

Test 2 will be Thursday, November 12, in class. It will be closed book and notes, except for one 8.5" x 11" sheet of paper (front and back) with notes. The format of the test will be similar to Test 1, i.e., multiple-choice and True/False. Review topics for Test 2 are:

Chapter 5. Lists, Loops, Validation, and More

- Input Boxes -- as a way to gather input from the user
- List Boxes usage, properties, and methods

Properties:

- SelectedIndex - item of selected listbox item, or -1 if no item is selected
- SelectedItem - returns a reference to the selected item
- Sorted - set to True if you want the List Box items to be displayed in sorted order
- Items collection - properties and methods on collections

Items Properties:

- ◆ Count - count of the number of items

Items (Collection) Methods: (see Table 5-1 for details)

- ◆ Add, Clear, Contains, IndexOf, Insert, Item(), Remove, RemoveAt

- Loops: Be able to read and write code that uses loops and deciding which type of loop to use
 - syntax and semantics of pretest and posttest Do While loops
 - syntax and semantics of pretest and posttest Do Until loops
 - syntax and semantics of For ... Next loops
 - looping concepts: infinite loop, counters, running total, user controlled loop, nested loops
- Multicolumn List Boxes, Checked List Boxes, and Combo Boxes
- Input Validation: CausesValidation property; Validating and Validated events

Chapter 6. Procedures and Functions

- Procedures: syntax, parameters (“formal parameters”), passing arguments (“actual parameters”), pass-by-value, pass-by-reference, local variables, static local variables
- Functions: syntax, calling, Return statement
- general idea of using procedures and functions to modularize your code

Chapter 7. Multiple Forms and Menus

Forms:

- One form is the “startup object” which can be designated in the Project’s Property Page dialog box. Other forms are displayed by programming statements
- The programmer describes at design-time a “recipe”/class template for a form, but you don’t have any forms yet. Before the program can display a form, it must create an instance of the form, and then call a method (either Show or ShowDialog) to display the form.
- Modal vs. Modeless style of forms
- Form event methods: Load, FormClosing, FormClosed
- Accessing objects on other forms using the formName followed by a period (“.”)
- Public keyword on class-level variables makes them accessible by other forms.

Menus:

- Using a MenuStrip control to place a drop-down menu on a form
- Creating menu items (prefix mnu) using ToolStripMenuItem objects, and they Click event handler.
- Menu item properties: Enable and CheckOnClick

Chapter 8. Arrays (Sections 8.1 to 8.3 mainly)

- Array concept and terminology: subscript, elements, parallel arrays
- Array processing: looping through entire array to sum all the elements, find the minimum (or maximum) element, sequential search for a target value, etc.
- Passing arrays as parameters