

National Chung Cheng University
Department of Information Management

Midterm Exam. for Systems Analysis and Design

Date: Dec. 12, 2011

1. Please briefly draw and discuss the whole picture/framework for system development process based on the content of the textbook, including planning, analysis (three types of system requirements, structuring system requirements and so on), design, and implementation. 10%
簡要地 說明整個系統開發過程
2. Please discuss the roles of system development methodology and application domain knowledge in building application software by a simple example in an individual and integrated manner. Please answer it in English. 10%
系統開發方法論及專業知識 個別和整合的方式
3. Please choose an organization with which you are familiar, perhaps your employer or a university. Determine how information systems projects are identified in the organizational case. You may involve discussing corporate strategic planning (CSP) and information systems planning (ISP) together in order to make the decision, as discussed in our textbook. 10%
日常的、熟悉的、假定
4. Please describe Rapid Application Development (RAD) in system development, in particular for developing target system projects, as our discussion in the class, (RAD) is greatly shortens the time of system development, and what is the major concern for using this method. 10%
本問題
5. Interview method, including individual and group interview, is an important way to acquire user requirements in the SDLC. Please discuss how you effectively plan and design the interviewing procedure with a simple example. 10%
說明、指出
6. Given an example of fast food restaurant (Like McDonald) as indicated in the textbook, it is planning to build a simple customer relationship management system (CRMS). SDLC is then used to build this information system. You are system analysts and responsible for the important task. What is the JAD (Joint Application Design) session for eliciting the user requirements of this information system? Your discussion includes the definition of this approach and some specific questions for deriving functional and data requirements from their users or managers. 15%
分析者 從事實例 推理
7. Continuing from the previous question, please discuss the process of structuring user requirements using Data Flow Diagram (DFD) in terms of the previously elicited functional requirements? The DFD may be presented in a quite detailed or deeper level for our understanding. 10%
完全詳細
8. Continuing from Question 6, please discuss the process of structuring user requirements using Entity Relationship Diagram (ERD) in terms of the previously

elicited data requirements, including cardinalities (1:1, 1:N, or M:N relationship and attributes? 10%

9. Continuous from Question 8, please transform the ERD, which you just found out from the previous question, into relations/Tables with the third normal form (3NF). 10%

10. In practice, what is the most difficult step in the SDLC for building an application system based on your judgment? Please discuss it in terms of the comparisons among these different steps in the SDLC. Please answer it in English. 10%