https://github.com/mbravop/CodingStandardsPY)

## Scoring Guidelines

|  |  |
| --- | --- |
| **Score** | **Description** |
| 5 | Excellent: Meets all the criteria with no issues. |
| 4 | Good: Meets most criteria with minor issues. |
| 3 | Satisfactory: Meets some criteria but has noticeable issues. |
| 2 | Needs Improvement: Meets few criteria with significant issues. |
| 1 | Poor: Hardly meets any criteria. |
| 0 | Not Addressed: Does not meet the criteria at all. |

**Code Inspection Rubric**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Criteria** | **Score – Y/N** | **Comments** |
| **Code Formatting** | Is the code consistently  formatted (indentation, spacing)? | 5 | This code implement correctly formatting |
| **Are line lengths reasonable and**  **within guidelines?** |  | 4 | In def sum exceeds 10 lines in code |
| **Are there unnecessary blank**  **lines or spaces?** |  | 4 | This code does have unnecessary white space lines. But it needs space |
| **Naming Conventions** | Are variable and function names descriptive and  meaningful? | 5 | The names are meaningful |
| **Are naming conventions consistent (camelCase,**  **PascalCase, etc.)?** |  | 5 | They use PascalCase. |
| **Comments and Documentation** | Are comments used where  necessary and helpful? | 5 | Does not use comment |
| **Is the code sufficiently documented to understand**  **functionality?** |  | Yes |  |
| **Are comments clear and concise?** |  | No | There are no comments |
| **Code Structure** | Is the code modular and divided into logical  functions/methods? | 5 |  |
| **Are there any long methods/functions that should**  **be broken down?** |  | Yes | In this code there is a long method sum |
| **Is there any duplicated code that**  **should be refactored?** |  | No | There is no duplicate code |
| **Logic and Functionality** | Does the code function as  intended? | No |  |
| **Are all the requirements**  **fulfilled?** |  | No |  |
| **Are there any obvious logic**  **errors?** |  | Yes | add space |
| **Are loop cases handled properly?** |  | No | Implement while |
| **Error Handling** | Are errors and exceptions properly caught and  handled? | No |  |
| **Is there any potential for**  **unhandled exceptions?** |  | No | Does not meet exceptions, implement in the future to avoid errors. |
| **Performance and Efficiency** | Are there any obvious  performance bottlenecks? | Yes |  |
| **Is the code optimized for**  **performance where necessary?** |  | Yes |  |
| **Security** | Are there any security  vulnerabilities in the code? | Yes |  |
| **Is input validation properly**  **implemented?** |  | Yes |  |



***Activity – PMD***

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

Descripción generada automáticamenteTexto

Descripción generada automáticamente

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Criteria** | **Score – Y/N** | **Comments** |
| **Code Formatting** | Is the code consistently  formatted (indentation, spacing)? | Yes | Is consistently |
| **Are line lengths reasonable and**  **within guidelines?** |  | Yes |  |
| **Are there unnecessary blank**  **lines or spaces?** |  | 5 | No use unnecessary blank lines |
| **Naming Conventions** | Are variable and function names descriptive and  meaningful? | No | Naming conventions are not used correctly |
| **Are naming conventions consistent (camelCase,**  **PascalCase, etc.)?** |  | Yes | Use camelCase |
| **Comments and Documentation** | Are comments used where  necessary and helpful? | No | Does not use comments |
| **Is the code sufficiently documented to understand**  **functionality?** |  | Yes |  |
| **Are comments clear and concise?** |  | No | Does not use comments |
| **Code Structure** | Is the code modular and divided into logical  functions/methods? | Yes |  |
| **Are there any long methods/functions that should**  **be broken down?** |  | No |  |
| **Is there any duplicated code that**  **should be refactored?** |  | No |  |
| **Logic and Functionality** | Does the code function as  intended? | Yes |  |
| **Are all the requirements**  **fulfilled?** |  | Yes |  |
| **Are there any obvious logic**  **errors?** |  | No |  |
| **Are loop cases handled properly?** |  | Yes |  |
| **Error Handling** | Are errors and exceptions properly caught and  handled? | No | Exceptions can be used in the EmailApp |
| **Is there any potential for**  **unhandled exceptions?** |  | Yes |  |
| **Performance and Efficiency** | Are there any obvious  performance bottlenecks? | Yes |  |
| **Is the code optimized for**  **performance where necessary?** |  | Yes |  |
| **Security** | Are there any security  vulnerabilities in the code? | Yes |  |
| **Is input validation properly**  **implemented?** |  | Yes |  |

