Computer Science 110 Exam Review

Format

40 multiple choice questions based on the information below
1 Visual Basic Project
Time 1 Hour

Note: Be familiar with the answers to all of the Unit questions that you completed in class this semester.

Unit 1

- Identify the components of a computer system. (Ram, Cpu)
- Identify input and output devices.
- Explain the importance of the computer's processor.
- Distinguish between system software and application software.

Unit 2

- Explain how programs and data are stored inside a computer. (What is Binary?)
- Identify influences and trends in programming.

Unit 3

- Explain the importance of detailed instructions when writing computer programs.
- Know the steps in the program development cycle.

1. Analyze
2. Design
3. Choose the Programming Language or Interface
4. Write the Code
5. Test and Debug
6. Document

- Describe the three stages a computer program goes through when being tested. (Desk Checking, Beta Testing, Parallel Testing)
- Explain the difference between **Syntax** (misspelled programming language commands and grammatical problems with the way you use the programming language.), **Logic** (Logic errors occur when your program is syntactically or grammatically correct but you told the program to do something that is not really what should be done) and **Runtime** errors.(the programmer fails to predict a potential problem and therefore fails to handle it when it occurs.)
- Describe the principle of top-down design.

Unit 4

- State the advantages and disadvantages of using flowcharts and pseudo-code.
- Explain why commenting your code is important.
- Explain why following a language's style conventions are important.

Unit 5

- Distinguish between a command line interface and a graphical user interface.
- Explain how event-driven programming works.
- Distinguish between an interface and its code.

Unit 6

- Open a new Visual Basic project.
- Customize the Visual Basic workspace to your own preferences.

Unit 7

- Set properties for various controls from the Properties window.
- Create code in the Code window.
- Save and run a project.
- Build an executable file.

Unit 8

- Add objects to a form.
- Name objects using proper Visual Basic naming conventions.
- Set properties from the Properties window.

Unit 9

- Identify event triggers.
- Explain the term "event procedure."
- Write simple code statements to assign/change an object's properties.
- Write simple event procedures.
- Write an event procedure to end a program

Unit 10

- Name and declare variables.
- Name and declare constants.
- Assign values to variables at design time.
- Assign values to variables at runtime.
- Identify Visual Basic built-in data types.
- Choose an appropriate data type. (single, double, currency, etc)

Unit 11

- What are expressions?
- Declare and initialize strings (What kind of information can a string hold?)
- Define Concatenate

Unit 13

- If... Then decision structures.
- The Rnd function.
- Explain the purpose of the Randomize statement.
- Local and global variable declarations.
- What is the Purpose of Message boxes, check boxes and password?

Unit 14

- Understand the difference between a DO LOOP and a FOR NEXT LOOP.