

# CSSE 374: Lab 8-2

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## Background

In this lab, I would like you to be creative and formulate your own problem as well as solve that problem using the Proxy pattern. This lab serves two purposes:

1. It will help you not only devise a solution to a problem but also define/re-define a problem and understand the interaction between a problem and its solution from start to end.
2. If I have bored you with previous labs, hopefully this assignment will rekindle your passion to work on your own novel idea that you find enthralling.

Create **Answer.pdf** in the **Lab8-2/docs** folder to document this lab. Here are the guidelines:

1. Formulate a **new problem** whose solution is not identical to the code provided in the **Lab 8-2/src/headfirst** package.
2. Describe the problem under the **Background** section in **Answer.pdf**.
3. Propose a **feature** that solves the problem under the **Feature** section in **Answer.pdf**. Provide enough description for prospective students to be able to understand what needs to be done but does not give away the solution right away. It should make them think how to devise the solution.
4. Design a solution to the problem in the **Design** section using UML class diagram. Explain your design in a few lines.
5. If your problem needs initial code, please put them under the **Lab8-2/src/problem** package. Also implement the necessary test cases under the **Lab8-2/test/problem** package.
6. Implement your solution in the **Lab8-2/src/solution** package. Your solution must **use the Proxy pattern** at the bare minimum.
7. Implement necessary test cases for the solution in the **Lab8-2/test/solution** package.

## Grading

You will be graded based on the following criteria:

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|---|-------------|
| 1. Novelty of the problem                         | [5 points]  |
| 2. Clarity of the Specification                   | [5 points]  |
| 3. Technical maturity of the problem and solution | [25 points] |
| 4. Test cases                                     | [10 points] |
| 5. Overall quality of the work                    | [5 points]  |

## Deliverable

Bundle your project in the **zip** format [**not rar**] and turn it in on Moodle.