**CMSC203**

**Assignment #1**

ESP (extrasensory perception)

**Assignment Description**

Write a program that tests your ESP (extrasensory perception). Create a list of the seven names of colors. The program should randomly select the name of a color from your list of words, for example:

Red, Green, Blue, Orange, Yellow

To select a word, the program can generate a random number. For example, if the number is 0, the selected word is Red, if the number is 1, the selected word is Green, and so forth.

Next, the program should ask the user to enter the color that the computer has selected. After the user has entered his or her guess, the program should display the name of the randomly selected color. The program should repeat these 11 times and then display the number of times the user correctly guessed the selected color.

* Start your program that asks the user for his or her name, MC M#, and then asks the user to enter a sentence that describes him or herself and Due Date in a format MM/DD/YY.

Here is an example of the program’s screen:

Enter your name: Julie Taylor [Enter]

Describe yourself: I am a computer science major, a member of the Jazz club, and I hope to work as a mobile app developer after I graduate. [Enter]

* Once the user has entered the requested input, the program should display this information at the end of the program.

**.**

**Requirements**

* You are required to run the application from the command line and from an IDE (like Eclipse).
* [Input and validate the name of a color from user.](http://www.java2s.com/example/java/regular-expressions/input-and-validate-data-from-user-using-regular-expression.html)
* Take screenshots of two runs of your program with different inputs, one from the command line and one from your IDE.
* You are not allowed to use arrays **or ArrayLists in this program.**
* You are not allowed to use any methods except main() **in this program.**
* Use java constants for number and String literals, for example:

**final** String COLOR\_RED = "Red";

**Concepts Covered**

* Java fundamentals,
* Input from keyboard using Scanner,
* decision structures (switch or if/else)
* loops (while, do-while, or for).
* Command-line processing.
* Input Validation

**Examples/Sample Runs**

Enter your name: Julie Taylor

Describe yourself: I am a computer science major, a member of the Jazz club, and I hope to work as a mobile app developer after I graduate.

Due Date: 06/19/23

CMSC203 Assignment1: Test your ESP skills!

Round 1

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

blue

I was thinking of Blue.

Round 2

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

Yellow

I was thinking of Yellow.

Round 3

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

yellow

I was thinking of Yellow.

Round 4

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

Black

You entered incorrect color. Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess again:

black

You entered incorrect color. Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess again:

orange

I was thinking of Blue.

Round 5

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

Orange

I was thinking of Orange.

Round 6

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

blue

I was thinking of Red.

Round 7

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

Blue

I was thinking of Yellow.

Round 8

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

red

I was thinking of Red.

Round 9

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

red

I was thinking of Orange.

Round 10

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

Yellow

I was thinking of Yellow.

Round 11

I am thinking of a color.

Is it Red, Green, Blue, Orange, or Yellow?

Enter your guess:

blue

I was thinking of Orange.

Game Over

You guessed 6 out of 10 colors correctly.

Student Name: Julie Taylor

User Description: I am a computer science major, a member of the Jazz club, and I hope to work as a mobile app developer after I graduate.

Due Date: 06/19/23

**Deliverables**

**Deliverables / Submissions and Deliverable format:**

* The Java application must compile and run correctly, otherwise the project grade will be zero.
* The detailed grading rubric is provided in the assignment rubric excel file.
* Your source code should contain proper indentation and documentation.
* Documentation within a source code should include:
* additional Comments to clarify a code, if needed
* class description comments at the top of each program containing the course name, the project number, your name, the date, and platform/compiler that you used to develop the project, for example:

/\*

 \* Class: CMSC203

 \* Instructor:

 \* Description: (Give a brief description for each Class)

 \* Due: MM/DD/YYYY

\* Platform/compiler:

\* I pledge that I have completed the programming assignment

\* independently. I have not copied the code from a student or \* any source. I have not given my code to any student.

 \* Print your Name here: \_\_\_\_\_\_\_\_\_\_

\*/

The deliverables will be packaged as follows. Two compressed files in the following formats:

* **FirstInitialLastName\_Assignment1\_Complete.zip**, a compressed file in the zip format, with the following:
  + src folder:
    - * + includes only ,
  + Word document that includes (use provided template):
    - 1. Screenshots:
         1. One screenshot of the application running from the command prompt line.
         2. One screenshot of the application running in your IDE.
         3. Screen shot of Java file (ESPGame.java) in your GitHub repository.
      2. Lessons Learned: Provide answers to the questions listed below:
         1. Write about your Learning Experience, highlighting your lessons learned and learning experience from working on this project.
         2. What have you learned?
         3. What did you struggle with?
         4. What would you do differently on your next project?
         5. What parts of this assignment were you successful with, and what parts (if any) were you not successful with?
         6. Provide any additional resources/links/videos you used to while working on this assignment/project.
    - **FirstInitialLastName\_Assignment1\_JavaFiles.zip**, a compressed file containing one or more Java files **(This folder SHOULD NOT contain any folders and it should contain Java source file only):**
      * + ESPGame.java