

Student Originated Software – Fall 2003
Case Study Syllabus

So that students can ground their year-long projects in experience, and have a common first hand understanding of the software development process, we will work together through the “software life cycle” on a case study for a vehicle rental business (*EU-Rent*). Students will work in groups of four (two OOAD/OOP programming teams) to consolidate the system design that two OOAD teams developed in UML for the weekly *EULease* homework, and implement the resulting single UML design.

The main objectives of this part of the program are to gain the ability to apply OOAD software development methods, to apply OOP (Java) programming skill, to gain skill using the Unified Modeling Language notation in an implementation, to integrate your work in OOAD and OOP by implementing a system for which you have developed a UML design, and to gain experience working in a programming team. By the end of the quarter, we expect that students will be able to work alone or in a small team to apply these concepts and abilities to their yearlong project.

Expectations and Requirements:

To receive credit, students must attend weekly workshops and complete all case study deliverables in a team. Student development teams will be evaluated on the quality of their final EU-Lease case study project notebook and their Java implementation, and written and oral presentations of those deliverables. Each student will receive the evaluation of his or her team, though we will point out in the evaluation specific contributions made by individuals and where an individual's work was exceptionally good or poor.

Weekly OOAD (EU-Lease case study) assignments - due each Thursday 5 pm.

These assignments on *EU-Lease* will be completed by teams of two and will be evaluated in your OOAD evaluation. The two notebooks will constitute the primary inputs to your case study work.

Case Study Deliverables:

***1. Case Study Notebook, i.e., finalized 4-person team EU-Lease specification
– due Thursday, December 4 (week 9) 5 pm***

This notebook will be an integration of the EU-Lease project notebooks from two teams. Hand in one notebook per implementation team. For this notebook, you must integrate the case study assignments into a coherent specification for implementation. This could be a revision of the assignments of one notebook or an integration of two notebooks. We will expect the notebook to include all the assignments for the case study that you have done, as well as additional relevant information as the team deems appropriate. **Your team will probably want to keep a copy for their use as they finalize the implementation.**

2. System Demo - Tuesday of week 10, December 9th, 10-12. Devise a professional demo for faculty.

3. System Evaluation – due Tuesday of week 10, December 4th. More details will follow.

4. Team Peer Evaluation and Feedback – due Friday of week 10.

More details on these deliverables will follow about week 5.

The Case Study evaluation will address the integration of the two EU-Lease Notebooks and the Java implementation, as well as the quality of the Demo and system evaluation. The team's teamwork will be addressed in the evaluation – specifically how the team worked together and/or dealt with problems that arose during the integration and implementation experience, and what they can carry forward to future teams from that experience.