EECS 486 Object Oriented Methodology Project 1 Implementation Description

Possible Points: 50 Assigned Date: 04FE03
Due Date: 11FE03

The objective of the Project 1 Implementation is to allow the students to quickly apply newly learned UML modeling techniques to a project. Students will work in assigned groups for the implementation. Page 2 describes the contents of the Project 1 implementation by describing the point content.

The domain of project 1 is a moderately complex, home-based software system. Examples include a controller for a 6-zone lawn sprinkling system or a programmable thermostat for a heating/air conditioning system.

The objective of the documentation was to diagramatically describe the system that the team is implementing. The objective of the Project 1 Implementation is to implement the system as described in the documentation. That is, rather than to hack an implementation into existence, the objective is to comply with the earlier design and determine reasons for non-compliance.

The grade for the Project 1 Implementation is divided into three parts: Time Effort for Implementation, Functionality of Implementation, and Presentation of Implementation. Each portion of the grade is further described on the next page.

During the implementation, the groups or individuals should focus on completely implementing a portion of the system, rather than partially implementing the entire system. That is, implement depth-first rather than breadth-first whenever and wherever possible. As an example, a group may choose to implement 2-3 complete classes from the class diagram or one complete use case. The choice of which classes or use cases to implement is up to the group, but as mentioned, please approach the implementation depth-first.

EECS 486 Object Oriented Methodology Project 1 Implementation Grading Template

Effort 20 points

- Each group is expected to work 12 hours/person/group
- Each group will keep a log of hours expended on the implementation by each group member and include the log when reporting out

<u>Functionality</u> 20 points

- Functionality is evaluated based upon a demo to Dr. Chesney or A Singh during the week of 10-14FE03
- Compliance to Project 1 Documentation is worth 10 points
- Actual functionality of the implementation is worth 10 points. That is, does the portion of the system implemented by the group actually work, and is its function demonstrable?

<u>Presentation</u> 10 points

- Each group will present on either the 13 or 14FE03
- Each group will have 20 minutes to present, including setup and tear-down
- The format of the presentations is as follows:
 - Introduction of Group Members
 - Introduction of Domain (Sprinkler Control or Thermostat)
 - Discussion of Compliance to Project 1 Documentation
 - Discussion and/or Demonstration of Implemented Functionality
 - Analysis of what would be done different next time (BTW, there will be a next time!)

Bonus Points Possible

• Graphical/Sound Implementation

5 points

- It is assumed that each implementation will minimally be character-based. If group is able to implement a graphical- or sound-based system, then an additional 5 points will be awarded
- Best-in-class Incentive

5 points

• Judged by your peers, the best implementation of each system (Sprinkler and Thermostat) will be awarded an additional 5 points