Your boss liked the changes to the design of the new pages (Index, About Us, and Contact Us) you added to the site.

You would like to impress your boss even more. The list below outlines the proposals for additional features that you would like to make to the site.

- An include file or files should be implemented for all code that is repetitive.
- The database should be improved. Currently inventory is not being tracked but should be. Determine what modifications will need to be made in order to be able to track inventory for all your items. Restructure the tables, but make sure the database is still normalized. For example, make sure you can track inventory for red baseball hats separately from blue baseball hats. **Produce an ERD and get it approved before starting to code.**
- An object should be used to retain the ordered item information. **Produce a UML and get** it approved before starting to code.
- The cart should still work as in Phase 1 but the following features should be added:
  - The cart should not be saved in the database.
  - Allow the shopper to remove all the items in their cart at once.
  - Update the look of the cart so that the shopper can see how much they have spent, including taxes, as they add or remove items from the cart.
  - Allow the shopper to continue shopping
- Change the look of the Catalog, Product and Cart pages to match what you did for the others. You feel that if the site had a more professional look more products would be sold.

## **NOTES:**

As in the previous exercises, you cannot throw out existing code and start from scratch. Modify the code where appropriate, and create new files where necessary (using the same coding style as the other files in the site).

Although the inventory is not being updated in this phase you need to make sure you have the database set up for it. You will be updating inventory in the next phase!

See "Shopping Cart Grade Sheet" for marking scheme used for all phases of the application.