# C# Basics Demo

This document will show the steps followed in class to create the Console application to demonstrate C# Basics.

1. Create a new Console Application in Visual Studio
   1. Go to Visual C#
   2. Select Console Application (.NET Framework)
2. Create a new class and name it “Car”
3. Why is class not public?
   1. Internal by default
   2. If it was private could not be used in any place unless the class is nested inside another class.
4. Add the following properties to the Car class
   1. Id – Integer
   2. Make – String
   3. Model – String
   4. Year – DateTime
5. What does a property get/set do?
   1. Get retrieves the value
   2. Set sets the value
6. How can we do customize the get and set?
   1. Create a private variable name \_id with int as the type.
   2. Modify the property to return and set the value
      1. Get – return \_id
      2. Set - \_id = value
         1. Validate that value is greater than 0 and set to 0 if not
   3. Repeat for other properties
      1. Create a private variable
      2. Create Get method to return
      3. Create Set method to set it – no logic
7. In Program.Main create a new instance of Car and assign values to the properties.
8. Create a new class name SuperCar and inherit from Car.
   1. Give it properties specific to a super car.
   2. Do you need to repeat the properties in Car?
9. Create a new car of type Car that is a Super Car in Program.Main.