Visual Basic

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1 Introduction

Visual Basic (VB) is an event driven programming language and associated development environment created by Microsoft. It runs only on Windows platform. For this report on Visual Basic I used Visual Studio 2005 express to make my tests. It can be downloaded for free.

2 History

2.1 Real Visual Basic

Visual Basic first release was in 1991 for DOS[1], it is an event driven programming language derived from the Microsoft BASIC [2] named QuickBasic. Visual Basic continued to evolve from version to version, the last real Visual Basic release was Visual Basic 6.0 in 1998. Microsoft will stop to support VB 6.0 after march 2008.

2.2 Visual Basic .Net

After the 6.0 version, Visual Basic 7.0 became Visual Basic .Net. The switch to .Net made VB an object oriented language. The compatibility with lower version is not ensured, VB code from version inferior or equal to 6.0 must be rewritten to cope with the changes introduced by the .Net framework. The .Net framework is Microsoft answer to Java, it provides toolkits for GUI, data access, cryptography and web application. As in Java, applications using the .net framework are managed by a virtual machine called CLI[3].

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[1]Disk Operating System
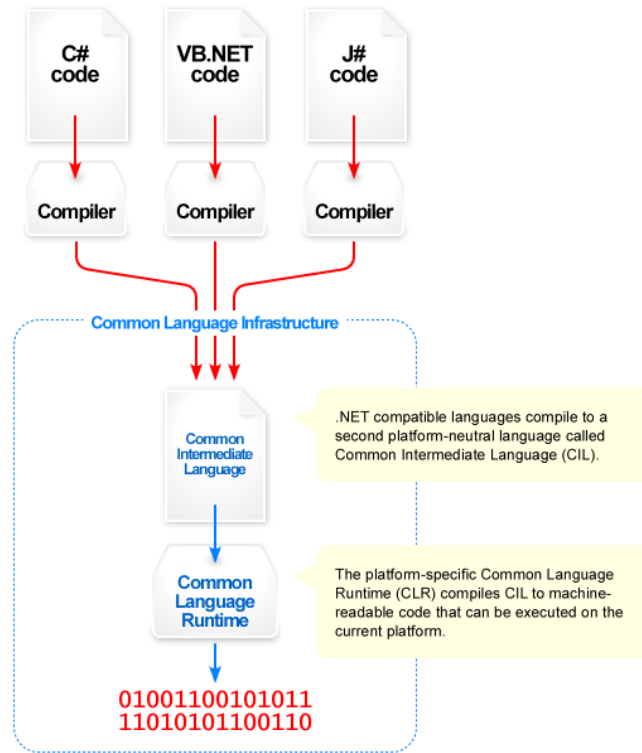[2]Beginner's All-purpose Symbolic Instruction Code
[3]Common Language Runtime

Figure 1: .Net mechanism

3   Syntax of Visual Basic : A monster from the past?

The Visual Basic syntax seamed weird to me when I first started using it. It has things from the past (like Goto statements!) that you don't expect to see nowadays in higher level languages mixed with object oriented concepts. The assignment syntax is also really strange when your not used to it.

```
String myString = "prettty assignment";
```

Figure 2: c++/Java declaration

```
1    Dim myString As String = "Why do we need this as and this Dim!"
```

Figure 3: Visual basic declaration

One other thing I don't really like is use of carriage return as the end of an instruction. This can make your code ugly if you want to write long instructions. The language also lacks some operators that I have been used to, like *++ or - -*. Syntax for loops can appear strange too,the for statement for example is really rigid (if your are used to C style where you can declare funky for statements).

```
1  Dim i As Integer
2    For i = 10 To 1 Step -1
3        Print("something")
4    Next words
```

Figure 4: A for loop

4 Development tools

The most common tools do develop Visual Basic applications is Visual Studio. A open source UIDE for .Net is also available, it is called #develop[4] (sharp develop).

