# Collection , Generics , data structure practice – CustomLinkedList

Shape

Description automatically generated with medium confidence

1. Create Node generic class that have Previous Node, Value generic, Next Node fields.
2. Create a CustomLinkedList generic class that have:
3. Generic Node types First , Current , Last fields .
4. Add method to add new generic value to the Node collection to the end of the collection
5. GetEnumerator , GetEnumerableDESC methods to enable using foreach iterator for iterating the collection Node s in ascending , descending order.

For reading about creating iterators : [Iterators | Microsoft Docs](https://docs.microsoft.com/en-us/dotnet/csharp/iterators)

Use the following code:

CustomLinkedList<int> cll = new CustomLinkedList<int>();

cll.Add(1);

cll.Add(2);

cll.Add(3);

System.Console.WriteLine("Enumarating CustomLinkedList items with");

System.Console.WriteLine("GetEnumerator:");

foreach (var item in cll)

    System.Console.WriteLine(item);

//

System.Console.WriteLine("GetEnumerableDESC:");

foreach (var item in cll.GetEnumerableDESC())

    System.Console.WriteLine(item);

Will produce this output:

Enumarating CustomLinkedList items with

GetEnumerator:

1

2

3

GetEnumerableDESC:

3

2

1