

C# Namespaces

Namespaces in C# are used to organize too many classes so that it can be easy to handle the application.

In a simple C# program, we use System.Console where System is the namespace and Console is the class. To access the class of a namespace, we need to use namespace.name.classname. We can use **using** keyword so that we don't have to use complete name all the time.

In C#, global namespace is the root namespace. The global::System will always refer to the namespace "System" of .Net Framework.

C# namespace example

Let's see a simple example of namespace which contains one class "Program".

```
1. using System;
2. namespace ConsoleApplication1
3. {
4.     class Program
5.     {
6.         static void Main(string[] args)
7.         {
8.             Console.WriteLine("Hello Namespace!");
9.         }
10.    }
11. }
```

Output:

```
Hello Namespace!
```

C# namespace example: by fully qualified name

Let's see another example of namespace in C# where one namespace program accesses another namespace program.

```
1. using System;
2. namespace First {
3.     public class Hello
4.     {
5.         public void sayHello() { Console.WriteLine("Hello First Namespace"); }
6.     }
7. }
8. namespace Second
9. {
10.    public class Hello
11.    {
12.        public void sayHello() { Console.WriteLine("Hello Second Namespace"); }
13.    }
```

```

13. }
14. }
15. public class TestNamespace
16. {
17.     public static void Main()
18.     {
19.         First.Hello h1 = new First.Hello();
20.         Second.Hello h2 = new Second.Hello();
21.         h1.sayHello();
22.         h2.sayHello();
23.
24.     }
25. }

```

Output:

```

Hello First Namespace
Hello Second Namespace

```

C# namespace example: by using keyword

Let's see another example of namespace where we are using "using" keyword so that we don't have to use complete name for accessing a namespace program.

```

1. using System;
2. using First;
3. using Second;
4. namespace First {
5.     public class Hello
6.     {
7.         public void sayHello() { Console.WriteLine("Hello Namespace"); }
8.     }
9. }
10. namespace Second
11. {
12.     public class Welcome
13.     {
14.         public void sayWelcome() { Console.WriteLine("Welcome Namespace"); }
15.     }
16. }
17. public class TestNamespace
18. {
19.     public static void Main()
20.     {
21.         Hello h1 = new Hello();
22.         Welcome w1 = new Welcome();
23.         h1.sayHello();

```

```
24.     w1.sayWelcome();  
25. }  
26. }
```

Output:

```
Hello Namespace  
Welcome Namespace
```