Day 17 Assignments

By

Praveen Chakravarthi

15-02-2022

NB Health Care

1. Research and write what is assembly in C#

An **Assembly** is a basic building block of .NET Framework Applications.

- It is a collection of types and resources that work together to form a logic unit of functionality
- Assembly can be a DLL or EXE depending upon the project we choose
- It is self-describing and reusable.

2. In a tabular format write the access modifiers and explain

Type of Assembly	Within the Same Assembly			Other Assembly	
Class/ Type	**Chakri Base Class**	**Chakri Derived Class**	**Chakri Other Class**	**PublicBase Class (inherited by ChakriBase)**	**Public Other Class**
public	Yes	Yes	Yes	Yes	Yes
private	Yes	No	No	No	No
protected	Yes	Yes	No	Yes	No
internal	Yes	Yes	Yes	No	No
protected internal	Yes	Yes	Yes	Yes	No

Code for Testing Access Modifiers:

Chakri Library

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ChakriLibrary
{
    // Author : Praveen Chakravarthi
    // Purpose : ChakriLibrary for Testing of Access Modifiers
    public class Base  // ChakriBase Class
    {
        public int a;
```

```csharp
      private int b;
      protected int c;
      internal int d;
      protected internal int e;
      /// <summary>
      /// This Method Reads Data from Base Class
      /// </summary>
      public void ReadBaseData()
      {
         a = 1;
         b = 2;
         c = 3;
         d = 4;
         e = 5;
      }
   }

   public class Derived : Base  //ChakriDerived Class inherited by Base Class
   {
      /// <summary>
      /// This Methods Read Data from Derived Class
      /// </summary>
      public void ReadDerivedData()
      {
         a = 1;
         b = 2;
         c = 3;
         d = 4;
         e = 5;
      }
   }

   public class Other   //ChakriOther Class
   {
      /// <summary>
      /// This Method Reads Data from Other Class
      /// </summary>
     public void ReadOtherData()
     {
        Base B = new Base();
        B.a = 1;
        B.b = 2;
        B.c = 3;
        B.d = 4;
        B.e = 5;
     }

   }
}
```

Public Library

```csharp
using System;
using System.Collections.Generic;
```

```csharp
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using ChakriLibrary;

namespace PublicLibrary
{
    // Author : Praveen Chakravarthi
    // Purpose : PublicLibrary for testing Access Modifiers
    public class PLBase : Base   // PublicBase Class inherited by ChakriBase Class
    {
        /// <summary>
        /// This Method Reads Data from Public Base Class
        /// </summary>
        public void ReadPBaseData()
        {
            a = 1;
            b = 2;
            c = 3;
            d = 4;
            e = 5;
        }
    }
        public class PLOther // PublicOther Class
    {
        /// <summary>
        /// This Method Reads Data from Public Other Class
        /// </summary>
        public void ReadPOtherData()
        {
            Base B = new Base();
            B.a = 1;
            B.b = 2;
            B.c = 3;
            B.d = 4;
            B.e = 5;
        }
    }
}
```