Report lab 5

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Inheritance in function constructor

Constructor functions define the prototype of the properties an object will contain. Using the constructor function, we can create a new object after passing the required parameters.

Inheriting a previously defined constructor function means using the parameters of the previously defined function along with adding some new parameters to the newly defined constructor function.

So we need to use the <u>call()</u> function which allows us to call a function defined somewhere else in the current context.

we create an 'Employee' constructor function. A new 'Developer' constructor function is created that will inherit the basic properties of 'Employee' as well as will contain some new properties.

```
function Employee(name, age, gender, id) {
    this.name = name;
    this.age = age;
    this.gender = gender;
    this.id = id;
}

function Developer(name, age, gender, id, specialization) {
    // Calling Employee constructor function
    Employee.call(this, name, age, gender, id);

    // Adding a new parameter
    this.specialization = specialization;
}
console.log(Employee.prototype);
console.log(Developer.prototype);
```

the 'Developer' constructor function inherits the properties of the 'Employee' constructor function along with a new parameter 'specialization'.

we called the Employee function using the call() function to pass the required parameters to the Employee constructor function.

Difference between abstract class and interface

Definition:

An abstract class is a class that cannot be instantiated and can contain both abstract and non-abstract methods.

An interface, on the other hand, is a contract that specifies a set of methods that a class must implement.

Method implementation:

In an abstract class, some methods can be implemented, while others are left abstract, meaning that they have no implementation and must be overridden by concrete subclasses. In contrast, all methods in an interface are by default abstract and must be implemented by any class that implements the interface.