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**Code smells**

* Data class

**Uma imagem com texto

Descrição gerada automaticamenteIllustrating code snippet:**

**Location:**

ganttproject>src>main>java>net>sourceforge>ganttproject>action>zoom>

ZoomActionSet.java

**Explanation:**

It´s a too small class because only contain data and two getter method. There is no real functionality and then it´s no necessary class.

**Refactoring Proposal:**

These behaviors can be directly placed on the class that need interact with those objects.

* Message Chain

Uma imagem com texto

Descrição gerada automaticamente**Illustrating code snippet:**

**Location:**

ganttproject>src>main>java>net>sourceforge>ganttproject>task>dependency>

constraint>Constraintlmpl.java (line 82-83)

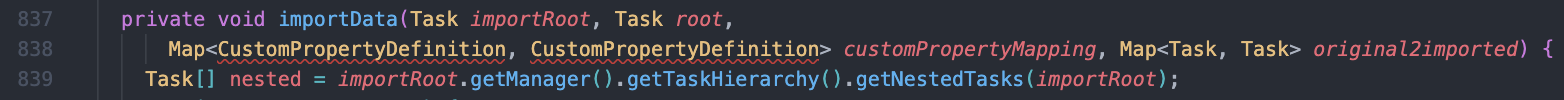
**Explanation:**

The code is calling to get an object back, and then calling again, getting another object to invoke another method and so on. It has long message chains, which can cause rigidity, complexity and makes code harder to test independently.

**Refactoring Proposal:**

Consider the e Law of Demeter, trying to not violate them, as they specify which methods are allowed to call.

* Long Parameter List

**Illustrating code snippet:**

**Location:**

ganttproject>src>main>java>net>sourceforge>ganttproject>task>

TaskManagerImpl.java

**Explanation:**

This method has a long parameter list that can be difficult to use and confused to understand. That can also increase the chance of something going wrong.

**Refactoring Proposal:**

Introduce parameter objects.