CSCI 341 : HANDS ON

UNIT: Looping through Arrays

Activities

- Constructing arrays
- Accessing array values
- Array Tools
- Introducing looping structures
  - explore **for** loops
  - explore **while** loops
  - explore **do..while** loops
  - explore oop with objects and **for..in** loops

Preparation

Be sure to read:

- **Pages: An Array of Hope**
- **Pages: Array Tools**
- **Pages: Loopiness**

Assignment (Boolean Secret Message)

Our pirates are attempting to send a secret message between two ships by writing an encrypted message on their flags. Given two pre-made methods (parseAscii, and parseBin) Prompt the user for a single character, convert the character to ascii using the given parseAscii function, then convert the ascii into an **8-digit** binary number using the parseBin function. Store each of the individual 1's and 0's of the binary number into an array using the split method. Finally, loop through the array and for every element write "true" to the page if 1 and write "false" to the page if 0. Here is a **sample file** with the given functions we have made for you. The reading pages above contain lots of helpful hints for completing this assignment.

1. Prompt the user for a **single** character.
2. Loop until valid data is entered.
3. Use parseAscii() to assign the ascii value of that character to a variable with the int prefix.
4. Use parseBin() to convert the ascii value to a binary value. Store the result in another variable.
5. Store each of the individual 1's and 0's of the binary value into an array using the split() method.
6. Loop through the array of binary digits, and output "true" for each 1 and "false" for each 0 to an element on your page.

Important Procedures for All Labs

Here are some general notes for perfection that you should follow for every assignment:

1. Please produce all web content to HTML5 standards.
2. Please **validate** all your files.
3. Be sure to update the header block comments for each file.
4. Be sure to check your browser's console / developer tools for error free code.
5. Test your code in Chrome and Edge at a minimum.
6. Use only your own original code for all labs.
7. Be sure to put your CSS and JavaScript in a separate files from your html.
8. Be sure to read through the lab rubric in Canvas.
9. Submit your lab in Canvas for grading.

Holler if you have any questions!

Mission Accomplished!

What is a pirate's favourite data structure? Arrrr-rays! We have not not seen the last of arrays. They will be back with a vengeance in the **strings** hands on, matey!