ISM3011: Study Guide for Exam 3

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Relevant Topics:

1. Chapters 11 and 12 in the textbook (including chapter 11 case study #3)
2. Web page development and publishing (as covered in unit 12 in class, see additional documents)
3. Additional content covered in class (all slides, units 11 – 13)

To avoid confusion: Unit 11A/B covered chapter 11, unit 12A/B covered Web page development, and unit 13A/B covered chapter 12).

Make sure you UNDERSTAND the concepts covered! Don't just learn by heart the definitions in the book. Ask in class if some concepts are unclear!

How to Prepare for the Exam:

1. Re-read your notes for units 11 – 13.
2. Re-read the documents covering Web page development.
3. Review the slides for chapters 11A, 11B, and 12A and make sure you remember what they describe.
4. Pass the self-assessment tests for chapters 11 and 12.
5. Make sure you understand the following review questions:
    a. Chapter 11: Questions 6, 8, 9, 19, 11, and 12.
    b. Chapter 12: Questions 1, 3, 5, 8, and 14.

Self-Assessment:

Make sure you know the answer to the following questions. A huge portion of these questions will be part of the exam, either in the exact way listed below or similar questions!

1. All of the review questions as listed above!
2. What are neural networks?
3. What are expert systems? (see pp. 470-484)
4. Which role play human experts in the development of an expert system?
5. What is the knowledge base and how is it different from a program?
6. Can expert systems using the contained rules to reason about a new situation?
7. How can expert systems preserve knowledge and make it portable?
8. How can credit card companies use expert systems?
9. If new knowledge is available, which steps are necessary to get it into the expert system?
10. What is the difference between a Database and a Knowledge Base?
11. Can an expert system contain the knowledge of multiple human experts?

12. What does the inference engine do?
13. Explain the roles of domain experts, the knowledge engineer, and knowledge users in the development of an expert system.
14. Why can it be difficult to make domain experts contribute to the development of an expert system?
15. Can artificial intelligence be used for the maintenance, configuration, and repair of computer systems? How?
16. With regard to systems development: Who is the only person who sees the system in its totality?
17. Why is it important to detect errors and necessary modifications early in the development process?
18. What is the idea of prototyping?
19. What is the critical path of a project?
20. What happens if an activity on the critical path is delayed?
21. What happens if an activity on the critical path can be completed early?
22. What happens if an activity that is not on the critical path is delayed?
23. What happens if an activity that is not on the critical can be completed early?
24. Which are the steps necessary to create a Web page?
25. What is a tag?
26. How can tags be used to determine the appearance of web pages?
27. What does nesting mean with regard to tags and can one nest HTML tags?
28. Which program type does one use to publish a Web page?
29. Explain the very basic structure of an HTML document (e.g. HTML, HEAD, BODY)
30. How does links in HTML documents work?