CIT 110 PROGRAMMING LOGIC AND DESIGN

MISSION 1 - CHECKLIST AND STUDY GUIDE

MAIN TOPICS

- Creating a First C# Program in Visual Studio
- User Input/Output
- Data Types
- Variables
- Submitting Projects

CHECKLIST

Learn

- ☐ Use one or more of the following resources to learn this week's material. Be sure to use the **Keywords**, **Concepts**, and **Skills** sections of this document as a study guide.
  - Watch the **Cengage** videos
  - Watch the **Developer University** videos.
  - Read **Chapters 1, 2** in the textbook.
  - Watch the PowerPoints
- ☐ Watch ***MindTap - Visualize: What is Computer Programming?***
- ☐ Watch ***MindTap - Visualize: Order of Operations***
- ☐ Watch ***Tutorial: Creating your First C# Solution.***
- ☐ Watch ***Tutorial: Downloading a Zipped Solution from Moodle or GitHub*** if you are unfamiliar with these skills.
- ☐ Watch ***Tutorial: Submitting a Coding Assignment to Moodle***.

Practice

- ☐ Complete all of the following exercises. Be sure to click **Submit** after all tests run correctly under the **Tasks** tab.
  - ***M1 - MindTap Programming 1.5***
  - ***M1 - MindTap Programming 2.2***
  - ***M1 - MindTap Programming 2.3***
  - ***M1 - MindTap Programming 2.6***
  - ***M1 - MindTap Debugging 2.4***

Assess Knowledge

- ☐ Complete the following quizzes. Use the reviews to practice for each quiz.
  - ***M1-Q1 Chap. 1 A First Program Using C#***
  - ***M1-Q2 Chap. 2 Using Data***

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Submit

- ☐ M1 Mission Debriefing
- ☐ M1 Project: The Conversation
  - Upload the zipped solution.
  - Upload the completed Skills Checklist

KEYWORDS

Program
Syntax
Compiler
Debugging
Keywords
Variables
Identifier
Inheritance
Encapsulation
String
Literal String
Argument
Method Header (Signature)
Method Body
Verbatim Identifier
Integrated Development Environment (IDE)
Literal Constant
Strongly Typed
Data Type
Initialization
Integer
Double
Float
Culture
Arithmetic Operators
Prompt
Parse
Immutable
Operands
Order of Operation (PEMDAS)
Boolean
String
Decimal
Concatenation
Intrinsic Types
Casting

CONCEPTS

- Camel Case vs. Pascal Case
- Hardware vs. Software vs. Firmware
- Line Comments vs. Block Comments
- Source Code, Compiler, Intermediate Code, Just in Time Compiler, and Machine Language
- Visual Studio Solution and Project File and Folder Structure
- Variable declaration vs. assignment
- String Interpolation
- Increment and Decrement Operators
- Implicit vs. Explicit Casting

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SKILLS

- The student will demonstrate the use the use of Moodle functions including; Forums, Quizzes, Assignments, and General Navigation.
- The student will demonstrate:
    - opening Visual Studio
    - creating a new console application
    - saving a solution to a known folder
    - opening a solution
    - zipping a solution folder
    - submitting a solution to Moodle
- The student will demonstrate their process of file management when working with files both in the lab and at home.
- The student will demonstrate writing a string to the console including the use of a literal string.
- The student will demonstrate reading a string from the reader and storing in in a variable.
- The student will demonstrate writing a string to the console with embedded variables.
- The student will demonstrate declaring and assigning values to a variable.
- The student will demonstrate the use of arithmetic operations to assign values to variables.
- The student will demonstrate incrementing and decrementing variables.
- The student will describe the Order of Operation (PEMDAS).
- The student will demonstration embedding a variable value in a **WriteLine** statement.
- The student will explain the difference between implicit and explicit casting.
- The student will demonstrate the use of explicit casting.