

**HW4**  
**ITEC 2150**  
**Design**  
**Due April 1, 2013**

The purpose of this assignment is to create a software design for the ITEC 2150 Project. This design should identify the major classes for this project, methods and collaborations between the classes. Please follow the directions below to assist you with this process.

1. Read the project assignment. Extract the nouns and record them. Please identify those that describe concrete items. This will help you identify candidate classes.
2. List the verbs associated with these candidate nouns. These are good candidates for methods.
3. Determine the collaborations and write the responsibilities for each class. If you cannot identify responsibilities or it doesn't seem to provide useful functionality for your program, consider whether this is a good class candidate.
4. Once you have identified the list of classes, review these to ensure you have covered the complete problem as well as ensuring you know and understand the object being described and the methods to provide the behavior desired.
5. Create a UML diagram detailing your class structure. Please keep in mind the different relationships and the correct symbology for each. Tools that can be used for the UML diagrams include:
  - a. Visio – available from DreamSpark Premium
  - b. UMLet - <http://www.umlet.com/> - be careful with the download. Want to get Umlet not the Free Editor.
  - c. For Mac and Windows users, ArgoUML is available and will in fact do rudimentary code generation. <http://www.macupdate.com/app/mac/25021/argouml>
  - d. **If you use a different tool, you must tell me which tool you used.**
6. Create class shells. These shells should describe the class and the methods being contained in that class. Remember the coding standard comments, these will be used to help describe your design. Please ensure that you have the correct Javadoc comments. We will be running Javadoc on your code to provide an API for your code.
7. Your submission will include your UML diagram and class shells describing your classes and methods.