

In JavaScript, method overriding refers to the concept where a subclass (child class) provides a specific implementation of a method that is already defined in its superclass (parent class). This concept is widely used in object-oriented programming (OOP).

Here are some examples of method overriding in JavaScript:

Example 1: Basic Method Overriding with Classes

In this example, we have a `Car` class with a method `describe`, and a `SportsCar` subclass that overrides the `describe` method.

Javascript code:-

```
// Parent class
class Car {
  describe() {
    console.log("This is a car.");
  }
}

// Child class overriding the describe method
class SportsCar extends Car {
  describe() {
    console.log("This is a sports car.");
  }
}

const car = new Car();
car.describe(); // Output: This is a car.

const sportsCar = new SportsCar();
sportsCar.describe(); // Output: This is a sports car.
```

Example 2: Overriding with Constructor and Method in Subclass

Here, we override the `drive` method in the `ElectricCar` subclass, while also adding new properties.

Javascript code

```
// Parent class
class Car {
  constructor(make, model) {
    this.make = make;
    this.model = model;
  }

  drive() {
    console.log(`Driving a ${this.make} ${this.model}`);
  }
}
```

```

// Child class overriding the drive method
class ElectricCar extends Car {
  constructor(make, model, batteryLife) {
    super(make, model); // Call parent class constructor
    this.batteryLife = batteryLife;
  }

  // Overriding the drive method
  drive() {
    console.log(`Driving a ${this.make} ${this.model} with
    ${this.batteryLife}% battery left.`);
  }
}

const electricCar = new ElectricCar("Tesla", "Model S", 85);
electricCar.drive(); // Output: Driving a Tesla Model S with 85% battery
left.

```

Example 3: Method Overriding with `super`

You can call the method from the parent class using the `super` keyword inside the overridden method.

Javascript code

```

// Parent class
class Animal {
  speak() {
    console.log("Animal makes a sound");
  }
}

// Child class overriding the speak method
class Dog extends Animal {
  speak() {
    super.speak(); // Call the parent class method
    console.log("Dog barks");
  }
}

const dog = new Dog();
dog.speak();
// Output:
// Animal makes a sound
// Dog barks

```

Example 4: Method Overriding in Prototype Chain

JavaScript also supports method overriding through the prototype chain, although using classes is generally preferred in modern JavaScript.

Javascript code

```
// Parent function constructor
function Animal() {}

Animal.prototype.speak = function() {
  console.log("Animal speaks");
};

// Child function constructor
function Dog() {}

// Inheriting from Animal
Dog.prototype = Object.create(Animal.prototype);

// Overriding the speak method
Dog.prototype.speak = function() {
  console.log("Dog barks");
};

const animal = new Animal();
animal.speak(); // Output: Animal speaks

const dog = new Dog();
dog.speak(); // Output: Dog barks
```

Example 5: Overriding with Default and Custom Methods

A default method can be overridden with a more specific implementation in the subclass.

Javascript code

```
// Parent class
class Shape {
  area() {
    console.log("Calculating area of the shape");
  }
}

// Child class overriding the area method
class Rectangle extends Shape {
  constructor(width, height) {
    super();
    this.width = width;
    this.height = height;
  }

  area() {
    return this.width * this.height; // Custom implementation for Rectangle
  }
}
```

```
    }  
  }  
  
  const shape = new Shape();  
  shape.area(); // Output: Calculating area of the shape  
  
  const rectangle = new Rectangle(5, 8);  
  console.log(rectangle.area()); // Output: 40
```

In these examples, the method in the child class (SportsCar, ElectricCar, Dog, Rectangle, etc.) overrides the method defined in the parent class (Car, Animal, Shape). The child class can call the parent class's method using `super`, or it can completely replace the parent class method with its own implementation.