Paper Guide to Digital Video Overview of
Visual Basic 2005 Tutorial Website
of Meredith Kelly

An Introductory Course in
Visual Basic Programming

An Overview

Programmer's Development Cycle

1. Analyze the problem.
2. Plan the solution to the problem.
3. Select and the interface.
4. Write the code.
5. Test and debug the program.
6. Complete the documentation.

In this course, students will learn the 6 steps in the Programmer's Development Cycle.

Analyzing the Problem

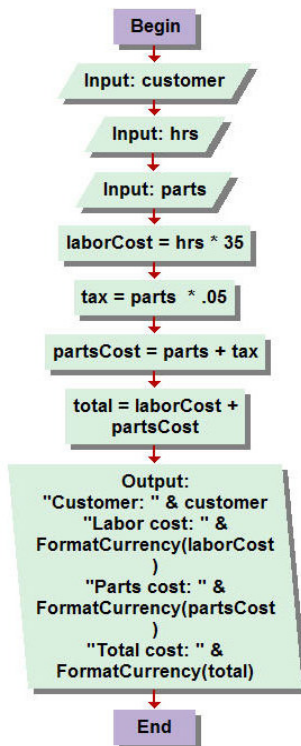Before beginning to use a computer language, the programmer must analyze the problem

A pictorial representation of this problem-solving process is

Input → Processing → Output

to determine what the output will be, what input is required, and the processes required to produce the outcome.
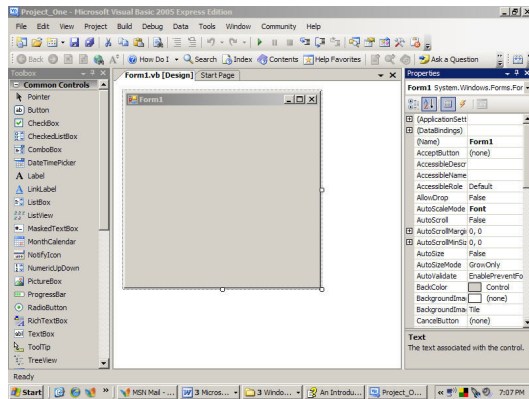
Planning the Solution Using the Flowchart Tool

Next, they use tools, such as a flowchart, which is a graphical representation of the steps required to solve the problem.

```
Begin
    ↓
Input: customer
    ↓
Input: hrs
    ↓
Input: parts
    ↓
laborCost = hrs * 35
    ↓
tax = parts  * .05
    ↓
partsCost = parts + tax
    ↓
total = laborCost +
        partsCost
    ↓
Output:
"Customer: " & customer
"Labor cost: " &
FormatCurrency(laborCost
              )
"Parts cost: " &
FormatCurrency(partsCost
              )
"Total cost: " &
FormatCurrency(total)
    ↓
End
```

Regardless of the computer language used, the logical steps will be the same.
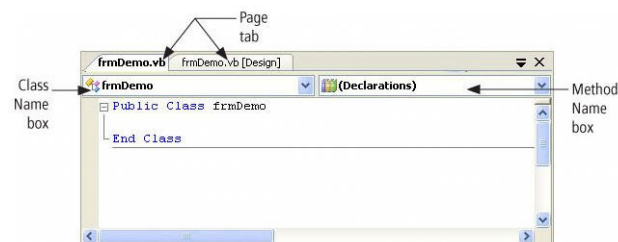
The Visual Basic Interface

In this course, students will be introduced to programming in the Visual Basic environment
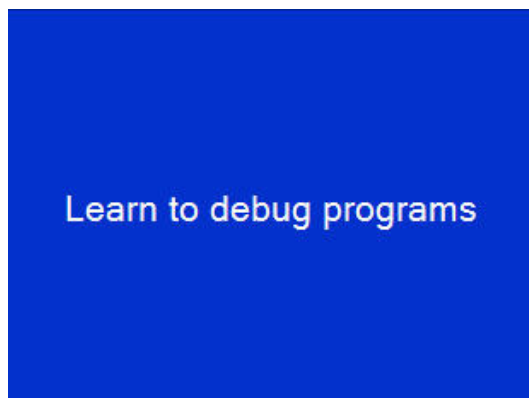
using the 2005 Express Edition of the program, which is a free download available from Microsoft.
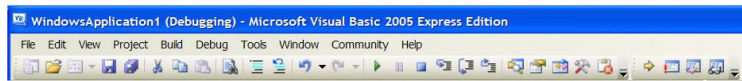

In the code screen,

students will write instructions to be followed.

In addition, they will learn debugging processes

for correcting errors they encounter as they test their programs.

Document Throughout the Process

While programmers writing commercial software produce manuals explaining what the program does and how it should be used,

```
Public Class frmOutputInColumns

    'John Doe
    'CST1101, Section 7200
    'PA_No.12

    ' This program will display the output in three columns.
    ' It uses a non-proportional font.
```

the students in this course will learn to include comments that are not read by the computer but point out the purposes of the various parts of the program.

To download VB 2005
Express Edition
visit:

http://www.microsoft.com/express/2005/
download/default.aspx