

C# Common Interfaces



Lesson Objectives

- IComparable
- IComparer
- IDisposable
- IFormattable
- IEnumerable
- ICollection
- IList

Section 1

ICOMPARABLE

- Defines a generalized type-specific comparison method that a value type or class implements to **order** or **sort** its instances.
- Methods to implement:
 - ✓ `public int CompareTo(object obj)`

- Defines a generalized type-specific comparison method that a value type or class implements to **order** or **sort** its instances.
- Methods to implement:
 - ✓ `public int CompareTo(T other)`

Implement interface

```
6 references
class Student : IComparable<Student>
{
    2 references
    public string Name { get; set; }
    4 references
    public decimal GPA { get; set; }

    0 references
    public int CompareTo(Student other)
    {
        //// To sort by GPA in descending
        return other.GPA.CompareTo(this.GPA);
    }
}
```

then use it

```
List<Student> listStudent = new List<Student>();
listStudent.Add(new Student()
{
    Name = "Mark",
    GPA = 3.6m
});
listStudent.Add(new Student()
{
    Name = "Peter",
    GPA = 3.9m
});

listStudent.Sort();
```

Thank you

