Universiti Malaysia PAHANG
Engineering • Technology • Creativity

COMPUTER PROGRAMMING

Introduction to Visual Basic (VB)

by
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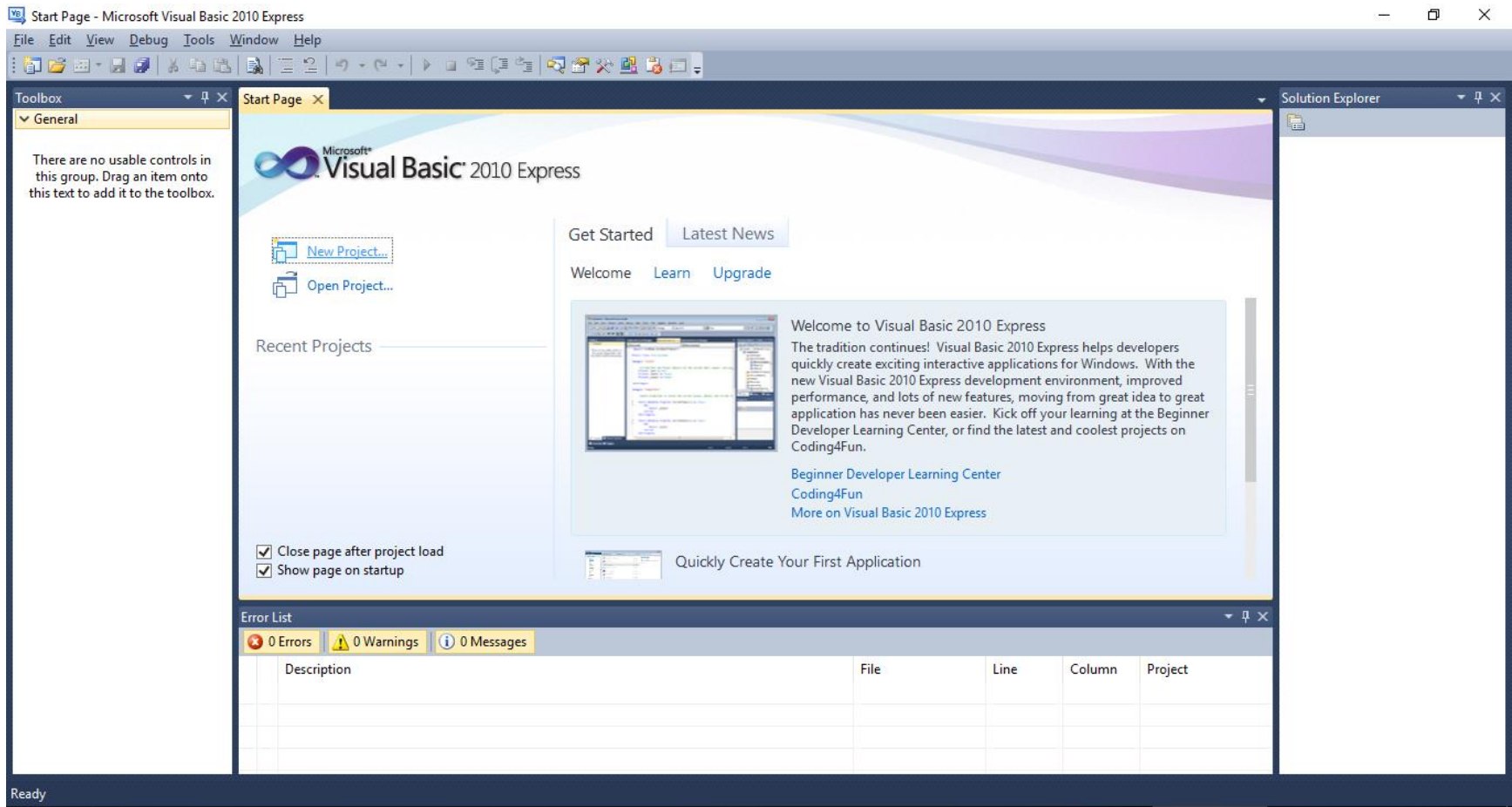**FACULTY OF CIVIL ENGINEERING & EARTH RESOURCES**
UNIVERSITI MALAYSIA PAHANG
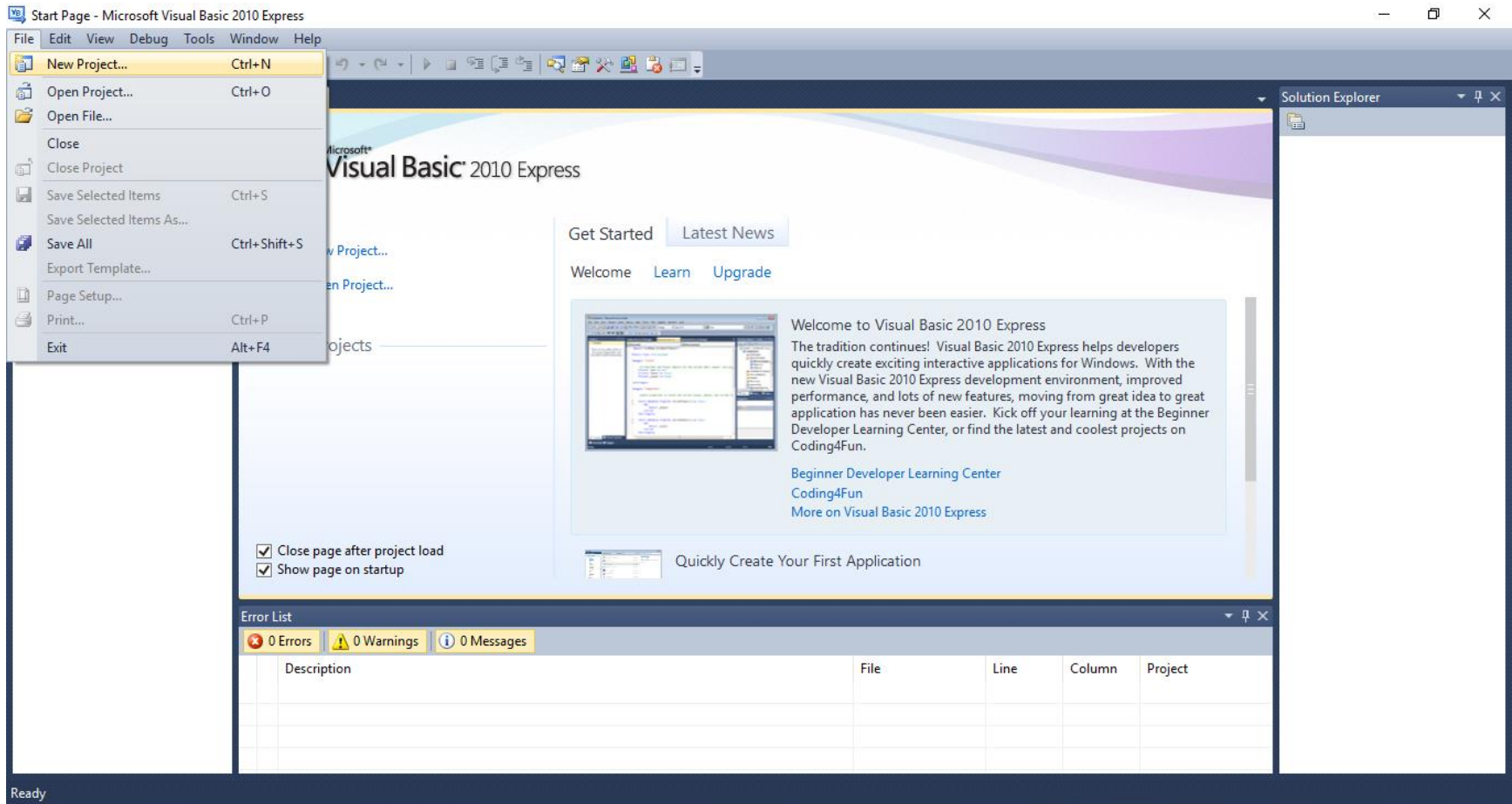
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Visual Basic (VB)

- Visual Basic is, in general, a computer programming developed by Microsoft

- The main aim of visual basic is to provide an easy platform to write programs that are mostly windows-based

- It is a event-driven program: When an event occurs, the program will execute the statement associated with that event.

