

Lucky Number

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Graphics

1. Objectives

- A. Familiarize yourself with JavaScript
- B. Familiarize yourself with OOC and JavaScript.

2. Equipment

- A. A computer that has Notepad ++ installed and a modern web-browser

3. Lab Preparation

- A. Review JavaScript
- B. Look how to call a JavaScript function from an HTML button

4. Lab Instruction

- A. Create a JavaScript program that will have a main class that will store information about the lucky number game and contains the playGame() function.
- B. When a player pushes an HTML button, it will call back to a global function (Not the main class), which will then invoke the playGame function from the instance of the main class
 - a. NOTE: this is necessary due to a limitation with JavaScript.
- C. Inside the playGame() function - get a random number between 1 and 100, get a second random number between 1 and 100, if the 2nd number is higher print "You Win", otherwise print you lose. (Also print the numbers).
 - a. (NOTE: When I say print I mean to write to the innerHTML of a section in the website).
 - b. You will keep track of how often you have one or lost. (Keep in mind you will NOT have to refresh)
 - c. The won and lost counters can be class variables.
- D. If you have won more than lost display a picture of a happy face (using JavaScript to change the src inside of an img tag)
 - a. Otherwise, display an unhappy face. (If you want a special face for win == lose you may add it.)

HINTS:

First create a class diagram for this assignment - What variables do we need for the class, and what functions do we need? Then implement the game.

5. Lab Rubric

| | Perfect | Logic incorrect | Not Acceptable/Not attempted |
|--|---------|-----------------|------------------------------|
| I can push the HTML button to play the game | 5 | | |
| The game result is displayed with the two random numbers | 5 | | |
| The image will change based on if I am winning or losing more. | 5 | | |
| Total | /15 | | |

6. Lab Report Requirements

No lab reports necessary for this assignment, but there is a peer review.