## **TW-13 TEAM LEAD VERSION (Sprint-8 Week-1)**







# **Meeting Agenda**

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

### **Teamwork Schedule**

Answer: B

**Ice-breaking** 10m • 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. **Ask Questions** 15m 1. Which JavaScript feature allows developers to organize code into reusable modules? A. Classes **B.** Functions C. Promises **D.** Modules Answer: D 2. Which built-in JavaScript object is commonly used as a module loader in modern browsers? A. window **B.** document C. navigator **D.** import Answer: D 3. Which JavaScript tool is commonly used to transpile modern JavaScript code into an older version supported by most browsers? A. Webpack **B.** Babel C. ESLint D. TypeScript

4. Which JavaScript module format is supported by most modern browsers?
A. CommonJS  B. AMD  C. ES6 (ES2015) modules  D. UMD
Answer: C
5. Which JavaScript method is used to load an external JavaScript file asynchronously in a browser?
<ul><li>A. import()</li><li>B. require()</li><li>C. load()</li><li>D. script tag with async attribute</li></ul>
Answer: D
6. How do you define a constructor function in JavaScript for creating objects?
<ul><li>A. createObject</li><li>B. initializeObject</li><li>C. constructorFunction</li><li>D. functionObject</li></ul>
Answer: C
7. What is the keyword used to create a new instance of an object in JavaScript?  A. newInstance
<ul><li>B. createInstance</li><li>C. newObject</li><li>D. new</li></ul>
Answer: D
8. What method is used to check if an object has a specific property in JavaScript?
A. hasProperty
<ul><li>B. containsProperty</li><li>C. checkProperty</li></ul>
D. hasOwnProperty

Answer: D

#### 9. How do you achieve inheritance in JavaScript using prototypes?

- A. objectInherit
- B. inheritObject
- C. extendObject
- **D.** prototypelnherit

Answer: C

#### 10. How do you implement encapsulation in JavaScript?

- **A.** Using private variables and methods
- B. Defining properties with this keyword
- C. Utilizing closures
- **D.** Declaring properties with let keyword

Answer: A

#### 11. In JavaScript, what is the purpose of a constructor function in object-oriented programming?

- A. To create multiple instances of an object with shared properties and methods
- **B.** To define the blueprint of an object and its properties
- C. To encapsulate data and behavior within an object
- **D.** To allow inheritance and polymorphism in object-oriented programming

Answer: B

#### 12.In JavaScript, how do you define a class using the ES6 class syntax?

- **A.** class MyClass = {}
- **B.** class MyClass extends Object {}
- **C.** class MyClass { constructor() {} }
- **D.** class MyClass : Object {}

Answer: C

#### 13. Which JavaScript keyword is used to refer to the current instance of a class within its methods

- A. super
- B. this
- C. new
- **D.** instance

Answer: B

#### 14. In JavaScript, what is the purpose of inheritance in object-oriented programming?

- **A.** To create multiple instances of an object with shared properties and methods
- **B.** To define the blueprint of an object and its properties
- C. To allow one object to inherit properties and methods from another object
- **D.** To encapsulate data and behavior within an object

Answer: C

#### 15. In JavaScript, how do you define a method inside a class using the ES6 class syntax?

- A. By using the function keyword
- B. By using the method keyword
- C. By using the constructor keyword
- **D.** By simply declaring a function inside the class body

Answer: D

#### **Interview Questions**

15m

#### 1. What are the four pillars of Object-Oriented Programming?

Answer: The four pillars of Object-Oriented Programming are:

- Encapsulation: Bundling data and methods together within an object, hiding the internal implementation details and providing controlled access.
- Inheritance: Allowing objects to inherit properties and behaviors from other objects, promoting code reuse and creating hierarchical relationships.
- Polymorphism: Allowing objects of different classes to be treated as objects of a common superclass, enabling flexibility and extensibility in code.
- Abstraction: Representing essential features and behaviors of objects in simplified models, focusing on what an object does rather than how it does it.

#### 2. What is the difference between a class and an object in JavaScript?

Answer: In JavaScript, a class is a template or blueprint that describes the structure and behavior of objects. It defines properties and methods. On the other hand, an object is an instance of a class, created using the "new" keyword. Objects hold specific data and can invoke the methods defined in the class.

#### 3. How do you achieve inheritance in JavaScript?

Answer: In JavaScript, inheritance is achieved through prototype chaining. Each object has an internal prototype property that refers to another object, and properties/methods not found in the object itself are looked up in its prototype chain. By setting the prototype of one object to be another object, we establish an inheritance relationship between them. This allows the child object to inherit properties and methods from its parent object.

**Coffee Break** 10m Video of the Week 10m • What are Classes, Objects, and Constructors? **Case study/Project** 15m • JS-CC-07: Stopwatch

### 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