- An event is something that happens that the computer can detect. Typical events includes:

  - Clicking a mouse button

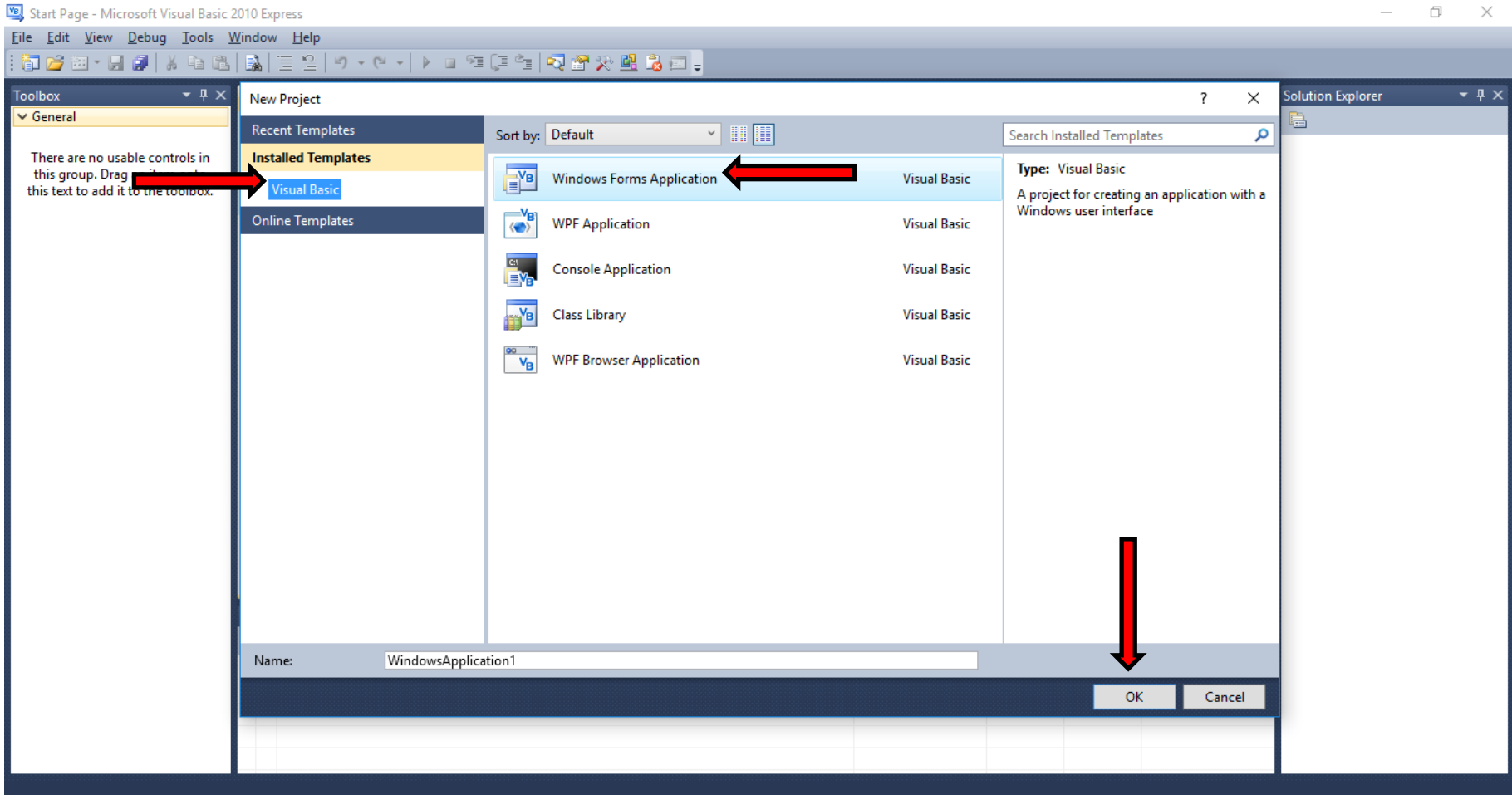 - Typing a character on the keyboard

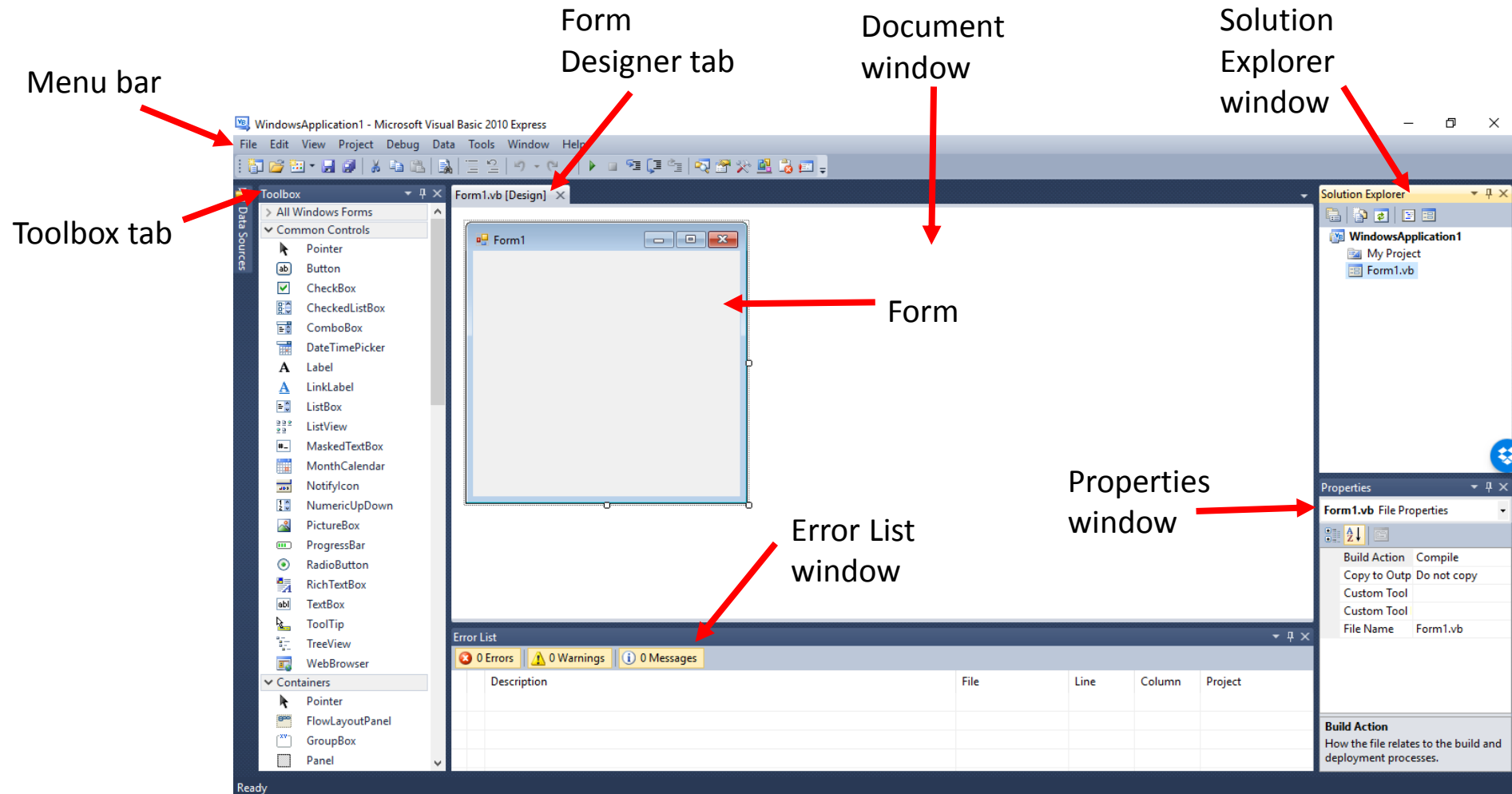 - Deleting or changing a value

