

What are Access Specifiers?

Definition:

Access specifiers (also called access modifiers) define the **visibility** or **access level** of class members (properties or methods). They control **who can access what** from outside or inside the class.

Access Specifiers in JavaScript (ES6+):

SpecifierSymbolMeaning

`public`[*default*]Can be accessed from **anywhere**.

`private`#Can be accessed **only inside** the class.

`protected`X Not natively supported in JS[Can be simulated with `_` naming convention]

Example in JavaScript:

```
class Person {  
    // public property (default)  
    name;  
  
    // private property (using #)  
    #ssn;  
  
    constructor(name, ssn) {  
        this.name = name;      // public  
        this.#ssn = ssn;       // private  
    }  
  
    // public method  
    getSSN() {  
        return this.#ssn;  
    }  
}  
  
const p1 = new Person("Milan", "123-45-6789");  
console.log(p1.name);      // ✓ Output: Milan (public)  
console.log(p1.getSSN());   // ✓ Output: 123-45-6789 (accessed  
via method)  
console.log(p1.#ssn);      // ✗ Error: Private field '#ssn' must  
be declared in an enclosing class
```

Explanation (Point-by-Point):

1. `name` is **public** – accessible from outside the class.
2. `#ssn` is **private** – cannot be accessed directly.
3. We use `getSSN()` as a **public method** to read the private value.

Extra Tip: Simulating Protected in JS

```
class Employee {  
    constructor() {  
        this._salary = 50000; // Underscore means "treat as protected"  
    }  
}
```

 Not truly protected, but a **common convention** in JS to signal: “don’t touch this outside the class or subclass.”