For this project you need to develop the design and software architecture that correspond to the system requirements of the software application that you delivered for project 1. The design and software architecture will then serve as the basis for the implementation (for project 3 and the term project) of your software application. Your project should be based on the following two main foundations:

1. IEEE 1016 standard for Recommended Practice for Software Design Descriptions. Specifically, it should include all four design views, namely: decomposition, dependency, interface, and detail. You should also capture both the logical and physical aspects of your design.

2. Design Patterns: you should identify and apply a design pattern that is most applicable to your project, per our coverage in class – please refer to the notes posted course web site.

Your project deliverables should adhere to the following timeline:

- **Monday 4/5:** First Draft of the design document to discuss with instructor. It should include brief description of the views and the applicable design pattern(s).

- **Wednesday 4/7:** Second Draft of the design document, including diagrams and references.

- **Monday 4/12:** Final design document

- **Wednesday 4/14:** Feedback from instructor about design document and design freeze. Start of the implementation phase.

You may consult with the course instructor, with your classmates, with computer science faculty or other individuals regarding potential project ideas. Please refer to the course web site, located at: [http://cs.armstrong.edu/saad/csci7320/index.html](http://cs.armstrong.edu/saad/csci7320/index.html) for pointers to online resources.

**Total Grade: 100 points**

**Project Grade Breakdown:**
- Final Design Document 60%
- Two Progress Reports 40%

**Grade Breakdown:**
- IEEE 1016 Standard 40%
- Design Pattern 40%
- Diagrams/References 20%