VB Opening Screen

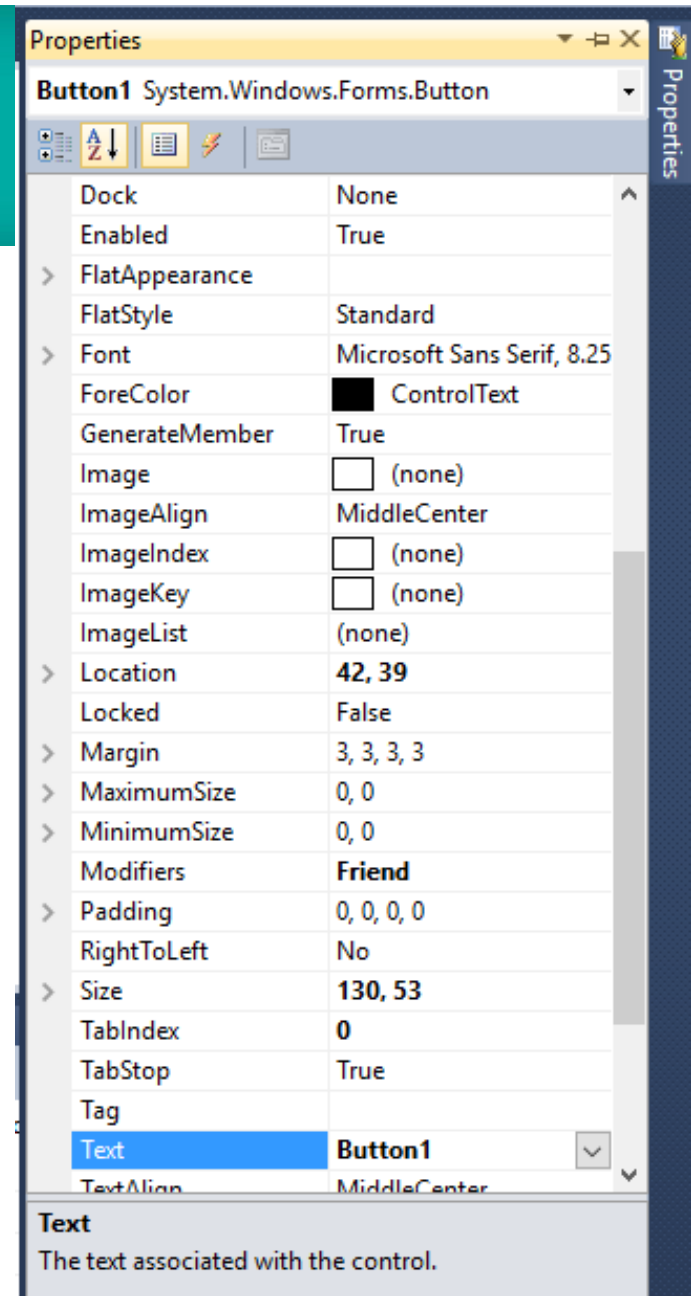# Starts A New Project

New Project Dialog Box

Initial VB Screen

Form
Designer tab

Document
window

Solution
Explorer
window

Menu bar

Toolbox tab

Form