To test Visual Basic, I used the Microsoft Visual Basic 2005 Express Edition. As part of the Visual Studio product range, Microsoft has created Visual Studio 2005 Express Editions for hobbyists and novices. One of these editions is Visual Basic 2005 Express Edition. The English edition is free to download from Microsoft[5]. The Express Editions are targeted specifically for people learning a language. They have a streamlined version of the user interface, and lack more advanced features of the standard versions. On the other hand, Visual Basic 2005 Express Edition does contain the Visual Basic

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[4]http://www.sharpdevelop.com/OpenSource/SD/
[5]http://msdn.microsoft.com/vstudio/express/vb/download/

6.0 converter, so it is a reasonable way to evaluate feasibility of conversion from older versions of Visual Basic

5   Design view

The design view (see figure 5) is a WYSIWYG editor that let you easily creates user interfaces.You can add elements from the toolbox to the application form by drag and dropping them. Then you can edit the properties of the selected the element. The properties box let you edit all the properties associated with one type of element.
From this properties box, you can also see all the events that can be associated with an element. Then by if you double click on a particular event in this list, the IDE view appears with the empty event handler you need to implement for the selected event.

6   IDE

The Visual Basic IDE (see figure 6) allows to code the functions for a project. It manipulates .vb files. The IDE is easy to use, it provides completion (IntelliSense) , auto indentation and error checking on the fly. The Visual Basic 2005 express IDE is smart an make you gain a lot of time, for example you can type lower case instructions (for or if instead of For and If) and the IDe will change them automaticlly to the appropriate reserved keywords.

7   Conclusion

After trying Visual Basic I can't really say wether it is a good or bad thing. What I am really wondering is Why do the world need Visual Basic .Net for. It just seem to me that it doesn't really has a reason to exist. Visual Basic really looks like Visual C++ or Visual C# only with an old and ugly syntax. So if Microsoft has abandoned strict Visual Basic since version 6.0 why have they made this product. It does not provide backward compatibility and programmers that have been used to old Visual Basic have to learn a new way of programming, they might just switch to a modern language. Visual basic syntax is archaic and not really clear. It is said to be easier to novices but I'm not convinced that it is, because with the introduction of all the object oriented concept it is just as hard as any other language. So it is not any more an beginners language, but it still exists because of its large

