

In an arrow function the `this` points to the surrounding scope or the parent scope, enclosing scope

## Classes in Javascript

- 1) Primitive way
- 2) Modern way

```
function Dog(name, age, breed) {  
    this.name = name;  
    this.age = age;  
    this.breed = breed;  
}
```

```
var dog = new Dog('barfi', 2, 'Indie');
```

Create a pizza constructor function

toppings  
size

crustType

describe method

Output

\_\_\_size\_\_\_ of the pizza with \_\_\_ topping on a \_\_\_ crust

```
function Pizza(toppings, size, crustType) {  
  this.toppings = toppings;  
  this.size = size;  
  this.crustType = crustType;  
  
  this.describe = function() {  
    console.log(`A ${this.size} pizza with  
${this.toppings.join(", ")} on a ${this.crustType} crust.`);  
  };  
}
```

```
var customerOrder1 = new Pizza(['cheese', 'pepperoni'],  
'medium', 'thin');
```

```
class Pizza {  
  
    constructor(toppings, size, crustType) {  
        this.toppings = toppings;  
        this.size = size;  
        this.crustType = crustType;  
    }  
  
    describe() {  
        console.log(`A ${this.size} pizza with  
        ${this.toppings.join(", ")} on a ${this.crustType} crust.`);  
    }  
}
```

## Inheritance

StuffedCrustPizza

Cheese

Garlic

Mushroom

Sweet Onions

```
class Pizza {  
  
    constructor(toppings, size, crustType) {  
        this.toppings = toppings;  
        this.size = size;  
        this.crustType = crustType;  
    }  
  
    describe() {  
        console.log(`A ${this.size} pizza with  
        ${this.toppings.join(", ")} on a ${this.crustType} crust.`);  
    }  
}
```

```
Class StuffedCrustPizza extends Pizza {  
    constructor(toppings, size, crustType, stuffingType) {  
        super(toppings, size, crustType) // call the parent  
class constructor with super  
        this.stuffingType = stuffingType;  
    }  
  
    describeStuffing() {  
        console.log(`This Pizza has ${this.stuffingType}  
stuffing in the crust.`);  
    }  
}
```

```
        describe() {  
            super.describe();  
            this.describeStuffing();  
        }  
  
    }  
}
```

## Static Property and Static Method

**Static Methods belong to the class rather than any particular object instance. They can be called directly on the class itself.**

```
class Pizza {  
  
    static totalPizzasMade = 0;  
    constructor(toppings, size, crustType) {  
        this.toppings = toppings;  
        this.size = size;  
        this.crustType = crustType;  
        Pizza.totalPizzasMade++;  
    }  
  
    describe() {
```

```
        console.log(`A ${this.size} pizza with
        ${this.toppings.join(", ")} on a ${this.crustType} crust.`);

    }

    static totalPizzasMade() {
        console.log(`Total pizzas made:
        ${Pizza.totalPizzasMade}`);
    }
}
```

```
class MathUtils {
    static add(a, b) {
        return a + b;
    }

    static multiply(a, b) {
        return a * b;
    }
}
```

```
console.log(MathUtils.add(2, 3));    // 5
console.log(MathUtils.multiply(4, 5)); // 20
```

