

Universidad de las Fuerzas Armadas "ESPE"
Software Engineering
Object Oriented Programming

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Team: Innova Code

NRC: 3682

Evaluated team: EMCL.JAVA

Errors in high cohesion because of empty methods, they're not doing what they need to.

```
private void IDSearchActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
}  
  
private void jTextField6ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
}  
  
private void jTextField7ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
}  
  
private void jButton9ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
}  
  
private void jButton10ActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
}
```

```

175
176 private void txtTypeActionPerformed(java.awt.event.ActionEvent evt) {
177     // TODO add your handling code here:
178 }
179
180 private void txtNameActionPerformed(java.awt.event.ActionEvent evt) {
181     // TODO add your handling code here:
182 }
183
184 private void txtIdActionPerformed(java.awt.event.ActionEvent evt) {
185     // TODO add your handling code here:
186 }
187
188 private void txtDescriptionActionPerformed(java.awt.event.ActionEvent evt) {
189     // TODO add your handling code here:
190 }
191
192 private void txtPriceActionPerformed(java.awt.event.ActionEvent evt) {
193     // TODO add your handling code here:
194 }
195
196 private void btnAddActionPerformed(java.awt.event.ActionEvent evt) {
197     // TODO add your handling code here:
198 }
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```

```

289 private void txtNameActionPerformed(java.awt.event.ActionEvent evt) {
290     // TODO add your handling code here:
291 }
292
293 private void txtIdActionPerformed(java.awt.event.ActionEvent evt) {
294     // TODO add your handling code here:
295 }
296
297 private void txtDirectionActionPerformed(java.awt.event.ActionEvent evt) {
298     // TODO add your handling code here:
299 }
300
301 private void txtEmailActionPerformed(java.awt.event.ActionEvent evt) {
302     // TODO add your handling code here:
303 }
304
305 private void txtBranchOfficeActionPerformed(java.awt.event.ActionEvent evt)
306     // TODO add your handling code here:
307 }
308
309 private void txtPhoneActionPerformed(java.awt.event.ActionEvent evt) {
310     // TODO add your handling code here:
311 }
312
313 private void btnHomeActionPerformed(java.awt.event.ActionEvent evt) {
314     // TODO add your handling code here:
315 }

```

```

20 public Bill() {
21 }

```

```

64 public void printBil(ShoppingList list){
65
66 }

```

```

18 public Cosmetic() {
19 }

```

```

20
21 //Problems in High Cohesion because are some events that are empty
22

```

```

72 public void calculateStock(){
73
74 }

```

```

75
76 //Problems in High Cohesion because are some events that are empty
77

```

```

17 public FinalConsumer() {
18 }
19
20 //Problems in High Cohesion because are some events that are empty
21
56 public void printFinalConsumer(){
57 }
58
59 //Problems in High Cohesion because are some events that are empty
60
61
18 public Medicins() {
19 }
20
21 //Problems in High Cohesion because are some events that are empty
22
71 public void CalculateStock(){
72 }
73
74 //Problems in High Cohesion because are some events that are empty
75
22 public Pharmacy() {
23 }
24
25 //Problems in High Cohesion because are some events that are empty
26
19 public ShoppingList() {
20 }
21
22 //Problems in High Cohesion because are some events that are empty
23
66 public void ArrayList(Product product){
67 }
68
69 //Problems in High Cohesion because are some events that are empty
70

```

This is also a high cohesion problem because a parameter is used

```

public BillController(FrmBill v) {
    this.vista=v;
    this.vista.btnSave.addActionListener(this);
}

public LoginController(LoginFrm v){
    this.vista = v;
    this.vista.btnStart.addActionListener(this);
}

```

```

public ProductController(ProductFrm v) {
    this.vista=v;
    this.vista.btnAdd.addActionListener(this);
}

```

These examples are wrong because the methods are used in the wrong place, so the modular reasoning is affected.

```

18 public class ConexionClient {
19     DB baseDatos;
20     DBCollection coleccion;
21     BasicDBObject documento = new BasicDBObject();
22     MongoClientURI uri = new MongoClientURI("mongodb+srv://Esteban:pooEspel23@cluster0.seaw1.mongodb.net/Sanamed?
23
24 //Problems in Modular Reasoning because the conexion should be a method
25

```

```

26 public ConexionClient()
27 {
28     try{
29         MongoClient mongo = new MongoClient(uri);
30         baseDatos = mongo.getDB("Sanamed");
31         coleccion = baseDatos.getCollection("customers");
32         System.out.println("Conexion a base de datos exitoso.");
33     }
34     catch(Exception e)
35     {
36
37     }
38 }

```

```

18 public class ConexionProduct {
19     DB baseDatos;
20     DBCollection coleccion;
21     BasicDBObject documento = new BasicDBObject();
22     MongoClientURI uri = new MongoClientURI("mongodb+srv://Esteban:pooEspel23@cluster0.seaw1.mongodb.net/Sanamed?
23
24 //Problems in Modular Reasoning because the conexion should be a method
25

```

```

26 public ConexionProduct()
27 {
28     try{
29         MongoClient mongo = new MongoClient(uri);
30         baseDatos = mongo.getDB("Sanamed");
31         coleccion = baseDatos.getCollection("products");
32         System.out.println("Conexion a base de datos exitoso.");
33     }
34     catch(Exception e)
35     {
36
37     }
38 }

```

High cohesion is affected, these methods are unnecessary because of the graphic interfaces.

```

@Override
public String toString() {
    return "CreditCard{" + "numberOfCard=" + numberOfCard + '}';
}

//Problems in High Cohesion because this code has an Unnecessary toString;

```

```

82  @Override
83  public String toString() {
84      return "Client{" + "name=" + name + ", id=" + id + ", Direction=" + Direction + ", email=" + email + ", bra
85  }

73  @Override
74  public String toString() {
75      return "Product{" + "type=" + type + ", name=" + name + ", id=" + id + ", Description=" + Description +
76  }
77
78  //Problems in High Cohesion because this code has an Unnecessary toString;

```

Low coupling is affected with these methods because it is being created to be called only for running the program, with no bases.

```

23  public CreditCard() {
24      numberOfCard=0000;
25  }
26
27  //Problems in Low Coupling because the method CreditCard() is created with no bases
28

44  public ShoppingList getShoppingList() {
45      return shoppingList;
46  }
47
48  //Problems in Low Coupling and High Cohesion because the return of the method is created without bases and is no
49

```

Low coupling is being affected because this class does not have to be in model. It's not even used all along the code.

The screenshot shows an IDE with a project structure on the left and a code editor on the right. The project structure includes a package 'ec.edu.espe.Sanamed.view' with files like 'FrmBill.java', 'LoginFrm.java', 'MenuSanamed.java', 'ProductFrm.java', and 'ProductsSearch.java'. The code editor shows a class with methods for user management, including 'mostrarInformacionPersona' and 'private void mostrarInformacionPersona'. A comment at the bottom of the code states: '//This class shouldn't be here'.