Visual Basic

**Visual Basic** –

* An event driven programming language
* Developed by Microsoft & runs on .NET frameworks
* High level language
* Easy to understand – much like English
* just like basic(coding) the difference is that it has buttons, textboxes, etc. –
* basically graphics that are programed to conduct an action

.NET Framework:

* Developed by Microsoft
* Framework that runs independently of the system (Windows)
* Like a virtual machine – JVM in Java

**Windows Forms** –

* Contains a lot of premade code done for you
* (can create a console application instead)

\*VB Hello World\*

IntelliSense – keeps track of what you have previously typed in the past and makes short cuts

Comments 🡪 ‘

Errors:

* Runtime – try catch statements
* Logic –

Primitive Data Types:

* Numbers
* Integers
* **int**, **byte**, **long**, **short**
* Real Numbers
* **float**, **double**
* Characters
* **string**
* **char**
* Logical
* **boolean**

Variables –

* **Dim** variableName **As** dataType
* Dim myNum As Integer = 5

. – exposes all of the public properties of the object

Work Pink Report:

* Option compare database – this results in string comparisons based on the sort order, determined by the locale ID of the database where the string comparisons occur. Something to try, in order to see how careful the old designer was, is to put Option Explicit in the db (top of every module), then try and compile it (in the VB editor, go to the debug menu and click compile). This will highlight any non defined variable, and you can decide if you want to correct them all

Objects in O-O Programming languages are manipulated by events, not by the order of the code in the program (like procedural) 🡪 this is called event driven programming

When running the macro recorder 🡪 creates a module for you, blank excel sheet editor does not already have a module created

**5/10 VB**:

Friend WithEvents??

* Access Modifier – the default access level of an interface, a module, a class, or a structure
* Typically VB.NET leans towards exposing too much (privacy is mostly opt-in) whereas C# is the inverse, privacy is typically opt-out. As others have mentioned the reason is likely due to VB.NET's legacy and the "friendliness" of exposing everything; it makes it easy to get started but also leads to poor design and additional effort to ensure loose coupling.

**VBA**:

Various Basics:

* Subroutine 🡪 Macro, Method, Procedure
* When executing Macros, have curses somewhere in between Sub & End Sub
* Change color of keywords, comments 🡪 tools 🡪 options 🡪 editor format

Getting Data from Access DB using Excel VBA:

* When writing the Macro to retrieve data from the DB –
* tools 🡪 references 🡪 Microsoft ActiveX Data Objects 2.0 Library
* Steps –
* Declare variables
* Clear all the cells 🡪 Cells.Clear
* Database Path Info 🡪 DBFullName = “C:\path of db file location
* Open the Connection (to the DB)
* Create Recordset – set of info we are retrieving from the DB

ADO.NET