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

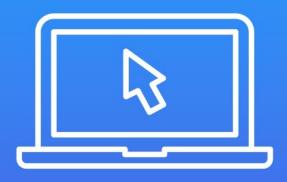


Filtering Data

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







Where expression

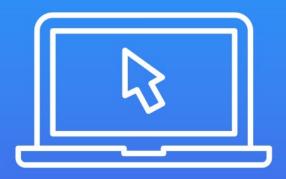
Using the And Operator

```
(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

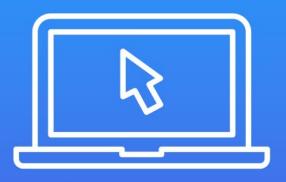


```
public static class ProductHelper
{
  public static IEnumerable<Product>
    ByColor(
    this IEnumerable<Product> query,
    string color)
  {
    return query
    .Where(p => p.Color == color);
  }
}
```

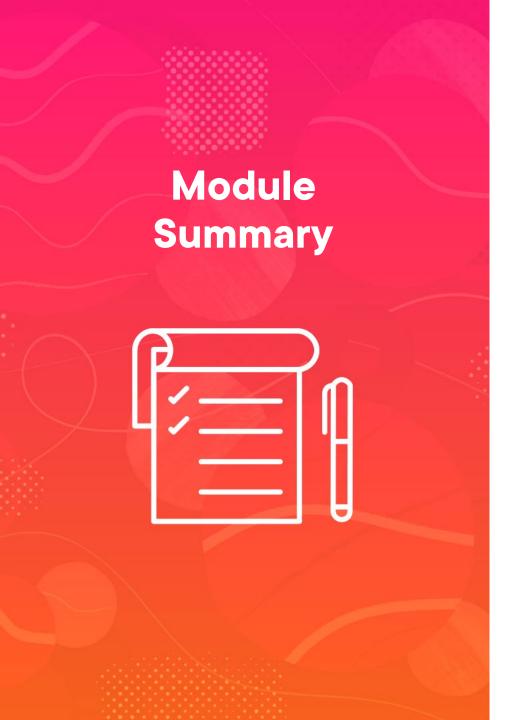
- **◄** Create static class
- Use 'this' keyword to key to type of object
- Pass in any other parameters
- Invoke the Where() method to filter data



Demo



Using a custom extension method for filtering



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

