CS161: Introduction to Computer Science Lab Assignment 7

– Rock, Paper, Scissors –

In this lab, you'll practice writing a non-static class and using while loops along with conditionals, random numbers, and the (ever useful) Scanner class to implement the game of Rock, Paper, Scissors.

Getting Started Game rules Scissor Scissors beats paper Rock Rock Rock

The starter code for this lab contains 2 classes. The first class RockPaperScissors is a *non-static* class that is responsible for actually implementing the rules of the game and keeping track of the number of wins, losses, and ties. You will be finishing this class in lab.

The second class I have completed for you. It is called GameController and it has a main() method that simply creates an object of type RockPaperScissors and then calls the play() method.

The game should repeat for as long as the user wants to continue, and cease when the user no longer wants to play. It's up to you how you choose to prompt the user to continue or quit – e.g., you could prompt the user with "Enter an action (or 'q' to quit)". Use a random number generator and conditionals to choose the computer's gesture first, then use the Scanner class to get the user's gesture.

Your program should keep track of the total games played, the number of user wins, the number of computer wins, and the number of ties.

At the end of the game, when the user quits, have your program output a summary of how well the user did against the computer. You can choose how to represent this information and what specific details to include.

Submitting your lab assignment

Your lab7 folder should have both the RockPaperScissors class and the GameController class inside. Don't forget to rename your folder before zipping and submitting on Canvas.