

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6 using System.Windows;
7 using System.Windows.Controls;
8 using System.Windows.Data;
9 using System.Windows.Documents;
10 using System.Windows.Input;
11 using System.Windows.Media;
12 using System.Windows.Media.Imaging;
13 using System.Windows.Navigation;
14 using System.Windows.Shapes;
15
16 namespace Motoring
17 {
18     /// <summary>
19     /// Interaction logic for PageLoan.xaml
20     /// </summary>
21     public partial class PageLoan : Page
22     {
23         public PageLoan()
24         {
25             InitializeComponent();
26             FillTestData();
27         }
28
29         private void RunningPageButton_OnClick(object sender, RoutedEventArgs e)
30         {
31             // --Data handling classes
32             Loan loan = new Loan();
33             CostSummary costSummary = new CostSummary();
34
35             //-- Get the data from the form
36             loan = HarvestLoanData();
37             costSummary.CurrentLoan = loan;
38
39
40             var runningCostPage = new PageRunning(costSummary);
41             this.NavigationService.Navigate(runningCostPage);
42         }
43
44
45         private void ClearButton_OnClick(object sender, RoutedEventArgs e)
46         {
47             this.CarPriceTextBox.Text = "";
48             this.CarDepositTextBox.Text = "";
49             this.LoanTermTextBox.Text = "";
50             this.InterestRateTextBox.Text = "";
51         }
52
53         private void FillTestData()
54         {
55             Loan myLoan = new Loan
```

```
56         {
57             CarPrice = 15000,
58             CarDeposit = 2000,
59             LoanTermYears = 3,
60             LoanRate = 3.75F
61         };
62
63         this.CarPriceTextBox.Text = myLoan.CarPrice.ToString();
64         this.CarDepositTextBox.Text = myLoan.CarDeposit.ToString();
65         this.LoanTermTextBox.Text = myLoan.LoanTermYears.ToString();
66         this.InterestRateTextBox.Text = myLoan.LoanRate.ToString("F");
67     }
68
69     //-- Harvest form data
70     private Loan HarvestLoanData()
71     {
72         Loan loan = new Loan();
73         //-- validate and get data
74
75         //-- Price
76         //-- Check there is a value in the TextBox
77         if (CarPriceTextBox.Text != "")
78         {
79             //-- Check that the value in the TextBox is the correct type, ↗
80             Integer in this case
81             //-- Use int.TryParse(Value to check, out type value to return ↗
82             if parse ok)
83             if (int.TryParse(CarPriceTextBox.Text, out int price))
84             {
85                 //-- Assign the value harvested to the member of the loan ↗
86                 class
87                 loan.CarPrice = price;
88             }
89             else
90             {
91                 //-- Message to the user if the value is not the right ↗
92                 type
93                 MessageBox.Show("The price entered must be an integer");
94             }
95         }
96         else
97         {
98             //-- Message to the user if the TextBox is empty
99             MessageBox.Show("You must provide a price for the car");
100         }
101
102         //-- Deposit
103         if (CarDepositTextBox.Text != "")
104         {
105             if (int.TryParse(CarDepositTextBox.Text, out int deposit))
106             {
107                 loan.CarDeposit = deposit;
108             }
109             else
110             {
111                 MessageBox.Show("The deposit value must be an integer");
112             }
113         }
114     }
115 }
```

```
108     }
109 }
110 else
111 {
112     MessageBox.Show("Enter an amount for the deposit");
113 }
114
115 //-- Term
116 if (LoanTermTextBox.Text != "")
117 {
118     if (byte.TryParse(LoanTermTextBox.Text, out byte term))
119     {
120         loan.LoanTermYears = term;
121     }
122     else
123     {
124         MessageBox.Show("The term must be a whole number less than 255");
125     }
126 }
127 else
128 {
129     MessageBox.Show("You must supply a value for the Loan Term in Years");
130 }
131
132 //-- Rate
133 if (InterestRateTextBox.Text != "")
134 {
135     if (float.TryParse(InterestRateTextBox.Text, out float rate))
136     {
137         loan.LoanRate = rate;
138     }
139     else
140     {
141         MessageBox.Show("The rate must be formatted as a number");
142     }
143 }
144 else
145 {
146     MessageBox.Show("You must supply a value for the interest rate");
147 }
148
149 return loan;
150 }
151 }
152 }
153 }
154 }
155
156
```