

Name: Jefferson Eras Lindao

SOFTWARE ENGINEERING II

Lab Report

Introduction

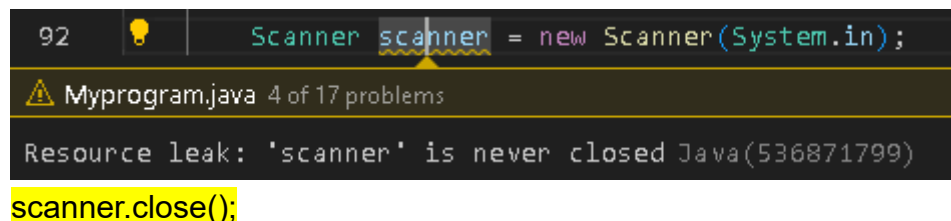
I chose the tool “SonarLint” and “CheckStyle for Java”, to have 2 perspectives both in the syntax part and in the semantic analysis part, and I am also more familiar with the Java language.

Section B

Criteria: lab report content

pdf uploaded in “Aula Virtual” with All pieces of evidence: screenshots of the process and first coding standards reports and fixed issues.

Criteria: fixed issues

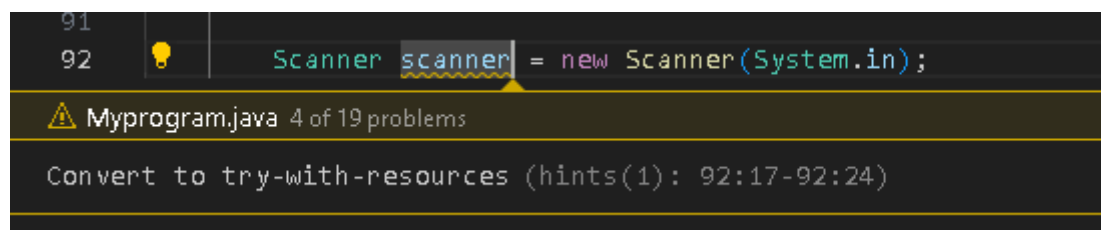


```
92  Scanner scanner = new Scanner(System.in);
```

Myprogram.java 4 of 17 problems

Resource leak: 'scanner' is never closed Java(536871799)

scanner.close();



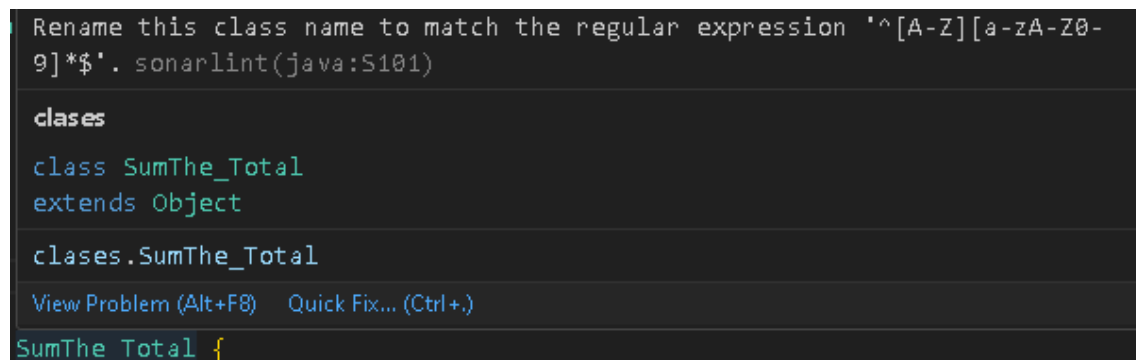
```
91  Scanner scanner = new Scanner(System.in);
```

Myprogram.java 4 of 19 problems

Convert to try-with-resources (hints(1): 92:17-92:24)

```
try (Scanner scanner = new Scanner(System.in)) {  
    while (true) {
```