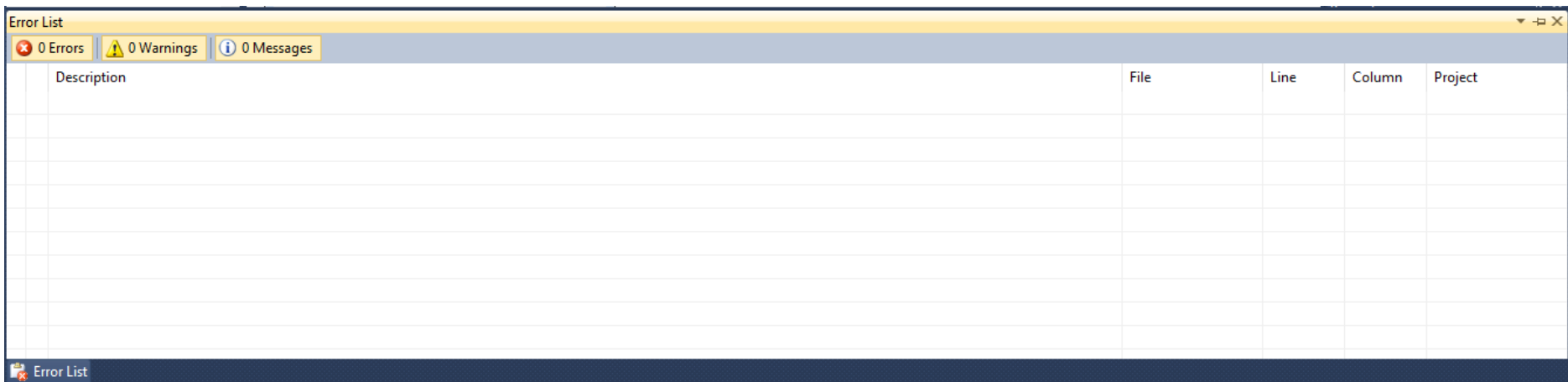
Properties
window

Error List
window

Properties window

- The Properties window allows you to view and modify the properties of the form and of the controls that it contains

- On our screenshot you may see the Properties