

Password Guessing Game

(A total of 50 points)

In this game, the computer will randomly generate a 4 digit password, and you will have 3 attempts to guess the password. The computer will also give you a few "hints."

Your program will do the following:

- 1) Generate a 4-digit password, using integers 1 through 9 and the random number function.
- 2) Let the player guess the 4-digit-number password and enter the 4-digit-number on screen. The user has 3 chances to enter the password.
- 3) Display some "hints," one hint the first try, two hints the second try, and three hints the remaining tries.

For example,

- The number is divisible by 3, the 1st digit is 2 and the last digit is 1.
 - The remainder of the number divided by 17 is 3, and the second digit is 6.
- 4) If the user fails, your program will display **"I'm sorry. You lost! The password is "display the password. Do you want to play again?"**.
 - 5) If the user is able to guess the password correctly, your game will display **"Congratulations! You won. Do you want to play again?"**
 - 6) If the user enters "Y", then you generate a new password, and repeat the game, otherwise display "Good bye" or some other message and exit the game.
 - 7) Use HTML and CSS to make your game look professional.

Grading rubrics:

- 1) Using loops correctly:
 - a. Initialization (2 points)
 - b. Correct code in the Body of the loop (2 points)
 - c. Proper loop termination (2 points)
 - d. Break out of the loop if you win (2 points)
- 2) Using conditional blocks correctly (8 points)
- 3) Using the random number generator correctly (4 points)
- 4) Ease of use for the game player. Efficient game play and algorithm design (8 points)
- 5) Creativity and originality, including appearance (8 points)
- 6) Indenting so the code is easy to read (6 points)
- 7) Comments (For JavaScript only) (4 points)
- 8) Using JavaScript to modify HTML content when displaying information (4 points)

Due Date:

The project is due at the beginning of class, Friday, June 10th.

To submit your project, you must:

Copy your html file to my flashdrive. Save you file as LastnameFirstnamePGG.html.