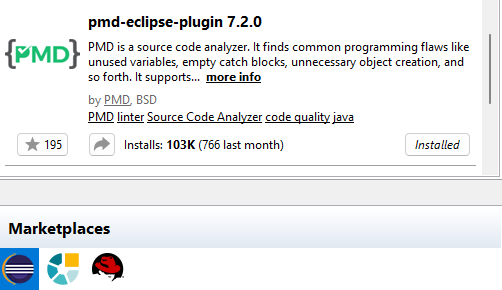
* Suggestions for improvements variable

Texto

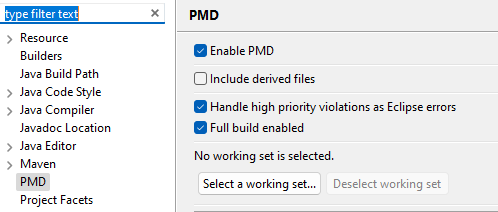
Descripción generada automáticamente

* handling exceptions in email application

***PART 2 – Install PMD***



***PART 3 – Configure the project***



***PART 4 – Using PMD***

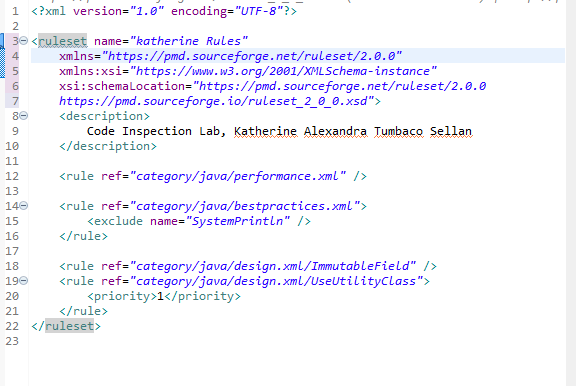
Interfaz de usuario gráfica, Tabla

Descripción generada automáticamente

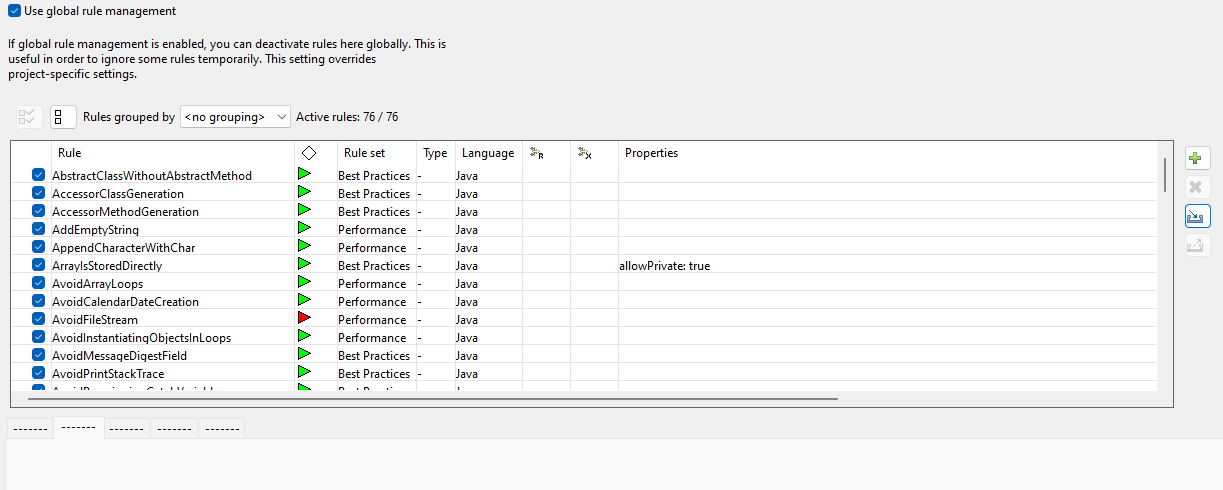
***PART 5 – Creating PMD rulesets***

Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

