TW-10 GROUP VERSION

TEAMWORK

CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

- Icebreaking
- Questions
- Interview Questions
- Coffee Break
- Coding Challenge
- Video of the week
- Retro meeting
- Case study / project

Teamwork Schedule

Ice-breaking 10m

- Personal Questions (Stay at home & Corona, Study Environment, Kids etc.)
- Any challenges (Classes, Coding, studying, etc.)
- Ask how they're studying, give personal advice.
- Remind that practice makes perfect.

Ask Questions 15m

1. How do you access a property of an object in JavaScript?

A. By using square brackets
B. By using the dot notation
C. By using parentheses
D. By using commas

2. How do you check if a property exists in an object in JavaScript?

A. By using the exist keyword
B. By using the contains keyword
C. By using the hasOwnProperty method
D. By using the isProperty method

3. How do you delete a property from an object in JavaScript

A. By using the `delete` keyword
B. By using the `remove` keyword
C. By setting the property value to null
D. By assigning an empty string to the property

4. How do you add a new property to an existing object in JavaScript

A. By using the `add` keyword
B. By using the `insert` keyword
C. By using the `update` keyword
D. By assigning a value to a new key

5. What is an object in JavaScript?

A. A function
B. A data tool
C. A data structure
D. An array

6. How can you create an empty object in JavaScript?

A. `emptyObject = {};`
B. `emptyObject = new Empty();`
C. `emptyObject = Object.empty();`
D. `emptyObject = new Object();`

7. How do you clone an object in JavaScript?

A. Use the Object.clone() method
B. Use the Object.assign() method or the spread operator (...)
C. Use the Object.copy() method
D. Use the Object.duplicate() method

8. What is object destructuring in JavaScript?

A. A way to create objects from strings
B. A way to concatenate objects
C. A way to merge objects
D. A way to extract properties from an object and assign them to variables

9. How do you swap the values of two variables without using a temporary variable using array destructuring?

A. const a = b; const b = a
B. const [a, b] = [a, b];
C. const [a, b] = [b, a];
D. const [b, a] = [a, b];

10. What happens if you try to destructure an array with more variables than there are elements in the array?

A. Extra variables are assigned undefined
B. An error is thrown
C. The array is automatically resized
D. Only the first few variables are assigned values

11. What does the rest element (...) do in array destructuring?

A. It spreads elements into multiple arrays
B. It gathers remaining elements into an array
C. It removes elements from the array
D. It reverses the order of elements in the array

12. What is JSON (JavaScript Object Notation)?

A. A lightweight data interchange format
B. A JavaScript method for creating objects
C. A way to define variables in JavaScript
D. A JavaScript library for animations

13. Write a code for get *sum of every positive element* in given array

```
const input = [1, -4, 12, 0, -3, 30, 42, -150];


// Write Your code here


//output: 85
```

14. Write a code for abbreviate the given name and return the name initials.

```
const input = "John Ronald Reuel Tolkien"


// Write Your code here


//output: JRRT
```

15. If you want to square each element of an array and return a new array with the squared values, which method would you use?

A. `reduce`
B. `filter`
C. `map`
D. All of the above

16. If you want to find the sum of all even numbers in an array, which method would you use?

A. `map`
B. `reduce`
C. `filter`
D. `forEach`

17. Write a code get each array elements length to a new array with map() method.

```
const names = ["Alice", "Bob", "Charlie"];
const nameLengths = // Write Your code here

console.log(nameLengths) // [5, 3, 7]
```

18. Write a code get each array elements capitalized with map() method.

```
const words = ["apple", "banana", "cherry"];
const capitalizedWords = // Write Your code here

console.log(capitalizedWords) //['APPLE', 'BANANA', 'CHERRY']
```

Interview Questions 15m

1. What is the difference between Object.keys(), Object.values(), and Object.entries()?

2. What is the Object.freeze() method used for?

3. What is constructor functions in JavaScript?

4. Explain `reduce()` method in Javascript

5. What is the DOM?

Coding Challenge **15m**

1. High Priced Product Categories

- You are given an array of objects representing a collection of products, each with a name, price, and category. Your task is to use map, filter, and reduce to calculate the average price of products in each category, and then return an array of objects containing only the categories that have an average price above 50.
- Sample input :

```
const products = [
  { name: "Product 1", price: 20, category: "Electronics" },
  { name: "Product 2", price: 30, category: "Clothes" },
  { name: "Product 3", price: 40, category: "Electronics" },
  { name: "Product 4", price: 50, category: "Clothes" },
  { name: "Product 5", price: 60, category: "Clothes" },
  { name: "Product 6", price: 70, category: "Electronics" },
  { name: "Product 7", price: 80, category: "Clothes" },
  { name: "Product 8", price: 90, category: "Electronics" },
];
```

- Expected outcome :

```
[
  { category: 'Clothes', average: 55 },
  { category: 'Electronics', average: 55 }
]
```

2. HR VS IT Department

- **Task :** You are given an array of objects representing a collection of employees, each with a name, salary, and department. Your task is to use map, filter, and reduce to calculate the average salary for each department and then return an array of objects containing only the departments that have an average salary above 65000.

- Sample input :

```
const employees = [
  { name: "John", salary: 50000, department: "IT" },
  { name: "Jane", salary: 60000, department: "HR" },
  { name: "Bob", salary: 55000, department: "IT" },
  { name: "Sophie", salary: 75000, department: "HR" },
  { name: "Mike", salary: 65000, department: "IT" },
  { name: "Emily", salary: 80000, department: "HR" },
  { name: "David", salary: 70000, department: "IT" },
];
```

- Expected outcome :

```
[
  { department: 'HR', average: 71666 }
]
```

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Coffee Break 10m

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Video of the Week 10m

- JS DOM

Case study/Project 15m

- HC-05 iOS Calculator

Retro Meeting on a personal and team level 10m

Ask the questions below:

- What went well?
- What could be improved?
- What will we commit to do better in the next week?

Closing 5m

- Next week's plan
- QA Session
