SE 450: Object-Oriented Software Development
Assignment 1—Due April 4, 2018

Model Consistency and Translating UML to Java Code

Introduction

This assignment has two goals:

- To give you an opportunity to install and test some of the basic development tools you will need for the remainder of the quarter, and
- To provide you with some practice in reading UML notation and translating that to working code.

Problem Description and Application Requirements

You are to write a text-based Java program that implements all the elements of the model consistency example (lecture 1, slides 28 and 29) we discussed in class. The application takes a single string argument and echoes it back as part of a greeting. The interaction should look similar to the following (user input is in **bold** type):

```
C:\>java HelloRunner SE450
This is your HelloHelper speaking...
Hello SE450!
```

Other requirements are:
1. The application must implement as closely as possible the design specified in the presentation slides.
2. The application must run directly from the command line and must not use any graphical interfaces. All input and output is directed through the console window.
3. If the user fails to provide an argument to the program, it should respond by indicating the proper usage:

```
C:\>java HelloRunner
Usage: HelloRunner <name>
```

Technical Requirements

- The application must be written in Java. Your code should be compatible with Java SE 9.

- The application *must* use a text-based user interface, *not* a GUI interface.

- **Only features and capabilities that are part of the standard Java SDK may be used in the application**.

- Check slides 29 for the correct package configuration.

- The application will be evaluated based on program correctness (compilation and execution), quality of code and documentation, and satisfaction of requirements.

Development Tools

Required:
- Java SE9
- IDE (IntelliJ IDEA or Eclipse)
- Tool to create Zip file of Java source code

Submission and Grading

Submit a Zip file containing the project folder for your application to D2L on the assignment due date. Do not submit `class` files. Please name your Zip file with your last name, first name, and the assignment number. For example: Mahmud_Luai_01.zip

You must include instructions how how to run your code in your IDE of choice.

Your code should compile and run without error, and satisfy the requirements set forth elsewhere in this document.