Descripción generada automáticamente



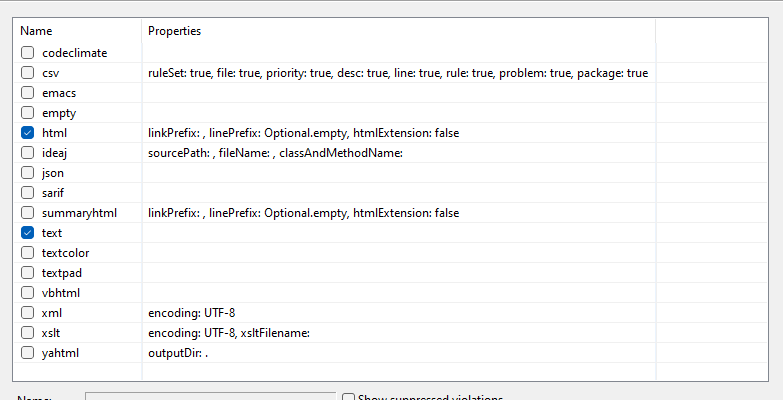
Delete group rules and import 



Clear Violations

Interfaz de usuario gráfica, Aplicación, Tabla

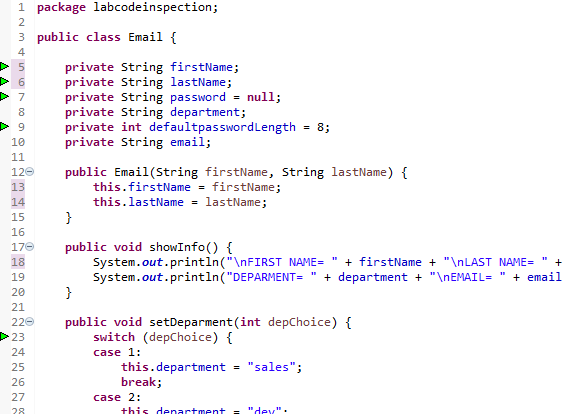
Descripción generada automáticamente

***Part 6: Generating a PMD report*** ******

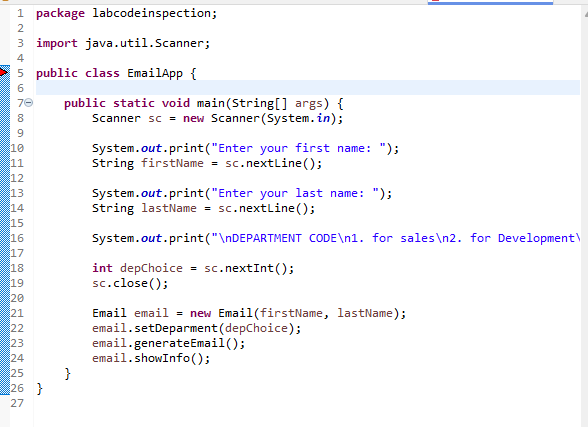
***Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente***

***Part 7: Suppressing PMD Rules***



Check the violation in EmailApp and solution.



