# CS 151: Object-Oriented Design

Fall Semester 2013

Department of Computer Science San Jose State University Prof. Ron Mak

## Assignment #3

Assigned: Tuesday, September 24 Due: Friday, October 4 at 11:59 PM Team assignment, 100 points max

### First version of your application

Write the first version of your Rock-Paper-Scissors game application.

- This should be a command-line-only version (no GUI).
- The number of throws per match should be a command-line argument when you start the application.
- At the start of each throw, the application should prompt the human player for his or her choice (rock, paper, or scissors) which the human should enter, or the human can ask for the current score or a help message.
- For each throw, the computer should compute its choice entirely by random.

Be sure you apply the object-oriented programming principles that you've learned so far. In particular, make sure that your application code is reliable, robust, flexible, easy to maintain, etc. You will be building on this code base in the next assignments: new algorithms for the computer's choice for each throw, a graphical user interface (GUI), and more.

Download and install the free **NetBeans** Integrated Development Environment (IDE) from <u>http://netbeans.org/</u> to use for this class. We will use NetBeans instead of Eclipse because the former has much better support for developing Swing GUI applications, which we will do later in the semester.

### **Updates to your Functional and Design Specifications**

As you're doing this assignment, you will want to make further changes to your **Functional Specification** which you updated for Assignment #2. To make clear what changes you made for this assignment, before editing, do an "Accept change" on all the

changes you made for Assignment #2 to create a new base document. Then make sure "Track Changes" is on as you make new changes for this assignment.

You will also want to make changes to your **Design Specification** from Assignment #2. Again, make sure "Track Changes" is on as you make new changes for this assignment.

#### What to turn in

Each team should create a zip file containing all your Java source files of its application; simply zip the **src** subdirectory that NetBeans creates when you create a new project. NetBeans will also create subdirectories **nbproject** and **test**. Only zip the **src** subdirectory. Do not include .class or .jar files.

Include your Functional Specification and your Design Specifications with the changes clearly marked.

Email all three as attachments to <u>ron.mak@sjsu.edu</u>. CC all your team members. Do not email any executable files because some mailers will reject the entire message. Subject: **CS 151 Assignment #3 team name** 

NOTE: If your mailer rejects the zip file as an attachment, try renaming the file so that the suffix is something other than **zip**, such as **zzz**.

This is a team assignment. Each member of the team will receive the same score.