

Object-Oriented Analysis and Design with UML

Final Assignment: Autumn 2013

Lecturer: LIU Yan

Design Model, SAD and Prototype

Due: SUNDY, December 29, 7:00 pm

Send to: ood_sse@sina.com

Final Presentation:

- December 25, 8:00AM-9:40AM, Room 430
- December 30, 8:00AM-9:40AM, Room 430

Weight in course grade: 55%

In the first part of this course, you have designed an event-driven system using UML. In the final assignment, you need to refine the architecture of your system and provide a platform dependent detailed design model.

You should explore the usage of architectural style, design patterns and other design principles to improve the quality of your system design. Finally, you need to complete your Software Architecture Document (SAD).

❖ **Final Presentation (weight in course grade: 25%)**

You should present your software design in 15 minutes. The following issues should be addressed in your presentation.

0. Overview of your software architecture
1. Architecture style and critical design decisions
2. Design of use cases
3. Design of subsystems
4. Prototype demonstration

❖ **Deliverables (weight in course grade: 30%)**

- 0 **Introduction and Overview:** The introduction file should describe the UML models and other artifacts created for your system analysis and design. The introduction file should also include the following parts:
 - a. A two-page (maximum) discussion on the software lifecycle model adopted to manage the process of software development.
 - b. A description of an architectural style, analysis or design pattern, or an

idiom, that you investigated and utilized in your project.

- 1 **Design model:** Include the refined architecture, detailed subsystem design and at least 3 examples of detailed use case realizations.
- 2 **SAD of your project:** You can find some templates and examples for SAD in RUP and you can add any necessary additional material for your project.
- 3 **Contributions of team members.**

Note: You must submit both the required document and the corresponding UML model files.