Texto

Descripción generada automáticamente

***Part 8: Detecting Cut-and-Paste with CPD***

Interfaz de usuario gráfica, Texto, Aplicación

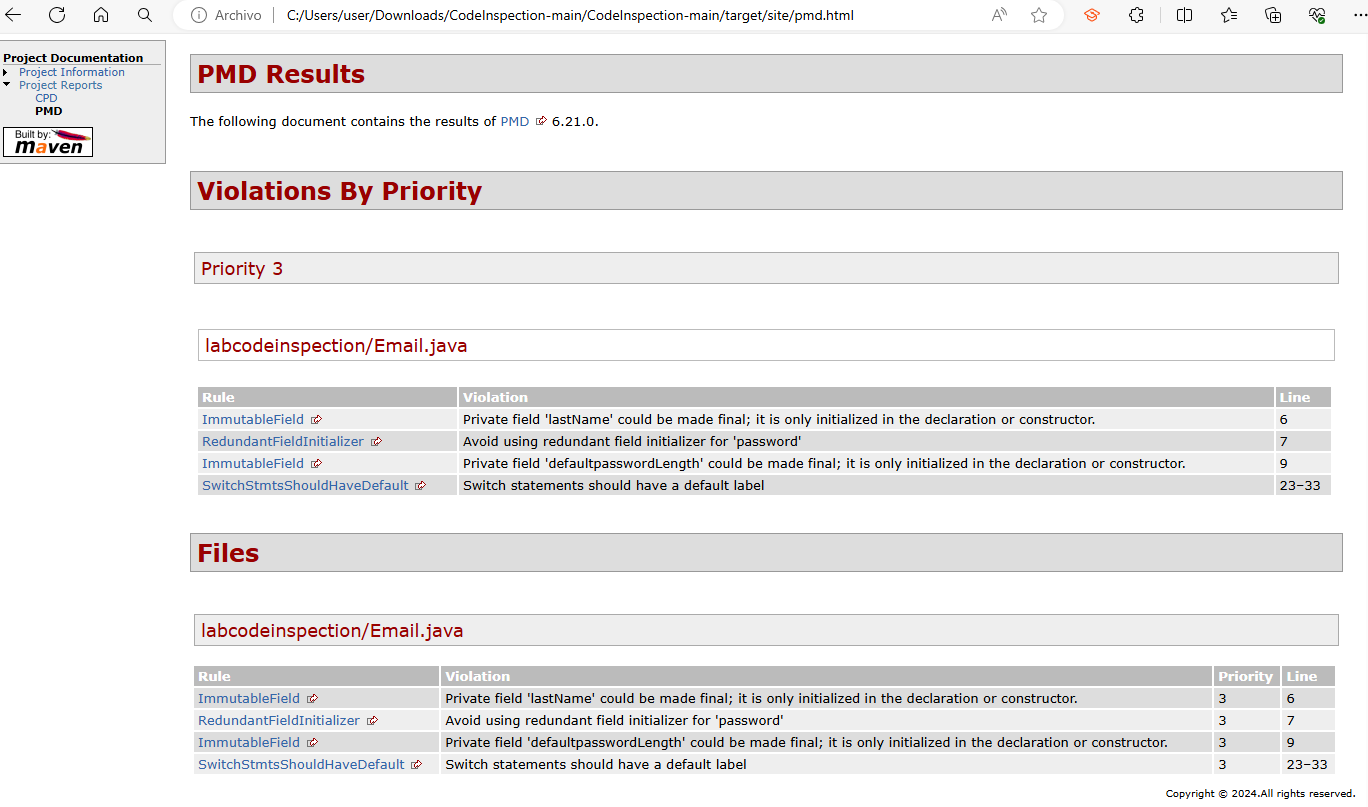
