CIS 450 - Exam 2 Review Suggestions

last modified: 11-1-11

• You are responsible for material covered in class sessions, homeworks, and assigned course reading; but, here's a quick overview of especially important material.

• You are permitted to bring into the exam a single piece of paper (8.5" by 11") on which you have handwritten whatever you wish on one or both sides. This paper must include your name, it must be handwritten by you, and it will not be returned.
  – Other than this piece of paper, the exam is closed-note, closed-book, and closed-computer.

Knowledge Audits

• See the Week 7, Lecture 1 slides posted on the course Moodle site; consider, also, your answers for the Week 7, Lecture 2 in-class exercise

• What is a knowledge audit? Why might an organization want to conduct a knowledge audit?

• What are the basic/major steps in conducting a knowledge audit?

• What are Bohn's stages of knowledge growth? What is a general description of each? What is a typical form of knowledge for each?
  – for a given stage, what are the characteristics of knowledge in that stage?
  – ...what is the typical location of knowledge in that stage?
  – ...what is the nature of the work processes in that stage?
  – ...what is the typical learning method in that stage?
  – Given a scenario, you should be able to make a case for what stage that scenario is at in some aspect, and why;

• What is an example of a specific goal appropriate for a knowledge audit?

• In documenting knowledge assets, what are the 4 angles in the capability framework discussed?
  – ...and what are some of the dimensions to be considered in each of those 4 capability angles?

• What are some questions one might ask to track knowledge growth over time?

Presentation Tips

• See the Week 8, Lecture 1 slides posted on the course Moodle site

• What are some of the questions that you should ask yourself in the early stages of preparing a technical presentation?

• What are some of the recommended steps for organizing your presentation material?

• What are some of the approaches for outlining your presentation?
• What are some of the means by which one might "add spice" to a technical presentation?
• What should visual aids in a presentation be designed to enhance?
• What are some of the rules-of-thumb for slides in a technical presentation?
• Why is practicing a formal technical presentation important?
• What are some of the guidelines we discussed for good practice during a technical presentation?
• What are some of the common mistakes in answering questions?
• What are some bad habits and distractions to avoid during a technical presentation?

Designing the KM Team
• See the Week 8, Lecture 2 slides posted on the course Moodle site
• What are the major KM team activities?
• What are some sources of expertise for the KM team?
• What are some characteristics that enhance the laterality of members on a KM team?
• In terms of KM team structure, what are some typical roles/members?
• In terms of the team focus, technology focus, and organizational focus of a KM team, what are some important characteristics of each?
• What are some design considerations for the team composition of a KM team?
• What are some of the desired characteristics of a KM project team leader? ... of a KM project team member?
• Be familiar with the major findings of the 1995 Standish Group "Chaos" report, and their implications for software projects

Creating the KMS Blueprint
• See the Week 9, Lecture 1 slides posted on the course Moodle site
• We discussed four KMS components as part of the KMS blueprint; what are these?
• What does a knowledge repository hold? How is it different from an information repository?
• What should a knowledge repository record?
• What are some of the potential perils of integrative repositories?
• What are some of the differences between centrifugal and centripetal knowledge flow models?
• What are some user interface design considerations to keep in mind?

Enterprise Information Portal
• See the presentation slides, references, paper, and two short-topic papers posted on the course
Moodle site under "Presentations"

- Why is it useful for a CIS major to know about Enterprise Information Portals?
- What is an Enterprise Information Portal (EIP)? How is this different from a general web portal?
- What are some common characteristics and features of an EIP?
- How might an EIP be used as part of an organization's knowledge management strategies?
- Why is it significant that an EIP feature a single sign-in?
- What is integration? What is federation?
- What is the difference between customization and personalization?
- What is meant by access control?

**Decision Support Systems**

- See the presentation slides, references, paper, and three short-topic papers posted on the course Moodle site under "Presentations"
- Why is it useful for a CIS major to know about decision support systems?
- What is a decision support system (DSS)?
- For what is a DSS typically intended to be used? Who is the typical intended user of a DSS?
- What are some of the classifications of DSSs? What are some of the taxonomies of DSSs? What are some of the types of DSSs?
- What are some types of decisions?
- What are some characteristics of a DSS? What are some of the potential benefits of a DSS?

**Data Warehouses**

- See the presentation slides, references, paper, and two short-topic papers posted on the course Moodle site under "Presentations"
- Why is it useful for a CIS major to know about data warehouses?
- What is a data warehouse? How does a data warehouse differ from an operational database?
- What are some of the reasons that one might want a data warehouse?
- What are some of the goals and requirements for a data warehouse?
- Why might the data in a data warehouse be deliberately denormalized (and why doesn't this necessarily cause problems?)
- What are some of the basic elements of a data warehouse?
- What are some of the activities in the data staging area of a data warehouse?
- Which part of a data warehouse does the user typically interact with?
• What are some of the characteristics of the dimensional model?
• What is a data mart?
• What are some of the steps in the process of data warehousing?

Data Mining
• See the presentation slides, references, paper, and three short-topic papers posted on the course Moodle site under "Presentations"
• Why is it useful for a CIS major to know about data mining?
• What is data mining? What are some of the main goals of data mining? What are some examples where data mining might be useful?
• What are 3 types of data mining?
• What are some techniques that have helped to advance data mining?
• What are some examples of data mining software?

OLAP (On-Line Analytical Processing)
• See the presentation slides, references, paper, and two short-topic papers posted on the course Moodle site under "Presentations"
• Why is it useful for a CIS major to know about on-line analytical processing?
• What is an On-Line Analytical Processing (OLAP) system?
• What are some of the defining features of an OLAP system, according to E. F. Codd's 12 rules?
• What are some of the typical components of an OLAP system?
• In the context of OLAP systems, what is meant by multi-dimensional? What is meant by a cube? What is meant by a measure?
• What are the basic analytical operations that OLAP tools provide? Why might each be useful?
• What are the 3 basic storage models for OLAP systems? What are the major differences between them?

Information Quality
• See the presentation slides, references, and three short-topic papers posted on the course Moodle site under "Presentations"
• Why is it useful for a CIS major to know about information quality?
• What is meant by information quality?
• What are some of the dimensions/types of information quality?
• What are some of the potential means for ensuring/improving information quality?
• What is the IAIDQ? What does it do?

**Security Policies in a KMS**
• See the presentation slides, references, and six short-topic papers posted on the course Moodle site under "Presentations"
• Why is it useful for a CIS major to know about security policies in a KMS?
• What is a security policy? Why would we want one for a knowledge management system?
• What are some basic security requirements for a KMS?
• What are some of the challenges in developing an effective security policy for a KMS?
• What are some of the recommendations discussed for creating security policies for a KMS?