**Project Phase II Assignment for CS 616 – due April 8**

**(during class, not after!)**

Phase II of the project is to perform the design, implementation, and testing for the project and to present the results to your peers. Here are the things you must prepare by April 8.

1. (13 points) Detailed Design
   * 1. Utilize some method of showing your detailed design for important scenarios or methods (must do so for at least one scenario or method)
     2. User interface design (your choice how to depict)
     3. Describe any design patterns that you used
     4. Hold a review of the design, describe the process you used (or checklist), list any issues you found
2. (37 points) Implementation
   1. Source code listing with in-line comments
      1. Hold a review of the code, describe the process you used (or checklist), list any issues you found
   2. User’s manual – format of your choosing
   3. Administrator’s manual (configuration) along with System requirements and Installation – format of your choosing – note that this may be one paragraph of text
3. (17 points) Testing
   1. Test plan, test cases, test results for one level of testing in addition to acceptance testing (unit or integration or system) – you must perform all these levels but must only provide deliverables for one level
      1. Hold a review of the test plans and test cases prior to testing, describe the process you used (or checklist), list any issues you found
4. (13 points) Technical Metric Collection (seek “waiver” for metrics that do not apply)
   1. Estimated story points (or lines of code or function points)
   2. Actual lines of code (or function points) – as implemented
   3. Complexity of each module (class or method) (such as McCabe’s cyclomatic complexity, Module coupling indicator for each module (from Chidamber-Kemerer (CK) metrics), Weighted methods per class (for each class) (also from CK metrics)
   4. Complexity of overall system (such as depth of inheritance tree, Coupling between object classes (both are CK metrics))
   5. Product size (such as number of user stories, number of acceptance test plans, etc.)
   6. Product effort (number of person hours)
   7. Defects (number detected during the quality assurance reviews, if any)
5. (5 points) Keep the Engineering Notebook up to date
6. (15 points) Demonstration of the project to customer/professor
7. Give your project to another team for peer review/evaluation (10/31) and perform a peer review/evaluation of the project of another team (they give to you 10/31, you give back your report by 11/9) – separate grade – NOT APPLICABLE for CS 616

8. Presentation of Results to Class (4/8) – separate grade

* Each team will have 20 minutes to present their results
* You may use viewfoils (transparency slides), PowerPoint slides, or posters
* Your presentation must present the major aspects of Phase II (you will not have enough time to show all the items developed, so some results may be combined or skipped)

The project may be handwritten (neatly), typed (word processor, graphics package), in spreadsheet format, or a combination of these. You may turn in hardcopy and/or email project and/or send URL.

All assignments must have the names of your team members, course number, semester, project phase number, and date