

EECS 486 Object Oriented Software Development

Project 2 Design Document Description

Possible Points: 100

Assigned Date: 02NO01

Due Date: 19NO01

The objective of the Project 2 Design Document is to fully describe the implementation of the system prior to writing any code. The Design Document is a system- and class-level view of the implementation focusing on *how* the code is implemented. Recall that *what* the system does was described in the Requirements Document.

The approach of the description is to first, include the class diagram from the Requirement Document to set context. Next, architectural models are included to describe both physical software and physical hardware deployment. Finally, the project is decomposed into individual classes with a thorough description of each class's constituents.

As always, the content of the design document is described on the following page(s). In general, the form is to first describe the notation of the diagram type. Next, the diagram for the group's specific application is given. Finally, the diagram for the system is textually described in full.

Notes:

- *Approximately 3/4 of the points are awarded for content and 1/4 of the points are awarded for form.*
- *Document must describe behavior of at least two classes using Statechart Diagrams.*
- *Document must describe behavior of at least four operations using Activity Diagrams.*

Project 2 Design Document Grading Template

Introduction (can be cut and paste from Proto2 Req Doc)		5 points
Overview		
System Level Design		
Structural Model (can be cut and paste from Proto2 Req Doc)		45 points
Notation Description	5 pts	
System Level Class Diagram	5 pts	
Class Diagram Description	5 pts	
Software Deployment		
Notation Description	5 pts	
Component Diagram	5 pts	
Component Diagram Description	5 pts	
Hardware Deployment		
Notation Description	5 pts	
Deployment Diagram	5 pts	
Deployment Diagram Description	5 pts	
Class Level Design		45 pts
Class		
Field Description	2.5 pts	
Activity Diagram Notation Description	2.5 pts	
Class 1..n	40 pts	
Name		
Description/Responsibilities		
Behavioral Model (if behavior is complex enough to justify)		
Attributes		
Attribute Dictionary Entry		
Attribute 1..m		
Name		
Description		
Type (e.g., int, real, long-real, enumerated, ...)		
Units (e.g., deg F, meters, ...)		
Range		
Resolution		
Operation		
Operation Dictionary Entry		
Operation 1..p		
Name		
Description		
Output (must have Attribute Dictionary Entry)		
Input (must have Attribute Dictionary Entry and ref to owner)		
Behavioral Model (if behavior is complex enough to justify)		
References		5 points