Week 04

Monday, May 10, 2021 1:13 PM

Object Oriented Programming in JavaScript

The static keyword can be used in class declarations to create a static method. A static method is called by the class directly rather than by instances of the class.

Creating an instance is to create an object with the class data.

What is the difference of class declarations and constructor functions?

By default, an object's methods are public in JavaScript. Methods and properties are said to be public because they can be queried directly and changed by assignment. The dynamic nature of the language means that an object's properties and methods can be changed after it has been created.

What is the prototype of the Object()?

Properties of objects in JavaScript are said to be enumerable or non-enumerable. If they aren't enumerable, this means they will not show up when a for-in loop is used to loop through an object's properties and methods.

The concept of polymorphism means that different objects can have the same method, but implement it in different ways. Polymorphism means that objects are able to override this method with a more specific implementation.

A mixin is a way of adding properties and methods of some objects to another object without using inheritance. It allows more complex objects to be created by 'mixing' basic objects together.

When objects are copied by assignment, they are only copied by reference. This means that another object is not actually created in memory; the new reference will just point to the old object. Any changes that are made to either objects will affect both of them. Arrays and functions are objects, so whenever they're copied by assignment they will just point to the same object. And when one changes, they all change. This is known as making a shallow copy of an object. A deep or hard copy will create a completely new object that has all the same properties as the old object. The difference is that when a hard copy is changed, the original remains the same. But when a shallow copy is changed, the original changes too.