CS360 Study Guide for Test 1
Thursday, January 31, 2019
The first test is taken primarily from Sections 1 thru 3 of Valacich as presented in Slide sets Unit 00-Unit 03 and the OO Ontology presented in the video tutorial and Ontology slide set.

SDLC Terms / Concepts

Management Concepts
- Evolution to the information age
- Computing in Small Business
- Definition of information system

Systems:
- Strategic
- Management
- Operational Systems
- Functional Obsolescence
- Operational Obsolescence

System Development Life Cycle:
Analysis, Design, Development, Implementation, Maintenance & Review

SDLC components:
- People, Procedures, Software, Hardware, Data, Networks

Analyst as:
- Change Agent, Problem Solver, Group Facilitator

The Role of Technology:
- Methodologies, Tools and Techniques -- CASE Tools
- Client/Analyst relationship in the SDLC

IS Requirements:
- Relevance, Accuracy, Timeliness, Usability, Affordability, Adaptability
- Symptom - Problem - Solution (systems approach to problem solving)
- Source Data Input In-efficiencies - Subsystem Integration Breakdown
- Problem Understanding Resources
- Industry Research - Personal Contacts - Documentation Review
- Importance of Written Documentation
- Request for System Services - Analysis Contract Contents
- Problem Summary - Scope/Constraints/Objectives
- Feasibility Analysis - Costs versus Benefits

modeling

object-oriented modeling

Be prepared to define and explain the tools for managing abstraction:

- object - (identity, encapsulation)
- attribute
- data - (remembrance)
  - static
    - data attribute variable
  - dynamic
    - data attribute value
- behavioral
  - static
  - service
  - dynamic
    - method (operation)
- class - (instance, membership OF)
- relationships
- structural
  - inheritance - (override, parent class/child class, class hierarchy)
- behavioral
  - association - (composition, membership IN)
  - message passing - (sender, receiver, message, parameters)
  - polymorphism - (binding)

The test will consist of a combination of any or all of the following: matching of terms and definitions, true / false questions, multiple-choice and short essays. Sixty minutes will be allotted for the test.

Les Waguespack, Ph.D.