CMSC 735 & MSWE 609
Assignment 4A

This assignment is, like Assignment 2, concerned with fault detection in requirements documents. However, it revisits the topic in a somewhat different way to get you to think about the different kinds of techniques that are available for fault detection.

When you were asked to identify faults in Assignment 2, you used an *ad hoc* or unstructured technique. That is, you were taught what kinds of faults might appear in a specific document and asked to find them. You were asked to rely on your own experience to use effective strategies for finding faults. Each member of the final team was responsible for finding faults in the entire document.

In this assignment, we introduce a fault detection technique known as Perspective-Based Reading (PBR), which is an example of a structured fault detection technique. PBR provides reviewers with a procedure to follow based upon a certain viewpoint, or perspective. For example, in this first phase of the assignment, you will be asked to evaluate the document from **one** of the following perspectives:

- a designer who has to produce a design of the system;
- a tester who has to produce a test plan;
- a requirements analyst who has to produce a user's manual.

The point is that each of these perspectives represents someone who has to create a specific model of the system described by the requirements. We can provide a procedure for creating that model, and use the process of creating the model to help find faults.

Assignment 4A will be handled slightly differently from Assignment 2A, because of the procedural techniques which will be used. [1] In particular, there will be some training in the techniques, and a chance to use them in class, so that you can ask for clarifications if there is any confusion. The timetable for the assignment is as follows:

Oct. 23	You will be trained in all three PBR techniques.
Oct. 28	You will be assigned a specific PBR technique. You will then apply the technique in class. You may ask for specific help if you need it (although this is not meant to take the place of the training session!). You will finish the assignment at home and submit your fault lists as usual.
Oct. 30	Fault lists are due through email to rjones@cs.umd.edu by noon. The other submissions (which are specific to the technique you have been assigned) are due at the beginning of class.

To submit your fault list, you should download the template report form 2.1 from the class ftp site (available on Oct. 28) and fill in your faults as described (if you have trouble downloading, let Ryan know and he will send an ASCII version of the file via email). Keep track of how long you spend examining the document for faults, including the time spent in class; you will need this information to answer some of the questions at the bottom of the report form (these questions are for statistical purposes only and will not be used in determining your grade).

Be sure to keep a copy of the completed form 2.1 file for yourself! You will need to reuse some of this information on future phases of this assignment.

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[1] Again, this assignment is part of a study. As always, working with another student will be considered cheating, but for the purposes of the study it is especially crucial that you do not discuss your work with other students in the class. The motivation and design of the study will be discussed in class later this semester.