**使用字典存储事件实例（C# 编程指南）**

**accessor-declarations** 的一种用法是公开很多事件但不为每个事件分配字段，而是使用字典来存储这些事件实例。这只在具有很多事件但您预计大多数事件都不会实现时才有用。

public delegate void EventHandler1(int i);

public delegate void EventHandler2(string s);

public class PropertyEventsSample

{

private System.Collections.Generic.Dictionary<string, System.Delegate> eventTable;

public PropertyEventsSample()

{

eventTable = new System.Collections.Generic.Dictionary<string, System.Delegate>();

eventTable.Add("Event1", null);

eventTable.Add("Event2", null);

}

public event EventHandler1 Event1

{

add

{

lock (eventTable)

{

eventTable["Event1"] = (EventHandler1)eventTable["Event1"] + value;

}

}

remove

{

lock (eventTable)

{

eventTable["Event1"] = (EventHandler1)eventTable["Event1"] - value;

}

}

}

public event EventHandler2 Event2

{

add

{

lock (eventTable)

{

eventTable["Event2"] = (EventHandler2)eventTable["Event2"] + value;

}

}

remove

{

lock (eventTable)

{

eventTable["Event2"] = (EventHandler2)eventTable["Event2"] - value;

}

}

}

internal void RaiseEvent1(int i)

{

EventHandler1 handler1;

if (null != (handler1 = (EventHandler1)eventTable["Event1"]))

{

handler1(i);

}

}

internal void RaiseEvent2(string s)

{

EventHandler2 handler2;

if (null != (handler2 = (EventHandler2)eventTable["Event2"]))

{

handler2(s);

}

}

}

public class TestClass

{

public static void Delegate1Method(int i)

{

System.Console.WriteLine(i);

}

public static void Delegate2Method(string s)

{

System.Console.WriteLine(s);

}

static void Main()

{

PropertyEventsSample p = new PropertyEventsSample();

p.Event1 += new EventHandler1(TestClass.Delegate1Method);

p.Event1 += new EventHandler1(TestClass.Delegate1Method);

p.Event1 -= new EventHandler1(TestClass.Delegate1Method);

p.RaiseEvent1(2);

p.Event2 += new EventHandler2(TestClass.Delegate2Method);

p.Event2 += new EventHandler2(TestClass.Delegate2Method);

p.Event2 -= new EventHandler2(TestClass.Delegate2Method);

p.RaiseEvent2("TestString");

// Keep the console window open in debug mode.

System.Console.WriteLine("Press any key to exit.");

System.Console.ReadKey();

}

}

/\* Output:

2

TestString

\*/