

Software Engineering

Refactoring

3 Ba INF 2018-2019

Stephen Pauwels

10/12/2018

1 Practical

- Deadline: **December 16, 23u55**

2 Context

Refactoring is a crucial step in order to keep the code clean and easily maintainable and adaptable. In this project we will take a look at 4 possible refactoring techniques: *Extract Method*, *Move Behaviour Close to the Data*, *Eliminate Navigation Code* and *Transform Self Type Check*.

3 Assignment

1. Read the following tutorial: <http://lore.ua.ac.be/Research/Artefacts/refacLab/>. Explain the 4 different techniques using the following questions:
 - What do they do, what is the goal of applying the technique?
 - When do we use them, what are the symptoms in the code?
 - What are the benefits of applying this techniques?
 - How do you apply them?

2. An updated version of the source code is available at blackboard. Analyze the new **Payments** package. Use every refactoring technique you just learned at least once to improve the quality of the code. Make a detailed list of the refactorings you apply and explain why they improve the quality of the code.
3. Search in the rest of the code for code that you can refactor, maintain a detailed list of all applied techniques and add it to your report.