In homework 2 you are required to revise homework 1 according to the instructor’s advice, and to construct the domain model of your project. The homework in this course is a continuously evolved document. You have to give each item a unique ID so that it can be uniquely identified and traced. Such items include system features, use cases, non-functional requirements, UML diagrams, and so on. It is your responsibility to maintain the consistency among these artifacts through the project life cycle. The completeness of the document is vital; each of the following items has to be provided otherwise your homework will be rejected.

1  (5%) A cover page includes the project title and team members

2  (40%) Requirement document
   
   2.1 Change history
   
   2.2 Problem statement [OOMD05, 11.3]
   
   2.3 System context diagram [OOMD05, Figure 11.3]
   
   2.4 Summary of system features [Larman02, 6.14]
       Please specify the new system features that you will develop in this project. If a function has been developed, you cannot list it in the system features. Only effort devoted at the course period will be graded.

   2.5 Use cases (optional in HW2, you can skip this the content but keep the item remained)

   2.6 Non-functional requirements and constraints [Larman02, 6.14]

   2.7 Data dictionary [OOMD05, 12.2.3]

   2.8 Software environments (The original item of development language in homework 1)
3  (45%) Domain class model

3.1  Domain class diagram showing only concepts [OOMD05, 12.2]

Please keep all classes (bad and good) you extracted from requirement artifacts and construct a domain class diagram similar to Figure 12.5 of the textbook [OOMD05].

3.2  Add associations [OOMD05, 12.2.4~12.2.5]

To construct a domain class diagram (the good classes) shows concepts with associations. You should consider using UML notations such as qualifiers and multiplicities to make your model more conviction.

3.3  Add attributes [OOMD05, 12.2.6~12.2.7]

To construct a domain class diagram (the good classes) shows concepts with associations and attributes. Note that attributes should not be objects; use an association to show any relationship between two objects.

4  (10%) Domain state model [OOMD05, 12.3.4]

Find a class in your domain model which state is complex and cannot be adequately described by a list of operations. Then, construct a state diagram for this class.

5  The previous project information (extra requirement for specific students)

For students whose projects are based on an existing one (please contact to the TA if you have any problem on this one), the following information about the existing project has to be provided.

5.1  Use case diagram (only use case diagram, do not submit use cases)
5.2  Conceptual model (analysis class diagram)
5.3  Design class diagram
5.4  System features that have been developed before this project began.

Please login the Open Cyber Classroom using your student ID from the following URL:  http://mslin.ee.ntut.edu.tw/teacher/cthchen_OOAD_2005_Spr/student/. The classroom is “OOAD 2005 Spring”. You have to submit a printed version of the homework and upload the electronic version (Microsoft Word format) to the web. If you do not upload the electronic version, your homework will not be graded.