Descripción generada automáticamente

***Part 9: PMD and Maven***

Texto

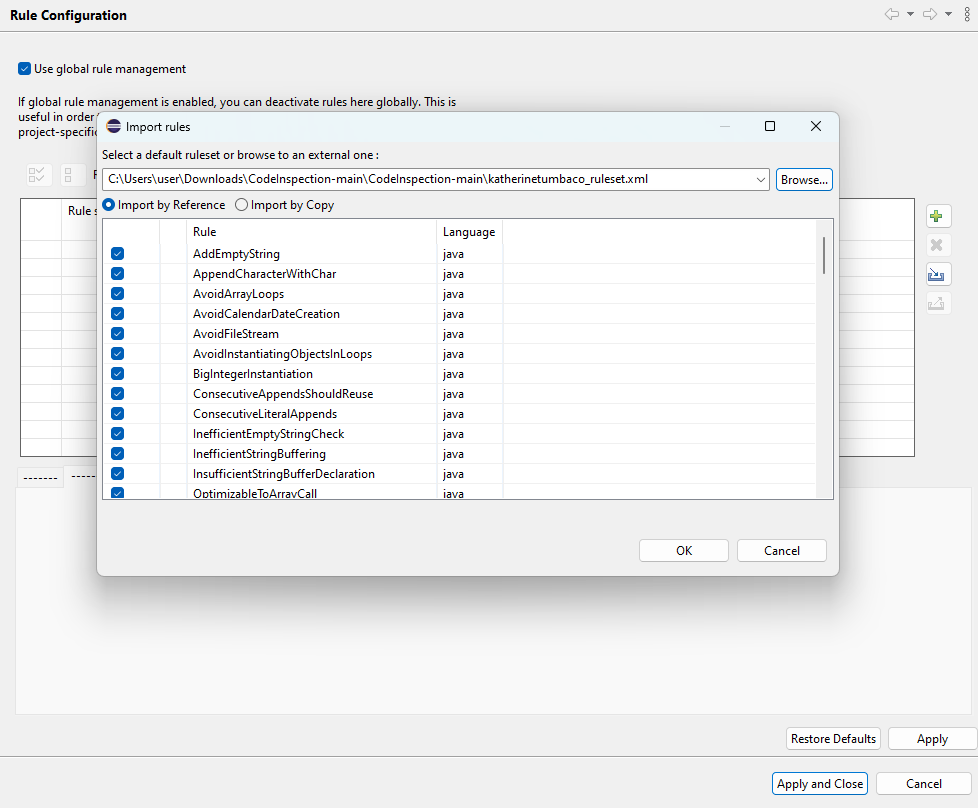
Descripción generada automáticamente

Forma

Descripción generada automáticamente