window displaying properties for a Button control named Button1. You can see in the figure that the **Text property** of this control is "Button1" and that's what the button displays to the user
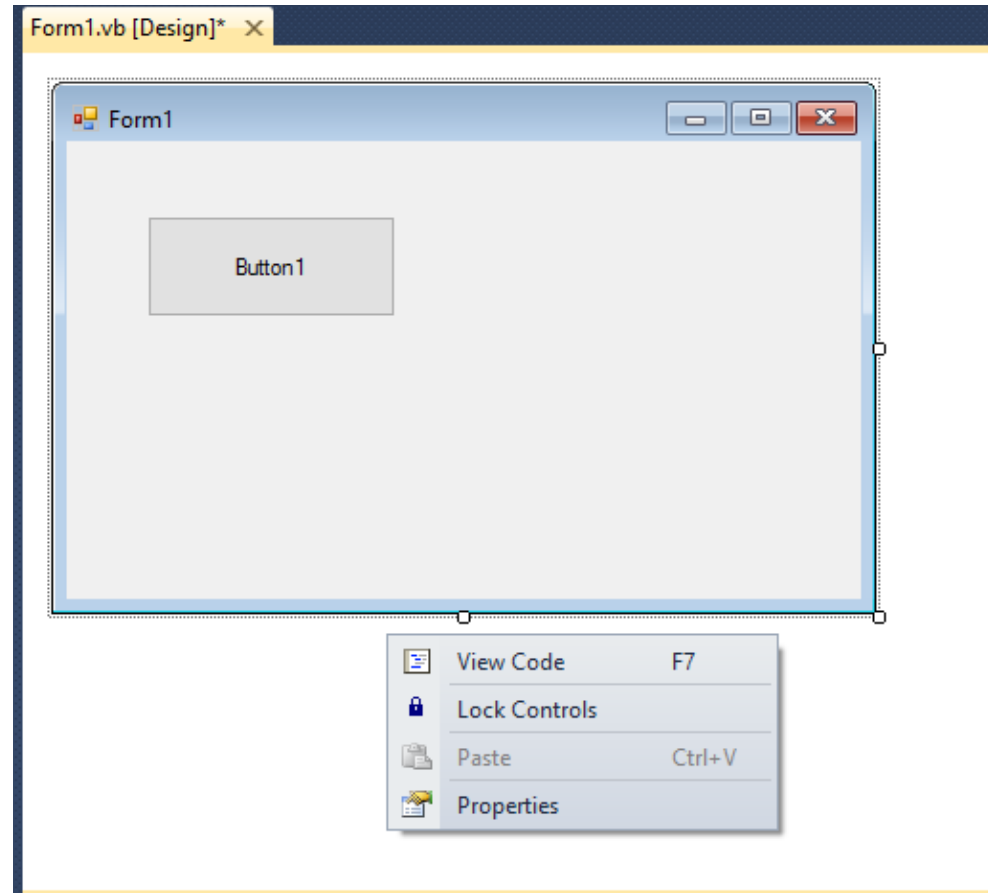
Error List window

