

## **EXTENSION METHOD**

# IN C# .NET







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#### What's Extension Method?

Extension methods are a powerful feature in C#.

That allow you to add new methods to existing types without altering their original code

# Extension methods are static methods







## **Key Points of Extension Method**

1-Extension method is a static method that must exist in static class.

2-It always use "this" keyword with first parameter in the parameter list. Basically this keyword tells to the compiler that what class you have to extend. You can also include other parameter proceeding with it.

3-You cannot override base method of existing type using an extension method. If you do this, the compiler will not give you an error but it will not work.

4-If you create an extension method with same name as base method but different parameters then the extension method will call first not base method.



## Example

```
1 reference
public static IEnumerable<T> Filter<T>
(this IEnumerable<T> list, Predicate<T> predicate)

{
   List<T> result = new List<T>();
   foreach (var item in list)
   {
      if (predicate(item))
          result.Add(item);
   }

   return result;
}
```

#### Now Let's create New List Of Numbers

```
var list = new List<int> { 1, 2, 3, -4, 5, -6, -7, 8, 9 };
```

#### Iterate for this List To know the positive numbers

```
IEnumerable<int> newList = list.Filter(s=>s>0);
foreach (int item in newList)
{
    Console.Write($"{item}{" "}");
}
```

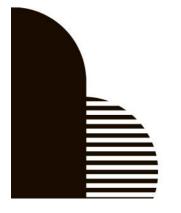
Output

1 2 3 5 8 9





# I Hope it was Helpful







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