

CS 121 Exam 1 Review

Fall 2016

Your exam will be 50-60 questions (2 pts each) of T/F & multiple choice. You will also have to examine code snippets and know what it is doing and understand the structure of the code's purpose. This is a list of my thoughts as I think about what the test covers.

- Which block of code is used to launch our applications?
- Know the difference between concatenation and doing math with text from a textbox.
- How to define different data types and use casting. Know the common ones like int, double, float, string, bool.
- Make sure you understand the parts of the generated code VS makes for us. How does it create our form and the controls?
- Constructor & destructor: what are they and how can you use them?
- Make sure to review the common namespaces our apps have been using.
- Know the difference between creating an object variable and instantiating an object from a class.
- What keyword is used for creating objects and where are reference types created.
- How are reference types removed from RAM when they go out of scope. What is in charge of this process in C++/CLI code?
- How to code a hyperlink on your form.
- Local vs class-level variables: How long are they in RAM. What are the main differences and when do you use one or the other.
- Review the Convert Class so you know how to cast a String to a Double, for example.
- What does Parse do?
- Look at TryParse (int::TryParse)
- Review cin and cout and the Console::ReadLine() & Console::WriteLine() methods.
- Review running totals and counts
- How to format a string with/without a \$ in a textbox

- How to tell if a textfile has data in it to read.
- Review loops and when to use a particular type.
 - Counted
 - Logical
 - Collection
- Review the three types of errors we talked about.
- Make sure to review if/switch statements so you are clear as to how they work.
- When does code in the constructor and Form_load event run?
- Know the default handlers for common controls.
- Be sure you are clear on “::”, “->”, and the “.” Operators... when to use them and what they are called.
- What is Unicode? How does VS use this in string literals?
- Make sure of how Mr. Switch works
- How many bits in an int?
- Native C++ VS CLR C++. What are the differences?
- How to get input from a user in the console and how to display data on the console.
- GUI terms like:
 - Text vs Name property
 - Properties vs Methods.
 - How to make form start in the center of the screen
 - What is an event, event handler, local vs class-level variables
 - How to change caption of a form (what it displays on screen as its title)