

C# DRILL

Create a series of Windows Console applications, one for each of the following class/method demonstrations. **Show each application to your Instructor.**

Create classes and methods that demonstrate:

- The difference between overloading methods and overriding methods, showing each in operation
- Creation of a derived class
- Each of these access modifiers: public, protected, internal, private, protected internal. Ref: <http://msdn.microsoft.com/en-us/library/wxh6fsc7.aspx>
- Creation of a sealed class
- Use of an interface
- Use of a try/catch/finally block
- Handling an exception by writing the important data from the exception to a log file on the local machine
- Value types vs. reference types
- Use of the keyword 'this'.
- Serialization of an object - in this case, a BLOB (Binary Large Object'). The object should be streamed to a text file. Show also the retrieval of the object from that file and conversion back to its original form.
- Differences between an abstract class and an interface, in terms of creation and use of each.
- Creation and use of a delegate.
- Creation and use of a multicast delegate
- Creation of a struct
- Creation and use of nullable types
- Creation and use of an Enumerable