

CMSC203 Assignment 1 Implementation (Documentation)

```
/*
* Class: CMSC203
* Instructor: Dr.Grinberg
* Description: The program selects a color randomly from a predefined
* list of seven colors and asks the user to guess the color. After 11
* rounds of guessing, the program displays the number of times the user
* correctly guessed the selected color.
* Due: Before the final exam (GFA)
* Platform/compiler: Eclipse
* 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: Sousanna Chugunova
*/
```

Part1: Pseudocode

| ESPGameGFA |
|--|
| <pre>BEGIN // Define constants for color names COLOR_RED = "Red" COLOR_GREEN = "Green" COLOR_BLUE = "Blue" COLOR_ORANGE = "Orange" COLOR_YELLOW = "Yellow" COLOR_PURPLE = "Purple" COLOR_PINK = "Pink" // Initialize correct guesses counter correctGuesses = 0 // Create a scanner object to read input from the user scanner = new Scanner(System.in) // Ask for user's name PRINT "Enter your name: " name = READ_INPUT() // Ask for user's MC M number PRINT "Enter your MC M#: " mcMNumber = READ_INPUT() // Ask for a description from the user PRINT "Describe yourself and Due Date (MM/DD/YY): " description = READ_INPUT() // Repeat 11 times FOR i = 1 TO 11 // Generate a random number between 0 and 6 to select a color randomNumber = RANDOM_NUMBER(0, 6)</pre> |

```

// Select a color based on the random number
SELECTED_COLOR = ""
SWITCH randomNumber
    CASE 0:
        SELECTED_COLOR = COLOR_RED
    CASE 1:
        SELECTED_COLOR = COLOR_GREEN
    CASE 2:
        SELECTED_COLOR = COLOR_BLUE
    CASE 3:
        SELECTED_COLOR = COLOR_ORANGE
    CASE 4:
        SELECTED_COLOR = COLOR_YELLOW
    CASE 5:
        SELECTED_COLOR = COLOR_PURPLE
    CASE 6:
        SELECTED_COLOR = COLOR_PINK

// Ask the user to guess the color
PRINT "Guess the color: "
userGuess = READ_INPUT()

// Check if the user's guess matches the selected color
IF userGuess is equal to SELECTED_COLOR (ignoring case)
    PRINT "Correct! The color was " + SELECTED_COLOR
    Increment correctGuesses
ELSE
    PRINT "Incorrect! The color was " + SELECTED_COLOR
END IF
END FOR

// Display the number of correct guesses
PRINT "You guessed the correct color " + correctGuesses + " times."
PRINT "Student Information:"
PRINT "Name: " + name
PRINT "MC M#: " + mcMNumber
PRINT "Description and Due Date: " + description

// Close the scanner
scanner.close()
END

```

Part2: Screenshots:

- a) One screenshot of the application running from the command prompt line for Windows (or running from the terminal for Mac)

```
sousanna@sousannas-Air ESP % java ESPTest.java
Enter your name: sousanna chugunova
Enter your MC M#: 21122697
Describe yourself and Due Date (MM/DD/YY): comp sci major. GFA
Guess the color: red
Incorrect! The color was Blue
Guess the color: orange
Incorrect! The color was Yellow
Guess the color: yellow
Incorrect! The color was Red
Guess the color: green
Incorrect! The color was Orange
Guess the color: blue
Incorrect! The color was Pink
Guess the color: purple
Incorrect! The color was Pink
Guess the color: pink
Incorrect! The color was Orange
Guess the color: red
Incorrect! The color was Orange
Guess the color: orange
Incorrect! The color was Blue
Guess the color: yellow
Correct! The color was Yellow
Guess the color: green
Incorrect! The color was Pink
You guessed the correct color 1 times.

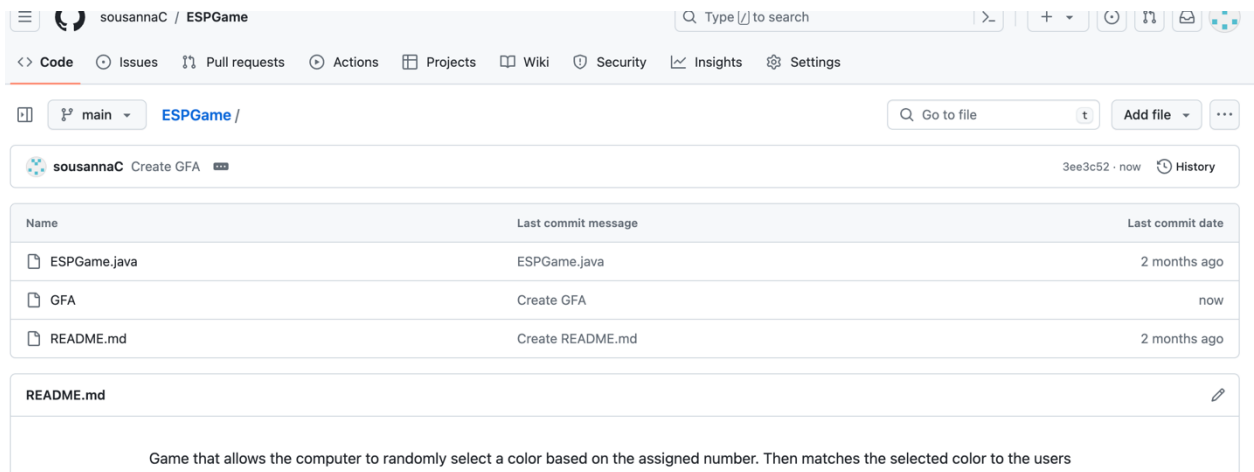
Student Information:
Name: sousanna chugunova
MC M#: 21122697
Description and Due Date: comp sci major. GFA
```

