Name Click here to enter name ID Click here to enter id

Lab: Guess My Favorite Color

# Overview

Create a PowerShell script that asks the user: **What is my favorite color?** This is a game where the user guesses the script’s favorite color. The game will keep track of game stats and allow for repeated play.

# Gameplay/requirements are as follows:

1. When the round starts select a system console color at random and ask the user to guess the selected color.
2. Read the guess and do the following:
   1. If they guess incorrectly, inform them that the color they selected is wrong and ask them to guess again.
   2. If the user enters a color that is not a valid color, inform them and let them guess again.
3. Provide a mechanism to list the valid colors to the user (either on demand or as part of game play, your choice).
4. When a user guesses incorrectly, provide a message and let them guess again.
5. When a user guesses correctly, let them know that they got it correct and end the round.
6. For both correct and incorrect messages, include the color name in the message, displayed in that color. E.g. “Correct, Blue is my favorite color.”
7. Keep a record of the colors guessed and provide a mechanism to show the user which wrong colors they have guessed (either on demand, or as part of game play, your choice).
8. Provide a mechanism to give the user a hint. The hint will display the first letter of the correct color. If the correct color starts with dark, include Dark before the letter, e.g. if the correct answer is DarkGray give the hint DarkG.
9. Provide a mechanism for the user to quit a round.
10. Keep a record of the guess attempts and let the user know how many guesses it took to guess the correct answer.
11. Keep track of how long it takes the user to guess the correct answer and let them know how long it took to play the round.
12. After the round is over give the user an option to play again.

# Lab Requirements:

* Create a script named **color.ps1**
* Include the following author comment block:

<#  
 Program Name : <program>  
 Date: <datecreated>  
 Author: <yourname>  
 Course: CYBER 360  
 I, <yourname>, affirm that I wrote this script as original work completed by me.  
#>

(If your instructor invited you to work on this lab with a classmate, you should also cite/credit your partner in your author comment block.)

# Hints:

You can get a list of the console color values with the command line:

$SystemColors=[System.Enum]::getvalues([System.ConsoleColor]) *#Returns an array of all the possible ConsoleColor Values*

$color=[System.ConsoleColor]'Red' *#Creates a ConsoleColor object from a string*

[string]$color *#Returns the name of the enumerated ConsoleColor*

[int]$color *#Returns the value of the enumerated ConsoleColor*

# Deliverable:

Upload your script to I-Learn

# Grading Rubric:

|  |  |
| --- | --- |
| *Criteria* | *Points* |
| Comment block (worth 1 if present, -25 if missing) | 1 or -25 |
| Select random color from color list | 3 |
| Guess evaluation and feedback | 3 |
| Invalid color detection and message | 3 |
| Colored colors in output | 3 |
| Color Lists (all valid colors, incorrect guesses) | 3 |
| Hint and Give Up functionality | 3 |
| Round time and guess count | 3 |
| Play Again | 3 |
| TOTAL: | 25 |