- The Error List window shows errors and warnings in the current project. For example, if the code contains invalid character, this list will say so. It's extremely useful as it clearly tells you the type of the error(s) showing a full description, file name, line and everything else that helps you easily find and fix the error. If you don't see the Error List it is probably hidden. You can display it by selecting the appropriate item in the View menu
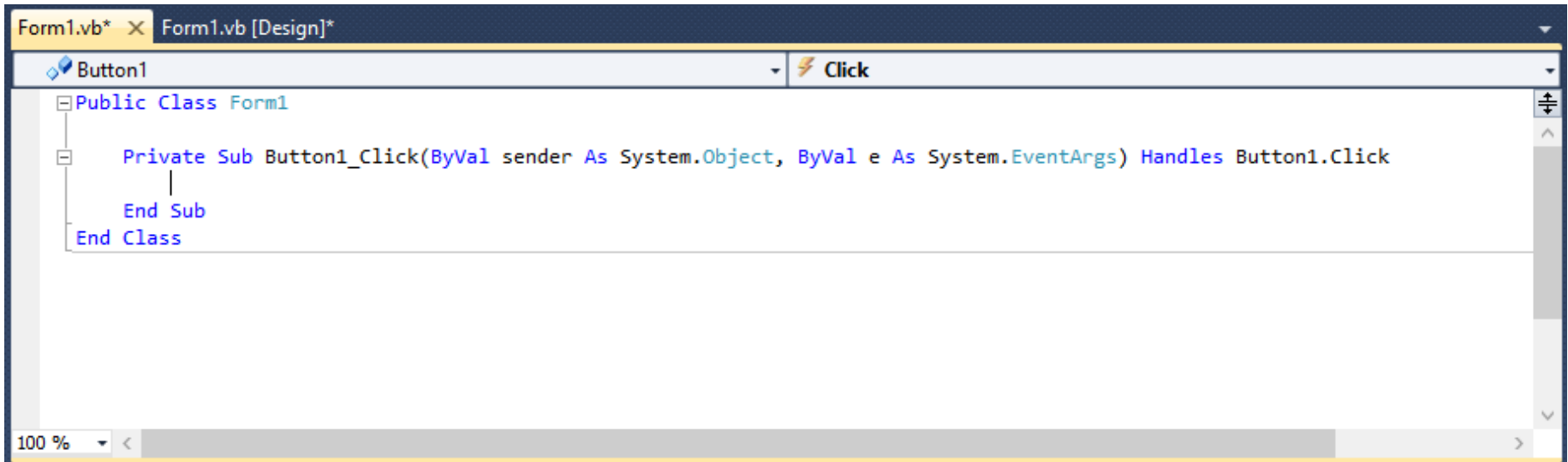
Windows Form Designer

- The **Windows Forms Designer** allows you to design forms for typical Windows applications. It lets you add, size, and move controls on a form using your **mouse**.

