OODP - Object Oriented Design and Programming
Exercise 3

1 Instructions

The goal of this exercise is for you to demonstrate your ability to learn a new design pattern.

1.1 Coding demonstration

Write a tutorial on the 'Proxy' design pattern. The tutorial should contain the following:

- A description of the 'Proxy' design pattern that includes at least the UML class diagram and explanation of the motivation for using the design pattern.

- Initial example code which does not include any design pattern.

- Snippets and explanation of how to refactor the 'Proxy' design pattern into the initial example code (using the Eclipse IDE).

- Write code demonstrating the 'Proxy' design pattern together with another design pattern of your choice. In addition to the code you should:

  - Explain why you chose the other design pattern.
  - Give a UML class diagram of the combined construction.

  For this case there is no need to show how to refactor the code.

1.2 Marking

- 45pts for 'Proxy' only design pattern part

- 45pts for the combined design-patterns part

- 10pts for proper submission

2 Submission Guidelines

- All files should contain your name in a comment at the top of the file.

- A project named Forename_Surname-1, e.g. State-Martin_OShea-1, which includes the initial code, and at least one test that demonstrates how the code works.

- A project named Forename_Surname-2 which includes the refactored initial code, and at least one test that demonstrates how the code works.

- A project named Forename_Surname-3 which includes the code for the combined construction, and at least one test that demonstrates how the code works.

- The projects should be stored in Git repositories (or in a single repository if you know how).

- Your submission should include:

  1. The tutorial in PDF or Word format (including the source for your knowledge on the 'Proxy' pattern).
  2. A zip file containing a copy of all the Git repositories (instructions on how to do this can be found at `http://www.dcs.bbk.ac.uk/~oded/OODP12/HW/Ex2Inst.html`).

3 General Guidelines

- In case of submission issues with BLE, please contact the TA:
  Martin O'Shea, e-mail: martin@dcs.bbk.ac.uk.
  Please note, replies may be sent from different email addresses.

- Questions about the assignment are welcome, but they will not be answered on the day of submission.

- We will only look at your submission after you submit it and not beforehand.

4 Submission Deadline

- On time submission: Wednesday, 30th of April, 2012 @ 23 55 hrs.

- Late submission: Wednesday, 14th of May 2012 @ 23 55 hrs.