

EC Websites Development 2008 Fall  
Mid-Term Examination  
Duration: 3 hours

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**INSTRUCTIONS :** This paper consists of 3 sections. You need to select at least one and at most 2 questions from each section. Each question carries 20 marks.

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## SECTION A

### Question 1

- (a) What is the definition of information systems [5 marks].
- (b) Using a business case as an example and with an aid of diagrams, describe the relationships amongst business processes, information systems and information technologies. [5 marks]
- (c) With an aid of diagrams, explain the differences system structure, system , security control, data ownership, between conventional and contemporary types of information systems in accordance with their (i) system structures, (ii) system security control, (iii) data ownership and (iv) requirement gathering. [10 marks]

### Question 2

- (a) With an aid of diagrams, describe in detail the (i) the waterfall model [5 marks] and (ii) the spiral model [5 marks] that help system development. (In your answer, you are expected to add diagrams to help your descriptions. Besides, you should highly the advantages and disadvantages of applying such methodologies.)
- (b) With reference to waterfall model, briefly describe the roles and responsibilities of the participants in a system development project, and in which phase(s) they have to take part in. [10 marks]

### Question 3

- (a) Describe how *network technologies* can facilitate the business activities of a company. [10 marks]
- (b) Describe in your own words why a development team should *acquire* knowledge in the latest information technologies and should a development team have a throughout understanding in all these latest technologies? [10 marks]

## SECTION B

### Question 4

- (a) Describe in details the roles and responsibilities of each participant in a system development project? [10 marks]
- (b) Describe the similarities and differences amongst feasibility analysis, requirement analysis, system analysis. [10 marks]

### Question 5

Select a website from Travelocity.COM, Global-Trade.COM, iSteelAsia.COM and Forbes.COM,

- (a) describe the potential users of the website [5 marks],
- (b) the underlying information technologies being used [5 marks],
- (c) the services that the company provides, [5 marks] and
- (d) discuss how the website helps to make money (or reduce operational cost) for the company. [5 marks]

### Question 6

In system analysis, data are collected for further analyzed. Describe in detail the techniques for which the data are collected, and in what situations the techniques can be applied. Add examples if necessary. [20 marks]

## SECTION C

### Question 7

Suppose that there is no relevant system to support the *supply chain consultant services* for *J-Star* and you are told to lead a team to build a platform to support this.

- (a) Describe in detail (with reasons) what should be the functions to be provided by the system. [10 marks]
- (b) Describe in detail the content you will put in the company website. [5 marks]
- (c) Describe what kind(s) of expertise you will recruit in the development. Explain why. [5 marks]

### Question 8

The new economic crisis will have a big impact on world. Describe what will this affect on the worldwide market and business practices. What will it change on the use of information technologies and the requirements for an information system. [20 marks]

### Question 9

Imagine you are the director of the Public Relation Unit in NCHU, and need to conduct a marketing project to promote IEC. A website will be designed in particular for this campaign. Describe, in you own words, (a) what sort of content (e.g. IEC is the only all-in-English teaching in Taiwan) would be put on the website, (b) how those contents should be presented (in dynamic way or in static format) on the website, and (c) other related issues. [20 marks]