

San José State University  
Department of Computer Engineering

CMPE 135  
**Object-Oriented Analysis and Design**  
Spring 2019  
Instructor: Ron Mak

## **Assignment #3**

**Assigned:** Thursday, February 21  
**Due:** Friday, March 1 at 11:59 PM  
Team assignment, 100 points max

### **Command-Line Rock-Paper-Scissors Game**

Implement the first version of the Rock-Paper-Scissors game as a command-line program:

- Each game has 20 rounds.
- Prompt the human player for each round's choice of rock, paper, or scissors.
- The computer makes a random choice.

What can change in future versions of this program:

- How the opposing (i.e., human) player's choices are obtained.
- How the computer makes its choices (it may not always be random).

### **Written report**

In a short (2- or 3-page) report, describe:

- How you **encapsulated** code that will change.
- How you used the **Law of Demeter**.
- Your implementation of **cohesive** classes.
- Your implementation of **loosely-coupled** classes.

### **What to turn in**

Make a zip file of all your C++ source files and your report. Submit it into Canvas:  
**Assignment #3. Command-Line Rock-Paper-Scissors Game**

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

## Rubric

Your program will be graded according to these criteria:

Criteria	Max points
<ul style="list-style-type: none"><li>• <b>As implemented by the program and described by the report:</b><ul style="list-style-type: none"><li>○ How well code that will change is encapsulated.</li><li>○ How well the program uses the Law of Demeter.</li><li>○ How well the implemented classes are cohesive.</li><li>○ How well the implemented classes are loosely coupled.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• <b>100</b><ul style="list-style-type: none"><li>○ 25</li><li>○ 25</li><li>○ 25</li><li>○ 25</li></ul></li></ul>