- Together with the Properties window, it lets you view and modify control properties, and create event handlers to **interact with the controls**
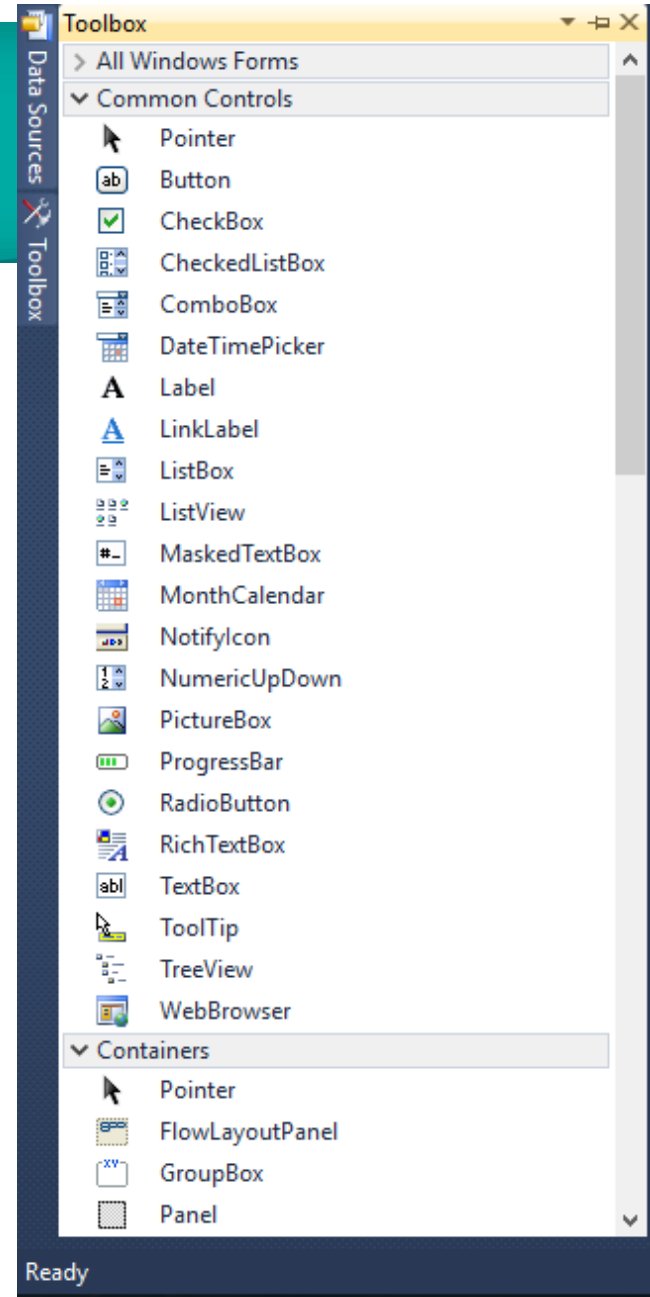
Visual Basic Code Editor

- You use the **Visual Basic Code Editor** to write a code that responds to control events.

- The most obvious feature of the code editor is that it lets you type code, but the code editor is **far more than a simple text editor** such as Notepad.

```
Form1.vb*  ✕  Form1.vb [Design]*

◇ Button1                                                    ▼  ⚡ Click                                        ▼

⊟Public Class Form1

⊟     Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click
      |
      End Sub
 End Class

100 %  ▼  ‹
```
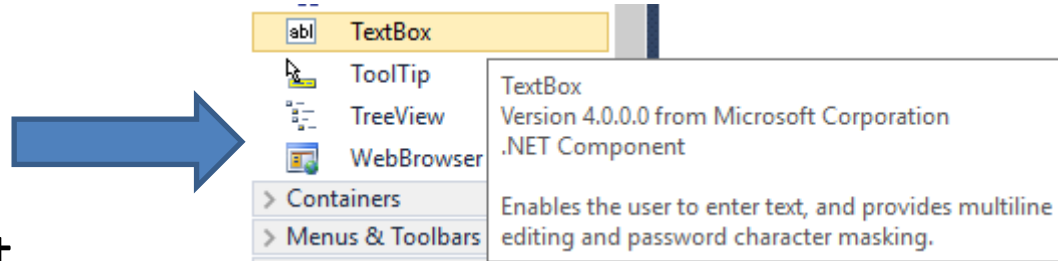
Toolbox window

- The Toolbox window displays tools that you could use with the currently active document. These tools are available when you are editing an item that can contain objects such as **controls** and components.
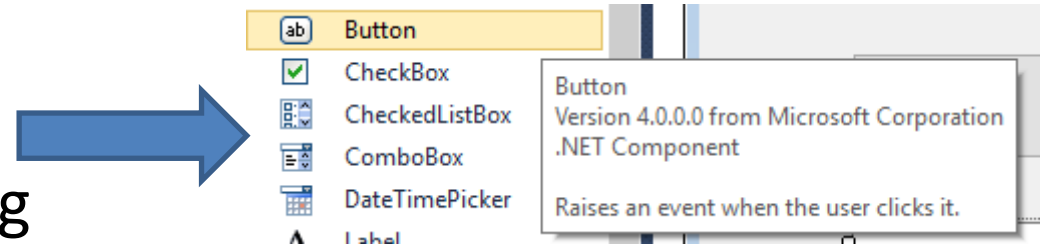
Commonly Used Control in VB

- **Text Box Control:** Used for input and output. When used for output, ReadOnly property is set to True

- **Button Control:** Used to initiate action/processing

- **Label Control:** Used as static text to label text box or other control, and to display read-only output