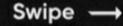


# OP

in JavaScript



#### Class

Classes offer an improved mean of creating object templates. You can think of the class as a sketch (prototype) of a house. It contains all the details about the floors, doors, windows, etc.

#### First Instance

Here, we are creating objects of the method that we added in the class code using the new keyword.

```
const firstCar = new Car('Bugatti', 'W16');
console.log(firstCar);
console.log(firstCar.getInfo());
const secondCar = new Car('Bently', 'V12');
console.log(secondCar);
console.log(secondCar.getInfo());
```

```
// [object Object]
{
    "company": "Bugatti",
    "engine": "W16"
}

"Bugatti has W16 engine"
```

```
// [object Object]
{
    "company": "Bently",
    "engine": "V12"
}

"Bently has V12 engine"
```

#### Inheritance

used to make the code more useful

Inheritance enables you to define a class that takes all the functionality from a parent class and allows you to add more.

Using class inheritance, a class can inherit all the methods and properties of another class.

```
class Sportscar extends Car {
  constructor(company, engine, doors){
    super(company, engine);
    this.doors = doors;
  }
  speed(){
    return '267mph;
  }
}

const mySportscar = new Sportscar('Bugatti', 'W16', 2);
```

#### Encapsulation

a methodology used for hiding information

Implementing Encapsulation in JavaScript prevents access to the variables by adding public entities inside an object, which the callers can use to achieve specific results.

```
class Sportscar extends Car {
    #engine;
    constructor(company, engine){
        super(company, engine);
        this.#engine = engine;
    }
    getEngine(){
        return this.#engine;
    }
    setEngine(){
        this.#engine = engine;
    }
}

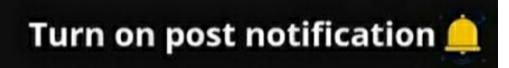
const mySportscar = new
Sportscar('Bugatti', 'W16', 2);
console.log(mySportscar.getEngine());
```

#### Polymorphism

comes from the word Polymorph

Refers to the concept that there can be multiple forms of a single method, and depending upon the runtime scenario, one type of object can have different behavior. It utilizes "Inheritance" for this purpose.

```
class Sedan extends Car {
  constructor(company, engine, model){
    super(company, engine);
    this.model = model;
                           the speed() method is
                           overridden in the class
  speed(){
  return '150mph';
                            Sportscar and Sedan
                                       (check page 3)
}
const mySportscar = new Sportscar('Bugatti',
'W16', 2);
const mySedan = new Sedan('Mercedes', 'V12',
'S-class');
console.log (mySportscar.speed()); // "267mph"
console.log (mySedan.speed()); // "150mph"
```



### THANKS FOR READING

## FOLLOW FOR MORE AMAZING CONTENT