community of programmers. Many have expressed concerns that Visual Basic leads to bad programming practices.
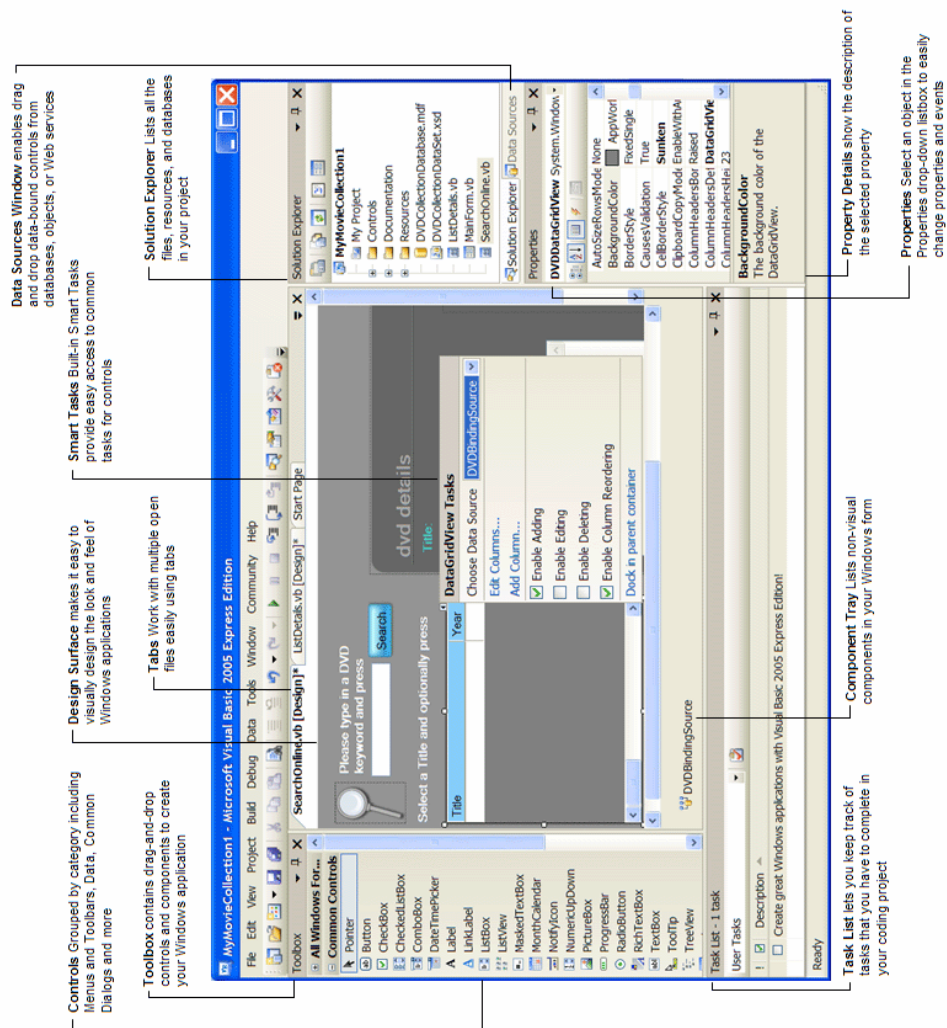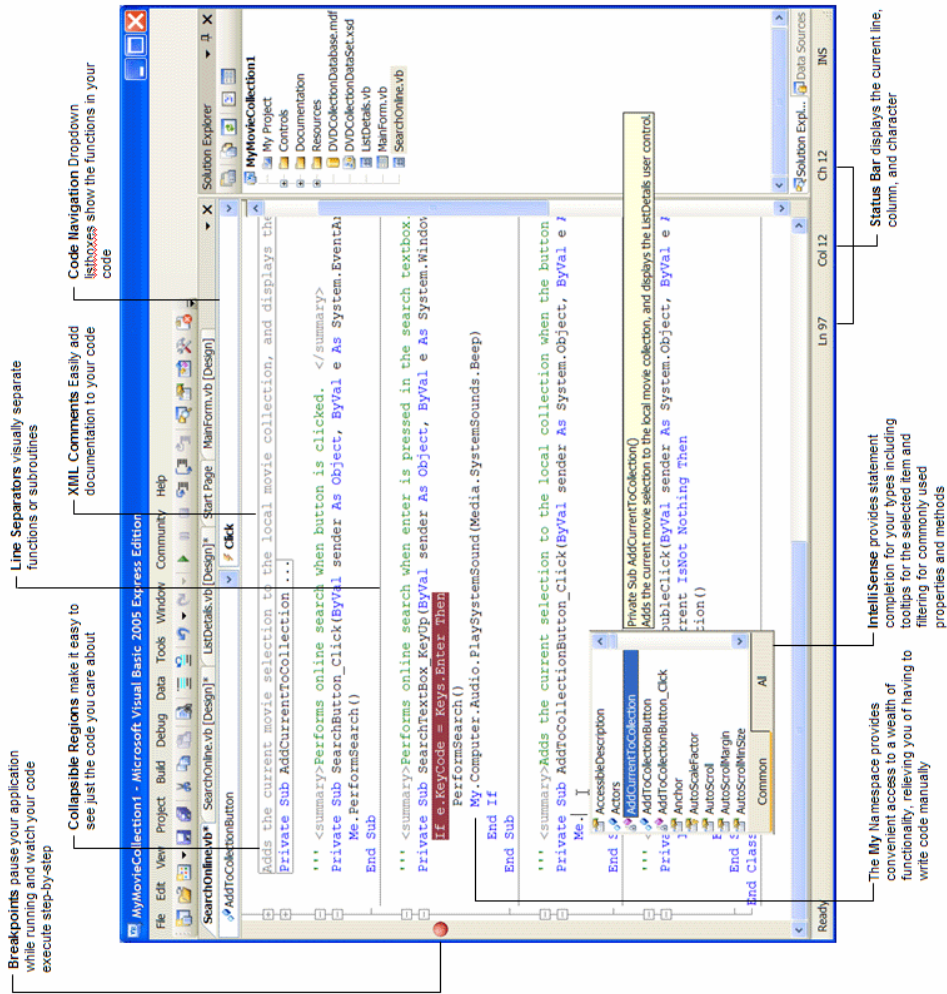
Figure 5: Visual Basic design view

Figure 6: Visual Basic IDE

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