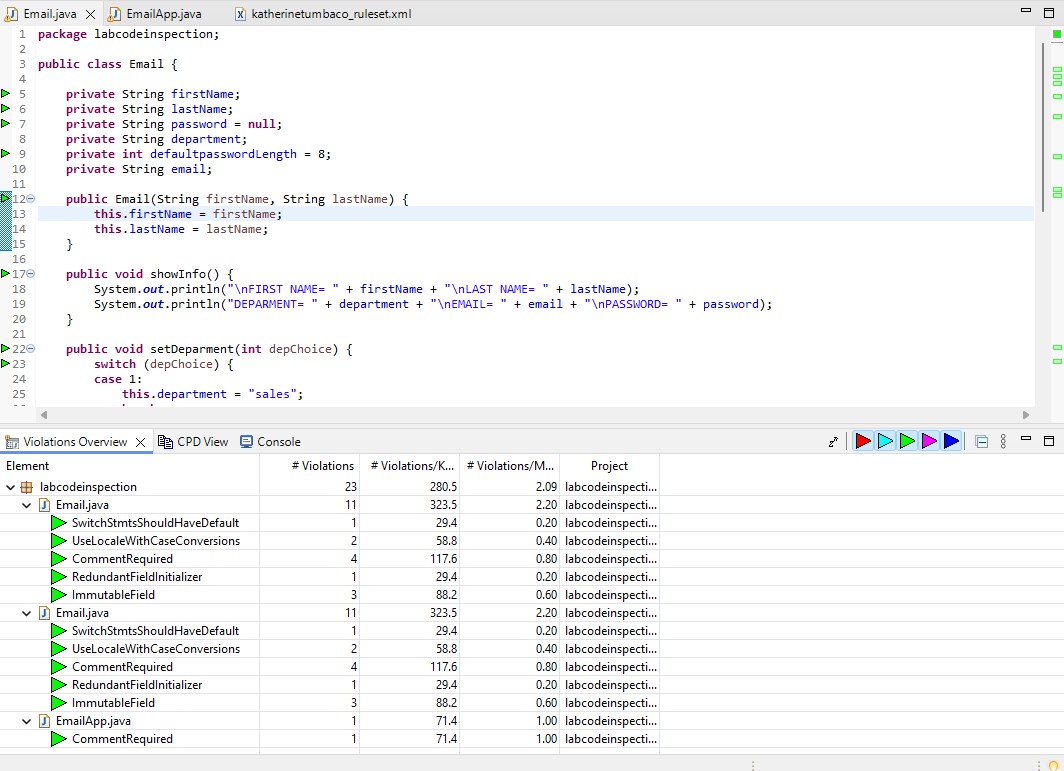
***Development***

I apply the rules

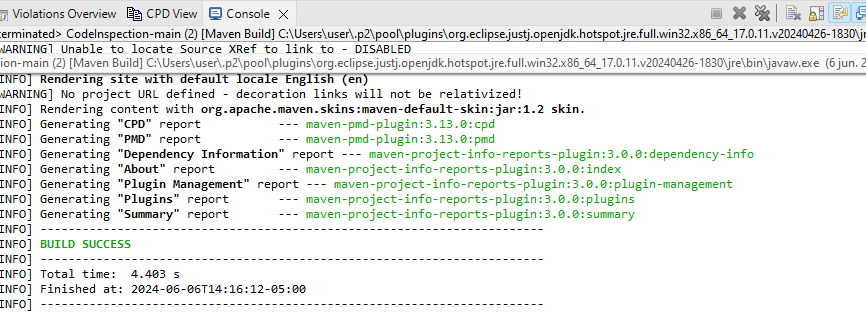


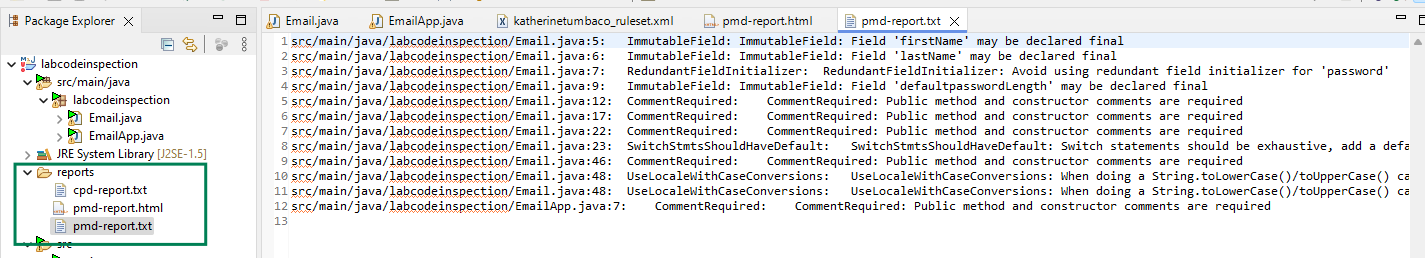
Interfaz de usuario gráfica, Aplicación, Tabla, Excel

