

C# Advance

C# and .Net Web API

Yash Lathiya

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Types of Class

There are 4 types of classes in .net

* Abstract Class

This class contains method with the only signature & not body.

* Sealed Class

This class doesn’t support inheritance.

* Partial Class

When class is too large then multiple different functionalities of class can be written / implemented separately but at compile time it will compile into once.

* Static Class

Static class is a global class.

It will not allow to create object.

Directly we can use method of the static class.

Generics

What is difference between generic & non generic ?

using System;

using System.Collections;

using System.Collections.Generic;

using System.Diagnostics;

namespace GenericsExample {

class Program {

static void Main(string[] args) {

//generic list

List<int> ListGeneric = new List<int> { 5, 9, 1, 4 };

//non-generic list

ArrayList ListNonGeneric = new ArrayList { 5, 9, 1, 4 };

// timer for generic list sort

Stopwatch s = Stopwatch.StartNew();

ListGeneric.Sort();

s.Stop();

Console.WriteLine($"Generic Sort: {ListGeneric} \n Time taken: {s.Elapsed.TotalMilliseconds}ms");

//timer for non-generic list sort

Stopwatch s2 = Stopwatch.StartNew();

ListNonGeneric.Sort();

s2.Stop();

Console.WriteLine($"Non-Generic Sort: {ListNonGeneric} \n Time taken: {s2.Elapsed.TotalMilliseconds}ms");

Console.ReadLine();

}

}

}

Here, Generic list will be sorted faster than non generic as it is specified datatype in generic while in non generic list, each input is taken as object and then casted to relevant memory. It takes much time.