Syntax error with “SonarLint”



```
Rename this class name to match the regular expression '^[A-Z][a-zA-Z0-9]*$'. sonarlint(java:S101)
```

```
classes  
class SumThe_Total  
extends Object  
  
classes.SumThe_Total  
View Problem (Alt+F8) Quick Fix... (Ctrl+.)  
SumThe_Total {
```

SumTheTotal

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```
Rename this local variable to match the regular expression '^[a-z][a-zA-Z0-9]*$'. sonarlint(java:S117)
```

```
double totalC_  
  
double totalC_ = clases.SumTheTotal.calc(Order, Menu)
```

[View Problem \(Alt+F8\)](#) [Quick Fix... \(Ctrl+.\)](#)

```
totalC_ = baseCost;
```

totalC

Dining Experience Manager

Requirements:

1. Menu and Meal Selection

```
PS E:\IS2_PRACTICAS\Taller1\Taller1_CodingStandards> & 'C:\Program Files  
EFFER~1\AppData\Local\Temp\cp_3k201tnscf5ha02zxkm1n000w1.argfile' 'clas  
Menu:  
Burger: $10.0  
Pizza: $15.0  
Pasta: $12.0  
Salad: $8.0  
Enter meal name to order or 'done' to finish: Burger  
here i am in aval method
```

2. Meal Quantity Validation

```
Enter quantity for Burger: 5
Menu:
Burger: $10.0
Pizza: $15.0
Pasta: $12.0
Salad: $8.0
Enter meal name to order or 'done' to finish: 
```

3. Cost Calculation

4. Special Offer Discount

```
Enter meal name to order or 'done' to finish: Pizza
here i am in aval method
Enter quantity for Pizza: 2
Menu:
Burger: $10.0
Pizza: $15.0
Pasta: $12.0
Salad: $8.0
Enter meal name to order or 'done' to finish: done
Your Ord:
Burger: 5
Pizza: 2
Total Cost: $66.5
Confirm order (yes/no): no
Order canceled.
-1
```

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Burger = $5 * 10 = \$50$

Pizza = $2 * 15 = \$30$

SubTotal = $\$80 + \$5(\text{Base}) = \$85$

Cantidad = 7 meal > 5 → Descuento = 10% → $85 * 0.10 = 8.5$

Total = $\$85 - \$8.5 = \$76.5$

Descuento Especial = $76.5 > 50 \rightarrow \text{Descuento Especial} = \10

Total = $\$76.5 - \$10 = \$66.5$

5. Meal Availability

6. Maximum Order Quantity

```
Enter meal name to order or 'done' to finish: Pez
here i am in aval method
meal not available. Please re-select.
Menu:
Burger: $10.0
Pizza: $15.0
Pasta: $12.0
Salad: $8.0
Enter meal name to order or 'done' to finish: Pasta
here i am in aval method
Enter quantity for Pasta: 200
Invalid quantity. Please re-enter.
```

7. User Confirmation

8. Output

9. Error Handling

```
Menu:
Burger: $10.0
Pizza: $15.0
Pasta: $12.0
Salad: $8.0
Enter meal name to order or 'done' to finish: done
Your Ord:
Total Cost: $5.0
Confirm order (yes/no): no
Order canceled.
-1
```

Conclusion

At the conclusion of this workshop, the importance of using static analysis tools such as SonarLint and CheckStyle for Java to improve code quality and ensure compliance with coding standards is highlighted. Through the use of these tools, greater consistency in programming style is achieved, possible errors are identified, and good software development practices are encouraged.

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Recommendations

In this workshop, we have explored using tools like SonarLint and CheckStyle for Java to improve code quality and maintain consistent coding standards, my recommendation are:

- Integrate static analysis tools into the workflow before checking for errors ourselves
- Second, review the lexical and semantic analysis.
- review documentation and business rules

GitHub Repository - URL:

https://github.com/JeffErasLindao/Taller1_CodingStandards.git