

Unit 7 Final Project

Due: Sunday, 11:59 pm EST of Unit 7

Points: 100

Overview:

This assessment will cover the Programming fundamentals of the Integrated Development Environment(IDE) found in Chapters 1-7 of the assigned text. In this assignment, you will demonstrate the use of tools explored so far within the course. It is the Math Practice activity found in the Case Projects section of your book.

Requirements:

Copy/paste the VB code into a Microsoft Word document. You are also required to submit enough screenshots of the output to show that all work has been completed.

Save the document in the following format:

LastNameFirstInitial_Unit 6 Assignment e.g. SmallJ_Unit 7 Assignment

Instructions:

Create an application that can be used to practice adding, subtracting, multiplying, and dividing numbers. The application should display a math problem on the screen and then allow the student to enter the answer and also verify that the answer is correct. The application should give the student as many chances as necessary to answer the problem correctly. The math problems should use random integers from 1 through 20, inclusive. The subtraction problems should never ask the student to subtract a larger number from a smaller one. The division problems should never ask the student to divide a smaller number by a larger number. Also, the answer to the division problems should always result in a whole number. The application should keep track of the number of correct and incorrect responses made by the student. The interface should include a button that allows the user to reset the counters for a different student.

Refer to the Grading Rubric below for grading criteria.

Grading Rubric

CRITERIA	Deficient	Needs Improvement	Proficient	Exemplary
	0 – 5 points	6 - 7 points	8 - 9 points	10 points
Windows Form	The form is not coded or has multiple major errors.	The form is coded with a major error.	The form is coded with minor errors.	The form is correctly coded.
Math Problem Display	Display of math problem is not coded or has multiple major errors.	Display of math problem is coded with a major error.	Display of math problem is coded with minor errors.	Display of math problem is correctly coded.
User Input	User input is not coded or has multiple major errors.	User input is coded with a major error.	User input is coded with minor errors.	User input is correctly coded.
Exemptions	Exemptions are not coded or have multiple major errors.	Exemptions coded with a major error.	Exemptions are coded with minor errors.	Exemptions are correctly coded.
Tracking	Tracking of responses coded not coded or have multiple major errors.	Tracking of responses is coded with a major error.	Tracking of responses is coded with minor errors.	Tracking of responses is correctly coded.
Reset Button	The reset button is not coded or has multiple major errors.	The reset button is coded with a major error.	The reset button has some minor coding errors.	The reset button is correctly coded.
	0 – 17 points	18 – 23 points	24 – 29 points	30 points
Screenshots	Screenshots were missing or demonstrated that little to no work was completed.	Screenshots demonstrated that some work was completed.	Screenshots demonstrated that most work was completed.	Screenshots demonstrated that all work was completed.
	0 points			10 points
Filename	The filename did not meet the requirements.	N/A	N/A	The filename met the requirements.