b) One screenshot of the application running in your IDE (Eclipse, NetBeans, etc).

```
<terminated> ESPTest [Java Application] /Library/Java/JavaVirtualMachines/jdk-17.jdk/Contents/Home/bir
Enter your name: Sousanna Chugunova
Enter your MC M#: 21122697
Describe yourself and Due Date (MM/DD/YY): I am a comp sci student. GFA.
Guess the color: red
Incorrect! The color was Orange
Guess the color: orange
Incorrect! The color was Pink
Guess the color: yellow
Correct! The color was Yellow
Guess the color: green
Incorrect! The color was Blue
Guess the color: blue
Correct! The color was Blue
Guess the color: purple
Correct! The color was Purple
Guess the color: pink
Incorrect! The color was Yellow
Guess the color: red
Incorrect! The color was Purple
Guess the color: orange
Incorrect! The color was Purple
Guess the color: yellow
Incorrect! The color was Pink
Guess the color: green
Incorrect! The color was Blue
You guessed the correct color 3 times.

Student Information:
Name: Sousanna Chugunova
MC M#: 21122697
Description and Due Date: I am a comp sci student. GFA.
```

c) Screen shot of Java file (ESPGame.java) in your GitHub repository.



GFA is the new submission, uploaded with the previous submission to keep it organized.
<https://github.com/sousannaC/ESPGame/tree/main>

Lessons Learned <Provide answers to the questions listed above>:

Write about your Learning Experience, highlighting your lessons learned and learning experience from working on this project.

What have you learned? **Follow directions**

What did you struggle with? **Nothing this time around**

What would you do differently on your next project? **Reread the rubric before submission**

What parts of this assignment were you successful with, and what parts (if any) were you not successful with? **Completing the assignment correctly**

Provide any additional resources/links/videos you used to while working on this assignment/project.

Check List: <Provide answers to the column Y/N or N/A >:

| # | | Y/N |
|-----------|---|----------|
| 1. | Assignment files: | |
| | • FirstInitialLastName_ Assignment1 _Complete.zip | Y |
| | • FirstInitialLastName_ Assignment1.docx/.pdf | Y |
| | • Source java files | Y |
| | • FirstInitialLastName Assignment1 JavaFiles.zip | Y |
| 2. | Program compiles | Y |

| | | |
|-----------|---|----------|
| 3. | Program runs with desired outputs related to a Test Plan | Y |
| 4. | Documentation file: | |
| | • Comprehensive Test Plan | Y |
| | • Screenshots from IDE | Y |
| | • Screenshots from 'cmd' line/terminal | Y |
| | • Screenshots of your GitHub account with submitted Assignment# (if required) | Y |
| | • Pseudocode | Y |
| | • Lessons Learned | Y |
| | • Checklist is completed and included in the Documentation | Y |