**Computer Programming I**

**Essential Standard 6.00 Apply tools to obtain and validate user input.**

**Indicator 6.03 Apply procedures for validation of user input. (3%)**

Validating Numeric Input

* There are multiple methods you can use to check the input.
* In previous lessons you have learned how to use the Convert methods.
* In this lesson you will learn how to use TryParse.
* TryParse is typically used in an assignment statement or in an if statement as it returns true/false.
* TryParse Methods

|  |  |
| --- | --- |
| **Method** |  |
| TryParse (String, Int16) | Converts the string representation of a number to its 16-bit signed integer equivalent. A Boolean return value indicates whether the conversion succeeded or failed (true or false). |
| TryParse (String, Int32) | Converts the string representation of a number to its 32-bit signed integer equivalent. A Boolean return value indicates whether the conversion succeeded or failed (true or false). |
| TryParse (String, Double) | Converts the string representation of a number to its double equivalent. A Boolean return value indicates whether the conversion succeeded or failed (true or false). |

* TryParse Example
  + The TryParse (String, Int16) converts the string and returns true/false indicating success/failure.  
      
     Dim strNum As String = “5”  
     Dim intNum As Integer  
     Dim result As Boolean  
     result = Int32.TryParse(strNum, intNum)
* The TryParse (String, Double) converts the string and returns true/false indicating success/failure.  
    
   Dim strNum As String = “5”  
   Dim dblNum As Double  
   Dim result As Boolean  
   result = Double.TryParse(strNum, dblNum )

Using the Convert Class Methods with Try/Catch

* Remember you learned how to write a try/catch block of code to check for user input.
* The Convert class methods will throw a runtime error if the string is not numeric.
* We can use the try/throw combined with the Convert class methods to validate numeric input.
* Using TryParse with Convert Methods

If Int32.TryParse( txtAge.Text, intAge) Then

intAge = Convert.ToInt32(txtAge.Text)

MessageBox.Show("Your age is: " & intAge.ToString)

’executes if the TryParse Convert works

else

MessageBox.Show("Enter your age in numbers.");

’executes if the TryParse fails

End If

Conclusion

* This PowerPoint provided an overview of using TryParse to validate input in Visual Studio.
* For more information on this topic

http://msdn.microsoft.com/en-us/library/32s6akha(v=VS.90).aspx

http://msdn.microsoft.com/en-us/library/yxcx7skw.aspx