

Delegates:Using Delegates

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/*
A Programmer's Introduction to C# (Second Edition)
by Eric Gunnerson

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*/
// 22 – DelegatesUsing Delegates
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using System;

public class DelegatesUsingDelegates
{
    public static void Main()
    {
        Container employees = new Container();
        // create and add some employees here

        // create delegate to sort on names, and do the sort
        Container.CompareItemsCallback sortByName =
            new Container.CompareItemsCallback(Employee.CompareName);
        employees.Sort(sortByName);
        // employees is now sorted by name
    }
}

public class Container
{
    public delegate int CompareItemsCallback(object obj1, object
obj2);
    public void Sort(CompareItemsCallback compare)
    {
        // not a real sort, just shows what the
        // inner loop code might do
        int x = 0;
```

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int y = 1;
object item1 = arr[x];
object item2 = arr[y];
int order = compare(item1, item2);
}
object[] arr = new object[1]; // items in the collection
}
public class Employee
{
Employee(string name, int id)
{
this.name = name;
this.id = id;
}
public static int CompareName(object obj1, object obj2)
{
Employee emp1 = (Employee) obj1;
Employee emp2 = (Employee) obj2;
return(String.Compare(emp1.name, emp2.name));
}
public static int CompareId(object obj1, object obj2)
{
Employee emp1 = (Employee) obj1;
Employee emp2 = (Employee) obj2;

if (emp1.id > emp2.id)
return(1);
if (emp1.id < emp2.id) return(-1); else return(0); } string
name; int id; } [/csharp]

```