

## Final Project –Semester 1

You will develop your own Visual Basic program using your talent, problem solving skills, and coding abilities you've learned this semester. You can build on this project for your final project in Semester 2 (or start a brand new one at the end of the next semester)

### Objectives

- Demonstrate what you've learned in the first semester
- Show creativity
- Have some fun!

### Requirements

- Comment your code!!!
- Adhere to all standard Visual Basic naming conventions of variables, constants, buttons, etc.
- Use a minimum of two different data types
- Use at least one constant
- Have a way to display instructions (probably a message box)
- Use at least one TextBox
  - Entered data must be converted to another data type at least once
  - Validate input (Try/Catch or TryParse)
- Use at least two Buttons
- Use at least one GroupBox
- Use at least RadioButtons and/or CheckBoxes
- Use at least one PictureBox
- Use these properties
  - Visible
  - Enabled
  - TabIndex
  - AcceptButton
  - CancelButton
- Use at least one If... Then... Elseif statement
- Use a nested If statement (If inside another If)
- Use at least one logical operator (AND, OR)
- Use mathematical operators
- Use at least one Select Case statement
- Use at least one MessageBox with four arguments
- Use Tool Tips for at least all Buttons, TextBoxes, RadioButtons, & CheckBoxes
- Use keyboard access (E&xit, for example) for all buttons
- When appropriate, format Strings (currency, for example)

### ...and beyond!

You can earn bonus points by fulfilling and going beyond these requirements (giving your project something(s) extra!)

### Due Date

The official due date for this project is Friday, December 22, 2017 at 11:59 PM. However, you have an automatic no-penalty extension through Thursday, January 4, 2018 at 11:59 PM. Hopefully we won't have any issues with students accessing Canvas for first semester classes during our vacation! If there are problems, contact Mr. Bower at [sbower@hccsc.k12.in.us](mailto:sbower@hccsc.k12.in.us) (don't try to send your program to the school's e-mail as it will likely quarantine the e-mail since your compressed file will include a .exe file)

This final project is 20% of your first semester grade.

### Grading

Form design	10
Control names / Variable and Constant names	10
Runs properly	10
Comments/documentation included	10
Accurate results	10
Use of required elements	40
Run-time communication with user	10
<b>TOTAL</b>	<b>100</b>