

```
1 using System;
2 using System.Collections.Generic;
3 using System.Text;
4 using System.Windows;
5
6 /*
7  * Title:    UtilityString
8  * Author:   Paul McKillop
9  * Date:     March 2020
10 * Purpose:  Manipulation of the strings for the application
11 */
12
13 namespace SignatureGeneratorV
14 {
15     public class UtilityString
16     {
17         /// <summary>
18         /// Get a random integer and covert to string
19         /// for concatenation to built user name
20         /// </summary>
21         /// <param name="n"></param>
22         /// <returns></returns>
23         public static string RandomNumberAsString(int lower, int upper)
24         {
25
26             // -- set up random integer object
27             Random random = new Random();
28             int n = random.Next(lower, upper);
29
30             return n.ToString();
31         }
32
33         /// <summary>
34         /// Remove leading and trailing and convert to lower
35         /// </summary>
36         /// <param name="myString"></param>
37         /// <returns></returns>
38         public static string TrimAndLower(string myString)
39         {
40             string st = string.Empty;
41
42             //-- Trim
43             st = myString.Trim();
44
45             //-- To Lower Case
46             st = st.ToLower();
47
48             return st;
49         }
50
51         /// <summary>
52         /// Function to reverse a string
```

```
53     /// </summary>
54     /// <param name="s"></param>
55     /// <returns>reversed string</returns>
56     public static string ReverseString(string s)
57     {
58         char[] arr = s.ToCharArray();
59         Array.Reverse(arr);
60         return new string(arr);
61     }
62
63     /// <summary>
64     /// Create the username from initial letters of forename and surname
65     /// </summary>
66     /// <param name="forename"></param>
67     /// <param name="surname"></param>
68     /// <returns>string of 2 characters</returns>
69     public static string MakeUsername(string forename, string surname)
70     {
71         //-- holding variable
72         string s = string.Empty;
73
74         try
75         {
76             //-- range for random
77             var lower = 1000;
78             var upper = 9999;
79
80             //-- string for Trim()
81             string st = forename.Trim();
82
83             //-- add forename first initial
84             s = s + st.Substring(0, 1);
85
86             //-- same with surname
87             st = surname.Trim();
88             s = s + st.Substring(0, 1);
89
90             //-- add the random suffix 1000 to 9999
91             s = s + RandomNumberAsString(lower, upper);
92         }
93         catch (Exception ex)
94         {
95             // -- show error message
96             MessageBox.Show(ex.Message);
97         }
98
99         return s.ToLower();
100     }
101 }
102 }
103
```