**The Factory Method Design Pattern Summary**

The “new” operator is considered harmful. There is a difference between requesting an object and creating one. The “new” operator always creates an object and so, fails to encapsulate object creation. The factory method design pattern enforces that encapsulation.

We adopted the factory method design pattern when implementing the invoice system. We used the factory method to instantiate either a Gold Order Invoice, a Silver Order Invoice or a Standard Order Invoice, based on the category of the order the customer wishes to view.

The Creator class (Invoice.aspx.cs) invokes the method getInvoice() from the Invoice Factory class, which depending on the category, returns either a goldOrderInvoice, a silverOrderInvoice or a standardOrderInvoice object. These object all inherit from the interface iInvoice, so they are returned to the caller as being of type iInvoice.

