

Use the LINQ Where Clause



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Module Goals



Using the where clause

Finding item(s) in a List<T> collection

Using && and || in a where clause

Using a custom extension method



Searching



Filtering Data

Query syntax uses the where clause

Method syntax uses the Where() method



Filtering Data

```
(from prod in products
 where
 prod.Name.StartsWith("S")
 select prod);
```

```
products.Where(
    prod =>
    prod.Name.StartsWith("S"));
```



Demo



Where expression



Using the And Operator

```
(from p in products where  
p.Name.StartsWith("L") &&  
p.StandardCost > 200  
select prod);
```

```
products.Where(p =>  
p.Name.StartsWith("L") &&  
p.StandardCost > 200);
```



Demo



Where expression with two fields



Custom Extension Method

**Can create an extension method
to return `IEnumerable<T>`**

Can use this method on the query

```
(from prod in products  
select  
prod).ByColor("Red");
```



```
public static class ProductHelper
{
    public static IEnumerable<Product>
        ByColor(
            this IEnumerable<Product> query,
            string color)
    {
        return query
            .Where(p => p.Color == color);
    }
}
```

- ◀ **Create static class**
- ◀ **Create static method**
- ◀ **Use 'this' keyword to key to type of object**
- ◀ **Pass in any other parameters**
- ◀ **Invoke the Where() method to filter data**



Demo



Using a custom extension method for filtering



Module Summary



Use where clause filter the collection

Use the C# && operator

Can write your own custom where filter



Up Next:

Select a Single Piece of Data from a Collection

