

TW-02 GROUP VERSION



CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

- ▶ Icebreaking
- ▶ Workshop Activities - Tuesday
- ▶ Teamwork Activities - Friday
 - ▶ Questions
 - ▶ Interview Questions
- ▶ Video of the week
- ▶ Retro meeting
- ▶ Case study / project

Teamwork Schedule

Ice-breaking

90m

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

Workshop Activities (Tuesday)

10m

1- Get Season

- Create a program that determines the season based on the month and day entered by the user. (Do not use loops or functions) :
- Take month and day from the user.
- Season conditions:
 - Spring: February 21 - May 31
 - Summer: June 1 - September 21
 - Fall: September 22 - December 20
 - Winter: December 21 - February 20
- Inputs should 1-12 for month and 1-31 for day. If it is outside these values, an error message should be displayed on the console.

Expected Outputs :

If month is 9 and day is 20, output should be:

```
`The season for 9/20 is Summer.`
```

If month is 5 and day is 32, output should be:

```
'Invalid month or day. Please enter valid values.'
```

2- Leap Year Checker :

- Write a JavaScript program that checks if a given year is a leap year. Leap years have a special property where they have an extra day, February 29th. The program uses conditional statements to determine whether the input year is a leap year or not. (Do not use loops or functions)
- Your program checks for leap years based on the following conditions:
 - If the year is divisible by 4 and not divisible by 100, it's a leap year.
 - If the year is divisible by 400, it's a leap year.

Expected Outputs :

- input : 2023 output: 2023 is not a leap year.
- input : 2024 output: 2024 is a leap year.

3 - Parallax Web Page

- [Project - 02 : Parallax Web Page \(HC-02\)](#)

Team Work Activities (Friday)

Ask Questions

20m

1. What is the main purpose of CSS Flexbox?

- A. To create two-dimensional layouts
- B. To style text and fonts
- ☒ C. To create responsive single-dimensional layouts
- D. To create animations

2. Which CSS property is used to turn an element into a flex container?

- A. display: block;
- ☒ B. display: flex;
- C. position: relative;
- D. float: left;

3. What is the default value for the flex-direction property?

- A. column
- B. column-reverse
- C. row-reverse
- ☒ D. row

4. Which CSS property is used to align items along the main axis in a flex container?

- ☒ justify-content
- ☐ B. align-items
- ☐ C. align-content
- ☐ D. flex-align

5. What is the purpose of the **fr** unit in CSS Grid?

- ☐ A. It represents a fixed unit of measurement.
- ☐ B. It defines a font size unit in CSS.
- ☒ C. It stands for "fraction" and represents a fraction of available space in the grid container.
- ☐ D. It is used for text formatting.

6. What is the key difference between CSS Flexbox and CSS Grid?

- ☒ A. Flexbox is one-dimensional, while Grid is two-dimensional.
- ☐ B. Flexbox is only for text styling, while Grid is for layout.
- ☐ C. Flexbox can only be applied to block-level elements, while Grid can be applied to inline elements.
- ☐ D. Flexbox and Grid have identical functionality.

7. How do you center an item both horizontally and vertically within a flex container?

- ☐ A. margin: auto;
- ☐ B. text-align: center; and vertical-align: middle;
- ☐ C. center: true;
- ☒ D. justify-content: center; and align-items: center;

8. What is the purpose of the **grid-area** property in CSS Grid?

- ☐ A. It controls the visibility of grid items.
- ☐ B. It sets the background color of grid items.
- ☐ C. It defines the area within a grid item where content should be placed.
- ☐ D. It specifies the gap between grid rows and columns.

9. What is the purpose of the **else** statement in JavaScript?

- ☐ A. It defines a loop.
- ☒ B. It provides an alternative code block to execute when the "if" condition is false.
- ☐ C. It specifies the condition.
- ☐ D. It terminates the program.

10. What is the result of the following JavaScript code snippet?

```
var x = 10;  
var y = 5;  
if (x > y) {  
  console.log("x is greater than y");  
} else if (x < y) {  
  console.log("x is less than y");  
} else {  
  console.log("x is equal to y");  
}
```

- ☒ A. "x is greater than y"
- ☐ B. "x is less than y"
- ☐ C. "x is equal to y"
- ☐ D. None of the above

11. In a JavaScript "if-else if-else" statement, which block of code is executed if none of the conditions are true?

- ☐ A. The "if" block.
- ☐ B. The "else if" block.
- ☐ C. The "if else" block.
- ☒ D. The "else" block.

12. Which loop is guaranteed to execute at least once in JavaScript?

- ☐ A. for loop
- ☒ B. do-while loop
- ☐ C. while loop
- ☐ D. for...in loop

13. Which loop is best suited for situations where you don't know how many times the loop needs to run in advance?

- ☒ A. while loop
- ☐ B. do-while loop
- ☐ C. for loop
- ☐ D. for each loop

14. In a "for" loop, what are the three statements enclosed in parentheses separated by semicolons?

- A. Condition, iteration, and execution
- B. Initialization, execution, and condition
- ☒ C. Initialization, condition, and iteration
- D. Condition, initialization, and execution

15. What is the purpose of the "continue" statement in a loop?

- A. It exits the loop prematurely.
- B. It restarts the loop from the beginning.
- ☒ C. It skips the current iteration and moves to the next one.
- D. It is not a valid statement in JavaScript.

16. What is the purpose of the "default" case in a JavaScript "switch" statement?

- ☒ A. It provides a code block to execute when none of the cases match.
- B. It defines the initial condition.
- C. It specifies the condition.
- D. It terminates the switch statement.

17. What happens if you forget to include an exit condition in a "while" loop?

- A. The loop will exit immediately.
- B. The loop will throw an error.
- C. The loop will only run once.
- ☒ D. The loop will run forever (infinite loop).

Interview Questions

20m

1. What are the escape characters in JavaScript?

2. What is JavaScript 'Strict Mode'?

3. What is the difference between `var` and `let` keyword?

Scope, Hoisting, Re-declaration

4. What is JavaScript Hoisting?

Variable Declaration:

Variables must be declared with `var`, `let`, or `const` before they are used. Without Strict Mode, variables without a declaration are automatically global (create an implied global variable).

No Implicit Global Variables:

Variables created without a declaration (e.g., without `var`, `let`, or `const`) are not automatically assigned to the global object (e.g., `window` in browsers).

Assignment to Read-Only Properties:

Assigning values to read-only properties or global objects (like `undefined`, `NaN`, and `Infinity`) will result in an error.

Deleting Variables, Functions, or Function Arguments:

The delete operator cannot be used to delete variables, functions, or function arguments.

No Duplicate Parameter Names:

Functions cannot have duplicate parameter names.

Octal Literal Syntax:

Octal syntax (e.g., `0123`) is not allowed. Octal literals are treated as syntax errors.

Strict Mode in Functions Only:

Strict Mode can be applied to the entire script or just to specific functions, allowing gradual adoption.



Coffee Break

10m



Video of the Week

15m

- [What You Can Do with JavaScript](#)

Case study/Project

15m

The case study will be solved by the students during the week and by the team on Friday Team Work.

- [Project - 03 : Home Furnishing Page \(HC-03\)](#)

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
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