

## Assignment #1 – *Hi-Lo* in JavaScript and HTML

### Objectives:

- To practice writing JavaScript functions
- To use some of the events supported by the Document Object Model

### Description:

This is an individual assignment. You will write an application as part of an HTML file that will play a typical *Hi-Lo* game, where the player guesses values in a specific range until the correct number is found.

### Requirements:

1. The entire application must be written in one HTML page using JavaScript and HTML.
2. When the page loads, the user is asked for his/her name in a prompt.
3. After the name is entered, the user is asked for a maximum number to be the upper range of the random number the computer creates.
4. The application must create a random integer between 1 and the number entered in Step 3 above.
5. The following should be components of the User Interface:
  - a. A textbox to enter the guess
  - b. A button to submit a guess
  - c. A message that states the new range for a new guess (in other words, as the user guesses, and the number is too high or too low, a message changes the high or low value appropriately so you don't have to remember the range)
  - d. When the guess is correct, change the background colour of the page and show an alert with an appropriate message.
6. Make sure that all data entered is validated for proper data type.

### Hand in:

1. The final HTML page
2. Make sure you comment appropriately, especially the header comments