SYST 17796

ICE 1

This exercise is to be completed individually during class time. Students are allowed to discuss the exercise and provide assistance to one another but each student is responsible for their own final product. Students not present in class are not eligible for credit unless they are eligible for a specific accommodation which is worked out between the instructor and that student according to class/departmental/college policies. Students should have registered their Git credentials with the instructor prior to beginning. **Keep in mind that this is a public repository and anything you commit will become part of the repository’s history and will be viewable by the public.**

# Overview

This Exercise will allow students to demonstrate that they can perform basic source code management tasks independently including cloning, editing, pulling, merging, committing and pushing code. The exercise will also test basic Java coding skills at the Java 1 level (review).

# Credit/Necessary Information

Credit is awarded based upon the matrix of tasks below. Some tasks may be graded during class time, at the professor’s discretion. Marks will be deducted for overwriting the master repository or otherwise mismanaging the code.

*When students edit another author’s code, they are expected to add themselves as a modifier in the class-level Javadoc and then add the date modified.*

ICE 1 REPOSITORY NAME for this section:

ICE 1 REPOSITORY URL for this section:

| Task |
| --- |
| 1. Clone the ICE 1 repository listed above to a NetBeans project |
| 1. Create a new **local Branch** called FIRSTNAME\_LASTNAME\_ICE1 to complete the remainder of ICE 1. **Note that you should not push changes to the remote master repository, only to your (new) remote branch which you will push up to GitHub**. |
| 1. Complete the CardTrick class so that it models a “hand” of seven cards as an array (or other suitable data structure) which is filled with random cards (you will have to create an algorithm that chooses random number values and random suits from the suits array, **this is started for you**)   \*\*\*Remember to add your name as a modifier and your student number in the header comment\*\*\* |
| 1. Make the CardTrick class then ask the user to pick a card (“any card”) and then search the array for the card, and report whether the user’s card is in the magic hand of random cards. There are no special points here for efficiency beyond a Java 1 level. This is something we can refactor! |
| 1. Push your new branch to the remote repository and login to the remote on GitHub to check that your branch was pushed. |
| 1. Edit your code **from GitHub to add a (hard-coded) Card Object called luckyCard with a number and suit of your choosing.** |
| 1. Safely merge the code into your NetBeans project, replacing the code that was asking the user to create a card with your new (hard-coded) luckyCard Object. The code should now search the randomly generated array of 7 cards for the hard-coded lucky card. If it is there, report a wining message to the user. Otherwise, report a losing message. |
| 1. Once your merged code is working as above, commit and **push your final branch changes to the remote repository in your own branch only.** **Do not merge with the master.** |
| \*\*\*\*Students will be asked to show their history to get full credit for the edit/merge (and Git history doesn’t lie!)\*\*\*\* |