• Inheritance in function constructor:

Inheritance in function constructor is a concept in JavaScript that allows creating new objects that inherit the properties and methods of existing objects. There are different ways to implement inheritance in JavaScript, but one of the most common ones is using constructor functions.

✓ Constructor function

A constructor function is a function that can be used with the new operator to create new instances of a certain type of object.

When creating a constructor function, you can use the prototype property to add properties and methods to the constructor function's prototype object. These properties and methods are then inherited by any objects created using the constructor function.

```
function person(name, age)
{
    this.name = name
    this.age = age
}
person.prototype.getName = function()
{
    return this.name
}
```

- ✓ *person* constructor function has a name and age property and a *getName* method. Any object created using the *person* constructor function will have these properties and methods inherited from the prototype.
- ✓ You can also create a new constructor function that inherits from an existing constructor function by using the call or apply method to call the parent constructor function and passing in this as the first argument.

```
function employee(name, age, company)
{
    person.call(this, name, age)
    this.company = company
}

employee.prototype = Object.create(person.prototype)
employee.prototype.constructor = employee
employee.prototype.getCompany = function()
{
    return this.company;
}

const employee1 = new employee("Menna", 23, "ITI")
console.log(employee1.name)
console.log(employee1.age)
console.log(employee1.getName())
console.log(employee1.getName())
```

✓ Parent constructor function *person* takes in a name and age parameter, also it has a method called *getName()* which is added to the prototype of the *person* constructor function. And child constructor function *employee* inherits the properties and methods from *person* constructor function. *employee* constructor function takes in an additional company parameter, and it has a method called *getCompany()* which is added to the prototype of the *employee* constructor function.

Name: MennaTallah Ashraf Saleh.

Track: Full stack web dev. Using PHP.

Eng. Ahmed Almahdy.