Group Challenge

Group Challenge

- In this group challenge, we will divide into small groups of approximate 3 students in each group.

- Each group will work together to solve the assigned challenge problem.

- You will spend about 30 minutes to the challenge and then each group will present their answer by screen sharing.

- The goal of this challenge is to enhance your skills in coding, research, problem solving, team collaboration and presentation.

- For this challenge, you will continue to use Chrome browser's console.

Group Challenge

- Group 1 Challenge Questions

```
// 1
// Using the map method, add 5 to each
number in the array and store the result into a
new array. Print the result to the console.

var numbers = [1, 1, 2, 3, 5];
var numbersAddFive = numbers.map();

// result: [6, 6, 7, 8, 10]
```

```
// 2
// Using the map method on the following array, turn it
into an array of strings with a colon along with the item
number in the array and store the result in a new array.
Print the result to the console.

var numbers = [245, -799, 550, 312, 967];
var numbersReformatted = numbers.map();

// result: ["245: array item 1", "-799: array item 2", "550:
array item 3", "312: array item 4", "967: array item 5"]
```

Group Challenge

- Group 2 Challenge Questions

```
// 1
// Use the filter method on the pets array given
below. Filter out only the pets that have 5 or
less letters in their name. Store the result in a
new array. Print the result to the console.

var pets = ["goldfish", "dog", "turtle", "tiger"]

var petsShortNames = pets.filter();

// result: ["dog", "tiger"]
```

```
// 2
// Use the filter method on the same pets array. Filter
out only the pets whose names start with the letter 't'.
Store the result in a new array. Print the result to the
console.

var petsTNames = pets.filter();

// result: ["turtle", "tiger"]
```

Group Challenge

- Group 2 Challenge Questions

```
// 3
// Filter out only the even numbers from the array below. Research the
use of the modulo operator: %. Store the result in a new array. Print the
result to the console.

var numbers = [3, 7, 4, 5, 10];

var evenNumbers = numbers.filter();

// result: [4, 10]
```

Group Challenge

- Group 3 Challenge Questions

```
// 1
// Use reduce method to concatenate the
letters into a single string "hello". Store the
result in a new array. Print the result to the
console.

var letters = ['h', 'e', 'l', 'l', 'o']

var greeting = letters.reduce();

// result: "hello"
```

```
// 2
// Use reduce method to get the total by multiplying all
the numbers in the array. Store the result in a new
array. Print the result to the console.

var numbers = [ 100, 3, 4, 1, 2];

var total = numbers.reduce();

// result: 2400
```

Group Challenge

- Group 3 Challenge Questions

```
// 3
// Use the reduce method to flatten this array of arrays (called a two-
dimensional array) to a single array. Research on the Array.concat()
method to achieve this. Store the result in a new array. Print the result to
the console.

var arrays = [["wise", "cries"], ["pies", "size"]];

var flattenedArray = arrays.reduce();

// result: ["wise", "cries", "pies", "size"]
```

Group Challenge

- Each group to share their solutions using share screen.
- Show your codes and the output on the console.
- Presenter:
  - Limit to 5 minutes for each question.
  - Tell us the question you'd worked on.
  - Explain your approach including code concepts used.

Questions?