

## Generic List(T) – Motor Exercise

Create an application that tracks electric motors in a manufacturing plant. A motor has the following characteristics:

MotorId: Five digit string such as "02346"  
Description: String  
RPM: Integer, values in the range 10 to 10,000  
Voltage: Integer, values in the range 1 to 500  
Status: String  
The Status values are   ON:   Motor is on and running  
                              OFF:   Motor is online but not running  
                              MNT:   Motor is undergoing maintenance  
                              NA:   Motor is not available

The application should be able to store the information for five Motor structures in a generic list and print the information for any one specific motor into a MessageBox when the user presses the Print button.

Refer to video for the functionality requirements. If the user enters invalid motor data, display error providers. Prevent the user from being able to enter more than five motors.

Allow the user to enter a motor number from one to five in Motor to print box. The number 1 to 5 represents the motor in the order they entered it. (ie: If they enter the number 2, then it should display the 2<sup>nd</sup> motor that they entered). If they enter a number, that is less than one or more five, provide them with an error message. If they enter a number between one and five BUT the motor they entered does not exist, show them an error message. (ie: If they have only entered 3 motors, but they enter a number 4 in the box to print, that is invalid)