

**Assignment 13**

(Java Programming Practices)

(Submitted in **Lab on Wednesday**, 4/21/2010 for **10%bonus**)(Submitted by **1:40pm on Friday**, 4/23/2010 **without penalty**)

Your name:	Score:
------------	--------

## Important Notice:

1. Have the Instructor check your submission by the **due time**:
  - If you **cannot** complete by due time, you need to submit your project by **email** (attach your project in a **single compressed file with meaningful names** for your projects and file(s)).
  - Late-submission **penalty** will be applied for any submissions after the due time.
2. The full score for this assignment is 100 points, **15%** of which go to your **Java code programming style** (if you have followed the Java Code Convention).

You need to use your **textbook (8<sup>th</sup> edition)** for this assignment (if you *don't* have the textbook, you may use *the slides on the course website*)—when you have completed the assignment, have the instructor check your projects and sign on the assignment papers, and return them to the instructor (**No email** submissions are required).

1. Practice with Fig. 8.3, and Fig. 8.4 (not necessarily creating NetBeans projects) and pay attention to the Yellowish-shadowed part of the code and learn how to use “**this**” reference.

2. Practice with sample code in Fig. 8.1 and Fig. 8.2:
  - a. Create a NetBeans project for this task.
  - b. Read the sample code thoroughly till you understand the design and implementation completely.
  - c. Draw a UML class diagram for the class *Time1* in the following space:

- d. By using Fig. 8.2 (the class *Time1Test* code and the *Output*), ***without referring to Fig. 8.1***, implement the class *Time1* based on the UML diagram you just drawn above in the following space (i.e., handwrite the Java code for the class *Time1*), then compare your code with the Fig. 8.1, and make necessary corrections.

3. Practice with sample code in Fig. 8.5 and Fig. 8.6:
  - a. Create a NetBeans project for this task.
  - b. Read the sample code thoroughly till you understand the design and implementation completely.
  - c. Draw a UML class diagram for the class *Time2* in the following space:

- d. By using Fig. 8.6 (the class *Time2Test* code and the *Output*), ***without referring to Fig. 8.5***, implement the class *Time2* based on the UML diagram you just drawn above in the following space (i.e., handwrite the Java code for the class *Time1*), then compare your code with the Fig. 8.5, and make necessary corrections.