What’s the big deal about Visual Basic .NET

Microsoft® .NET is a set of Microsoft software technologies for connecting information, people, systems, and devices. It enables a high level of software integration through the use of XML Web services—small, discrete, building-block applications that connect to each other as well as to other, larger applications over the Internet.

http://www.microsoft.com/netbasics/whatis.asp

Why does Microsoft’s vision matter?
As of 16:55 on 22 April 2004 he owns $31,117,998,880.53 of Microsoft.

Microsoft’s Vision

• “Smart” clients
• XML Web Services
  – Microsoft MapPoint
• Servers
  – Windows Server 2003
• Developer tools
  – Visual Studio
  – Visual Basic .NET

Extensible Markup Language

<?xml version="1.0" standalone="no"?>
<Mail>
<From>Author</From>
<To>Receiver</To>
<Date>Thu, 7 Oct 1999 1:15:16 -0600</Date>
<Subject>XML Introduction</Subject>
<body><p>Thanks for reading this article</p>
<br/>
<p>Hope you enjoyed this article</p>
</body>
</Mail>

SOAP

http://www.devshed.com/Server_Side/PHP/AmazonAPI

.NET Framework

- Common Language Runtime
  - Compiling to intermediate language
- Class Library
  - Namespaces
- ASP.NET
  - Web delivery

Oracle, Sun et al. vrs. Microsoft

W3C
- www.w3c.org

J2EE vrs .NET

- Oracle, Sun et al. vrs. Microsoft
- W3C
  - www.w3c.org
- Great spectator sport!

What you need to remember from IMS1000?

- How to make variables
- How to debug
- The general nature of a well written program
- How to “paint” a form
- An understanding of the level of detail that is required to transfer and algorithm into working code
- The value of walkthrough’s
  Most of you have already shown this to us!

The power of objects

- COM, DCOM, etc, etc, etc.
- Its all in VB
  - the only downside is “.dll” madness
- Watch as POD makes a
  - Spreadsheet application,
  - movie viewer,
  - a calendar.

How will your application use objects?

- Forms, widgets and the like are all objects.
  - Calendar object
- Crystal reports
  - More on CR next week.
- ADO.Net objects
- Application classes
  - You must make sure you understand chapter 2 of B&M.
Multitier .Net applications

- **Presentation tier**
  - Forms, controls, menus
- **Business tier**
  - Validation, calculations, business logic
- **Data tier**
  - e.g. dataset, connection, dataadapter
- **Could be stored and executed on different machines (in theory).**
- **Allows, for example, the business tier and data tier to be the same for different presentation tiers**
  - Windows and Web

You must make sure you understand chapter 2 of B&M.

One more thing

- **Get used to the Visual Studio IDE**
  - It's going to be the standard interface for all "system" and "developer" tools in Windows
  - e.g's from "Yukon"
- **Yukon and Longhorn**

Enjoy

- You'll be pleasantly surprised at how easy it is to program
- Communicate with us!