The objective of the Project 1 Documentation is to allow the students to apply newly learned UML techniques to a project. Students will work in groups of four (randomly chosen by professor) for the Project 1 documentation and implementation. Page 2 describes the contents of the Project 1 documentation by describing the form of the report.

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.

Students are given both the physical system and the user manual for the system. The objective is to re-engineer a descriptive document that explains the system using the Unified Modeling Language. Note that in the second partition of this project, students will implement the system software from this documentation.

As mentioned, the content of the documentation is described on page 2. The form of the documentation is to first describe the notation used in a particular diagram type. Next, the diagram for the group’s specific application is given. That is, the graphical representation is included. Finally, the diagram for the system is textually described.

For the System Level Class Diagram, only responsibilities are necessary for this document. However, the students may include attributes and operations if known.
Introduction 5 points

Overview

System Level Design

Use Cases 15 points

Notation Description
System Level Use Case Diagram
Use Case 1 Description
Use Case n Description

Structural Model 15 points

Notation Description
System Level Class Diagram
Class Diagram Description

Instance Analysis 10 points

Scenario 1 Description
Scenario 2 Description

References 5 points

Note: Approximately 2/3 of the points are awarded for content and 1/3 of the points are awarded for form.