**MIS320 Spring 2011  
Assignment 1**

**Assignment:** Complete the design process for an inventory management system for the Lemonade Stand we’ve been discussing in class. Your design specifications should be thorough enough to hand off to a contract developer and ensure they build the system to meet all of the clients’ requirements. Your design specs should include the following deliverables:

* Business (High Level) Requirements
* Product (Low Level) Requirements
* Process Flow Diagrams
* I/O Design
  + Screen/Report Wireframes
  + Control List
* Data Design
  + ERD (No Data Dictionary necessary *this time*)
* Class Design
  + Class Diagram
  + Class Definition (Class Name, description, definition of members, declarations and pseudocode for methods)

For this one assignment, you can (and should) turn in your handwritten work on paper. Remember to staple it. Remember to staple it. Remember to staple it. If you do any of your modeling in Visio, make sure to turn in every version. The point of this assignment is for me to see the iterations in your process.

**Business Case:**  Your firm has built the checkout system we’ve been discussing, so we now need an Inventory Management System (IMS) to handle supplies of lemons, sugar, cups, etc. The IMS will need to account for the supplies being inventoried. Your clients want to be able to track a description of the supply, its type, the quantity on hand, a minimum quantity level (a reorder point if you’ve had OM), and the standard reorder quantity. Users should be able to enter a new supply and the fields associated with it. They should be able to associate a supply with a product if it is an ingredient in that product. They should also have the functionality to update supply quantities on hand manually (we’re not integrating it with the checkout system yet). The system will need the ability to produce a report that lists the supply ID, description, quantity on hand and reorder quantity for all supplies below their minimum quantity level. ***(Be sure to document in your requirements any assumptions you make based on questions that arise from this summary.)***

**Technical Specifications:** For purposes of psuedocoding, you can assume you’re developing this as a desktop application interacting with a database.