# Utilizing Visual Basic Collections



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### Module Goals



#### Learn to use...

- Arrays
- ArrayList
- Dictionary
- List(Of T)
- LINQ queries

Build more of the WPF application



### .NET Collections

**Arrays** 

Don't use these too much

**ArrayList** 

An simple collection

**Dictionary** 

A key/value pair collection

List(Of T)

Use these most often





Define and add to an array

Define and initialize in one statement





#### **Define an ArrayList**

- Untyped collection
- Can put anything in you want

Add strings

**Add Product objects** 





Create a dictionary of product objects





**ContainsKey method** 

**Count, Remove and Clear methods** 





#### **LINQ** methods

- Sum
- Average
- Min
- Max





Load products into List(Of T)

**Exists method** 





#### Methods/Properties of List(Of T)

- Count
- RemoveAt
- Remove
- Find
- Clear





### **LINQ** expressions

- Sum
- Average
- Min
- Max

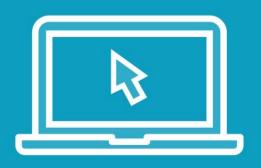




#### Changes to WPF application

- Products list
- Customer list
- Step through the code





#### Changes to WPF application

- INotifyPropertyChanged
- PropertyChanged event



## Summary



Use List(Of T) as much as possible

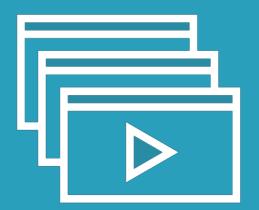
Use Dictionary when you need a key/value pair

Stepped through some code

Separated data layer logic from view model logic

Read some data from an XML file





Coming up in the next module...

Decision making

If, case, and loops

