

# Defining a class, Class Instantiation



J5



## Lecture CheckList

- 1. What is a class
- 2. Examples
- 3. Class instantiation
- 4. Example



#### What is a class

- Classes serve as a blueprint for creating objects, providing a way to organize and structure code.
- They allow you to define objects with similar properties and methods in a reusable manner, reducing the amount of code you need to write and making your code easier to maintain.

#### Reasons why you might want to use classes in Javascript::

- Object-Oriented Programming
- Reusability
- Abstraction
- Encapsulation
- Modularity
- Classes were introduced in ECMAScript 6 (ES6).
- A class is defined using the class keyword, followed by the class name, and a block of code that defines the properties and methods of the class.



# Example



### Class Instantiation

- Class instantiation in JavaScript refers to creating an object from a class.
- Object for a class is a kind of primitive data type that shows the behavior and the characteristics of a class.
- This is done using the new operator, which creates an instance of the class and returns the object. When the new keyword is used, it creates an instance of an object.

It does so by following these steps:

- It creates a new, empty object.
- It sets the prototype property of the newly created object to be the prototype property of the constructor function being invoked with the new keyword.
- It binds the 'this' keyword within the constructor function to the newly created object.

The 'this' keyword refers to the object that is currently executing the code. Its value depends on how a function is called, and it can be used to access properties and methods on the current object.



# Example:



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