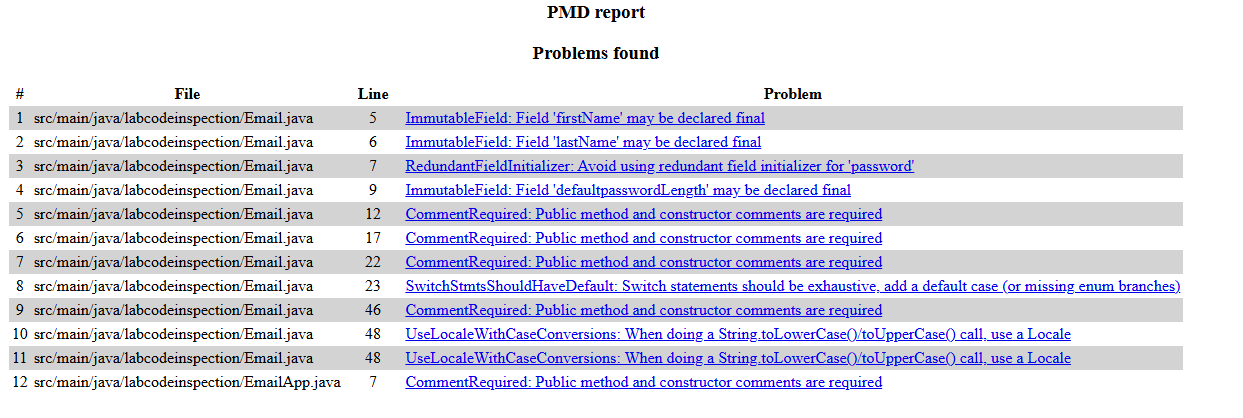
Descripción generada automáticamente

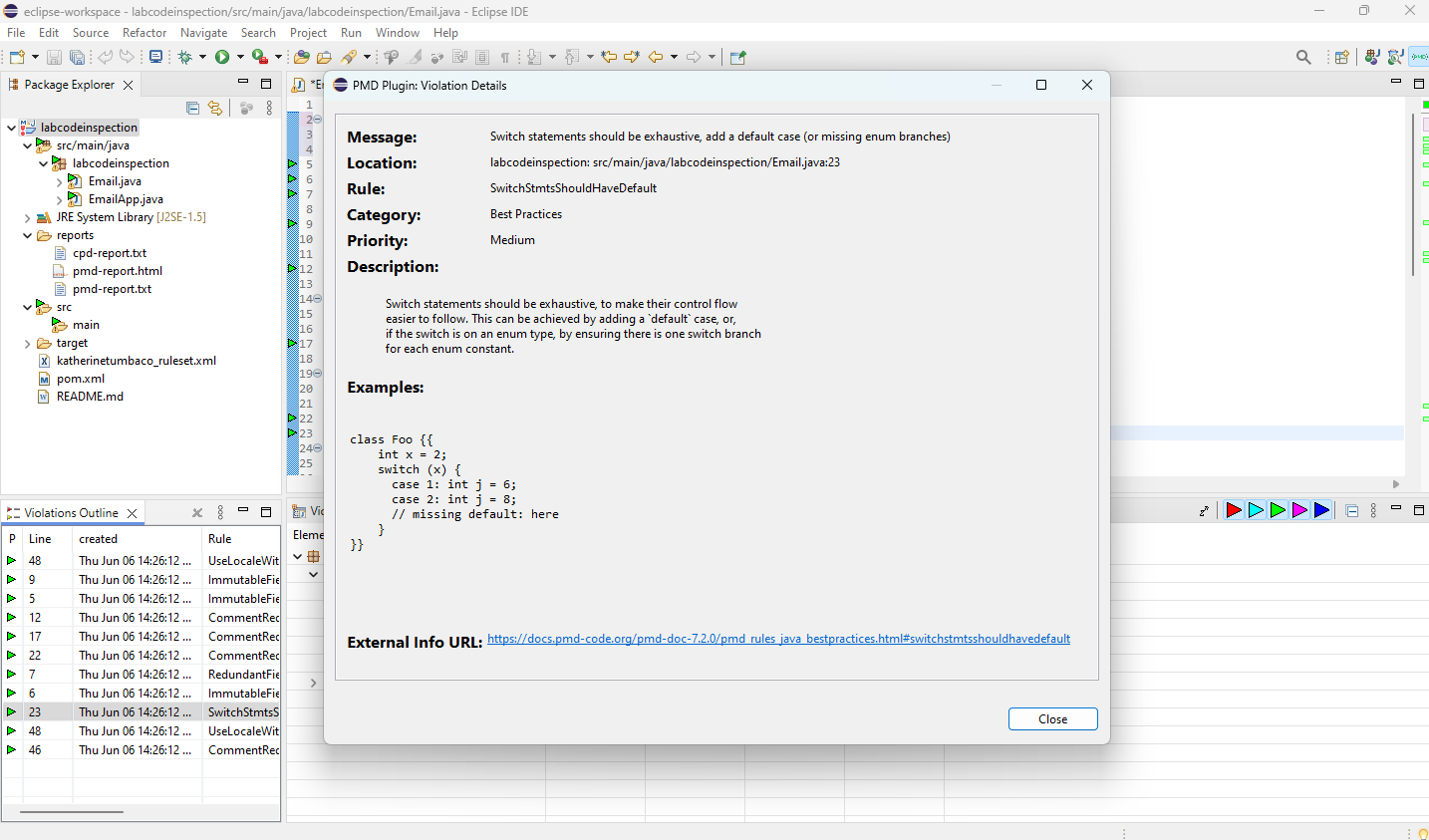


I do Run –> Maven Build

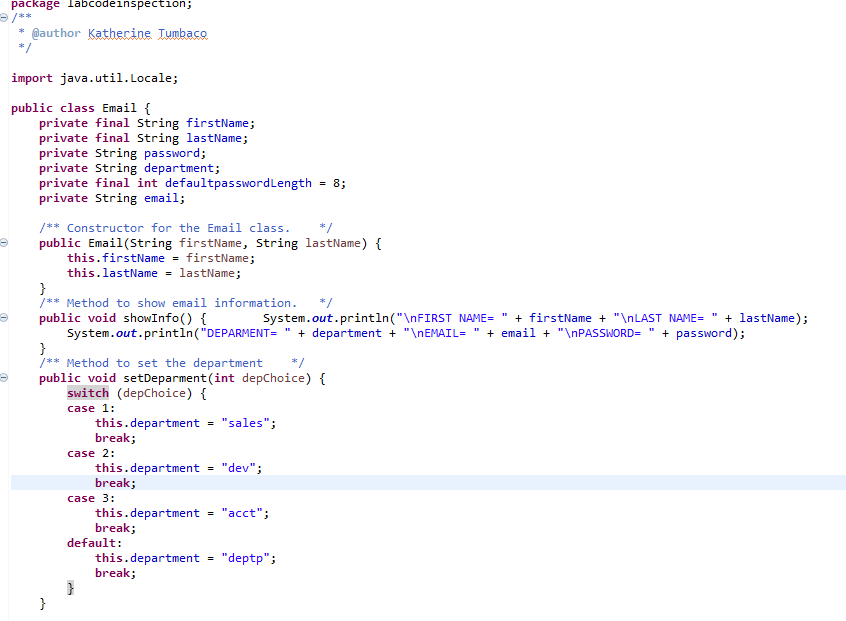


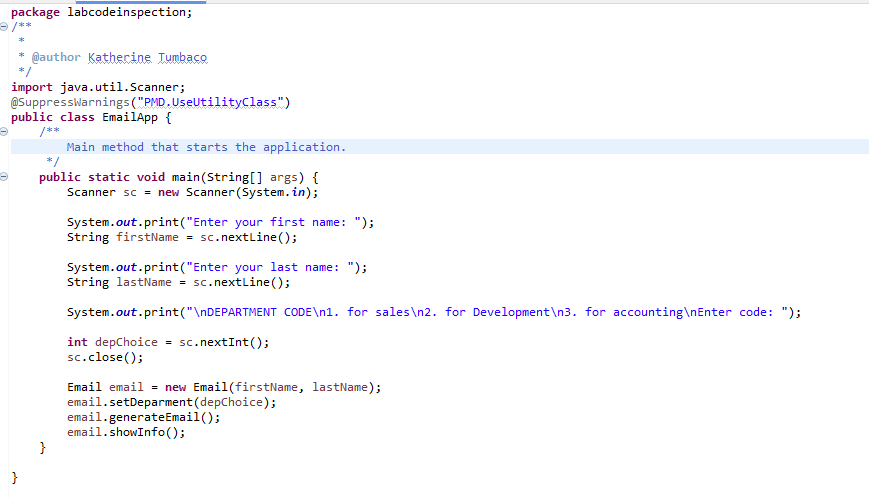




We proceed to look at the details of the violations and correct them.

Code corrected

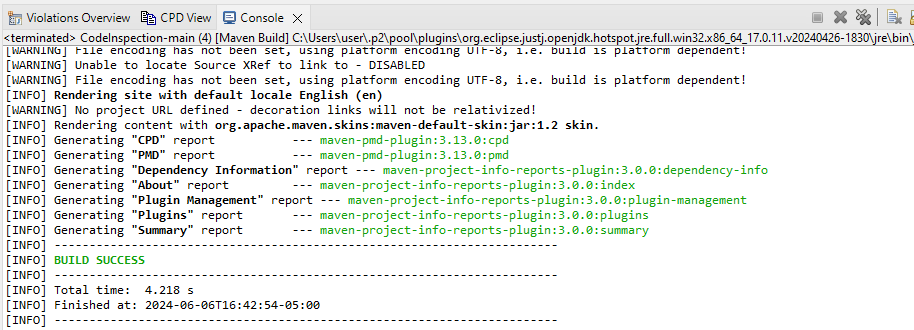
Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

Descripción generada automáticamente

There is no violationInterfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente

I do Run As-> Maven Build



Report is generated and no problems are found.Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamenteInterfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

Descripción generada automáticamente

***Repository:***

<https://github.com/katumbac/CodeInspection.git>

***Notes:***

Rule *BeenMembersShouldSerialize* was not applied because that rule was renamed *NonSerializableClass* and in Eclipse the rule could not be found under that name.

