

Assignment #1: User Interface Design

ISDS 558, Prof. Robin Burke

Spring 2002

Due: 2/12/2002

Objective:

The objective of this assignment is to ensure the base level of familiarity with Visual Basic needed to succeed in an advanced programming course.

What to do:

1. Buy a Zip disk to keep your coursework for this class. At the end of the course, you will submit your portfolio of initial and revised assignments on this disk.
2. Develop a Visual Basic application that computes amortization information for a fixed-term fully amortized loan. The application should have the following characteristics:
 - All user input should be validated. Non-numeric input should not be accepted in numeric fields.
 - The application should display the loan payment and total cost of the loan at all times. However, if the value for principal, interest rate or repayment term is missing, the loan payment and total cost fields should be blank.
 - The application should have a standard "File" menu with the option to reset the application, and to exit the program, and a "Help" menu with an "About..." item that brings up an About box.
 - The About box should contain your name, the assignment number and the due date.
 - The application should have a button that displays an amortization table for the loan. The amortization table lists all of the payments and the remaining loan principal after each payment. Use a List control to display the amortization information.

What to turn in:

Bring your Visual Basic application to class on Feb. 12 on your Zip disk. We will practice placing the application in the course Drop Box. Future assignments will be submitted to the Drop Box BEFORE class.

Hints and Notes:

- All numeric amounts should be appropriately rounded. The payment and balance due cannot contain fractions of a cent.
- Do not use the default VB names for your controls. No one but you will know what "Text1" is supposed to be. Use meaningful names for controls and variables.
- The values presented by the application should always be consistent. Whenever the values for the principal, rate or term are changed, the payment and total cost should be automatically updated.
- The built-in Pmt, IPmt and PPmt functions will be useful for this assignment. Examine the VB documentation.

Extra Credit:

- For extra credit, use one of the Grid controls instead of the List control on the amortization table form.