

## Lecture No. 1 and 2

### Introduction to Visual Basic

- Visual Basic is a programming language and development environment created by Microsoft.
- Visual Basic, also referred to as "VB," is designed to make software development easy and efficient.
- Visual Basic is a third-generation event-driven programming language first released by Microsoft in 1991. It evolved from the earlier DOS version called.
- BASIC. **BASIC** means **B**eginners' **A**ll-purpose **S**ymbolic **I**nstruction **C**ode. Since then Microsoft has released many versions of Visual Basic, from Visual Basic 1.0 to the final version Visual Basic 6.0.
- Visual Basic is a user-friendly programming language designed for beginners. Visual Basic provides a graphical user interface GUI that allows the developer drag and drop objects into the program as well as manually write program code.

### Visual Basic.NET

In 2002, Microsoft released Visual Basic.NET(VB.NET) to replace Visual Basic 6. Thereafter, Microsoft declared VB6 a legacy programming language in 2008. Fortunately, Microsoft still provides some form of support for VB6. VB.NET is a fully object-oriented programming language implemented in the .NET Framework. It was created to cater for the development of the web as well as mobile applications. However, many developers still favor Visual Basic 6.0 over its successor Visual Basic.NET.

### Visual Basic 6.0:

- Visual Basic is a programming language and integrated development environment.
- It derives from the much older BASIC programming language, and so is considered useful and easy programming language for the beginner to learn.
- Visual Basic 6.0 was the final edition of Visual Basic.

### Feature of Visual Basic 6.0:

- Learning Consists of all necessary tools required to build main stream Windows Applications
- Professional Includes advanced features such as tools to develop ActiveX and Internet controls.
- Enterprise In addition to all Professional features, it also includes tools such as Visual

## **The concept of computer programming:**

Programming means designing a set of instructions to instruct the computer to carry out certain jobs that are very much faster than human beings can do. The earliest programming language is called machine language which uses the binary code (comprises 0 and 1) to communicate with the computer. However, the machine language is extremely difficult to learn. Fortunately, scientists have invented some high-level programming languages that are much easier to master. Among the high-level programming languages are Basic, Visual Basic, Java, Javascript, C, C++, etc.

## **What programs can we create with Visual Basic 6:**

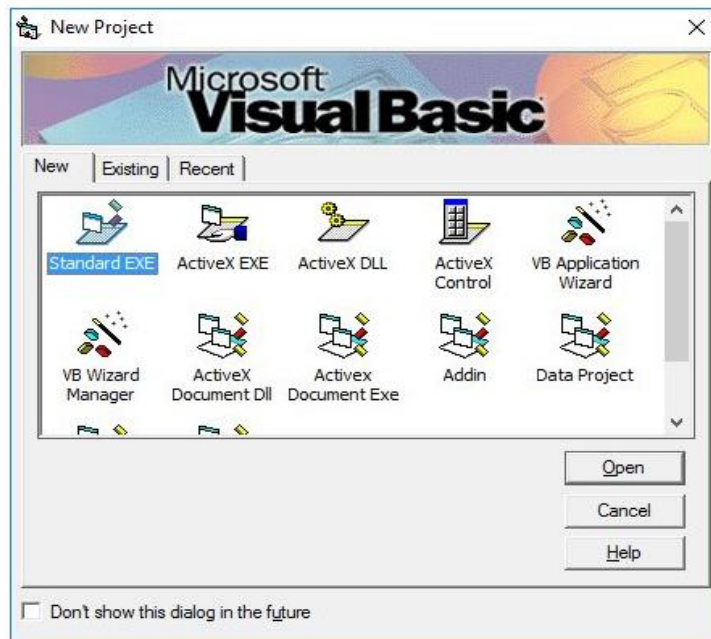
In VB 6, we can create any program depending on your objective. For mathematical and statistical programs such as Writing programs for Averages, Dispersions, Curve fitting, prime number tester, quadratic equation, coefficient of regressions, correlations, confidence intervals, testing of hypotheses about mean, difference between two means, proportion & difference between two proportions, one way ANOVA, two way ANOVA, three way ANOVA, Frequency distributions fitting and testing (Binomial & Poisson), test of independence of attributes in contingency table, sorting techniques, matrices, series, binary searching, geometric progression, simultaneous equation solver , and so on. If we are in business, we can also create business applications such as inventory management system, Amortization Calculator, investments calculator, point-of-sale system, payroll system, accounting program and more to help manage your business and increase productivity. Besides, we can create multimedia programs such as Smart Audio Player, Multimedia Player and more. Indeed, there is no limit to what program we can create.

## Lecture #2:

### The Visual Basic 6 Integrated Development Environment:

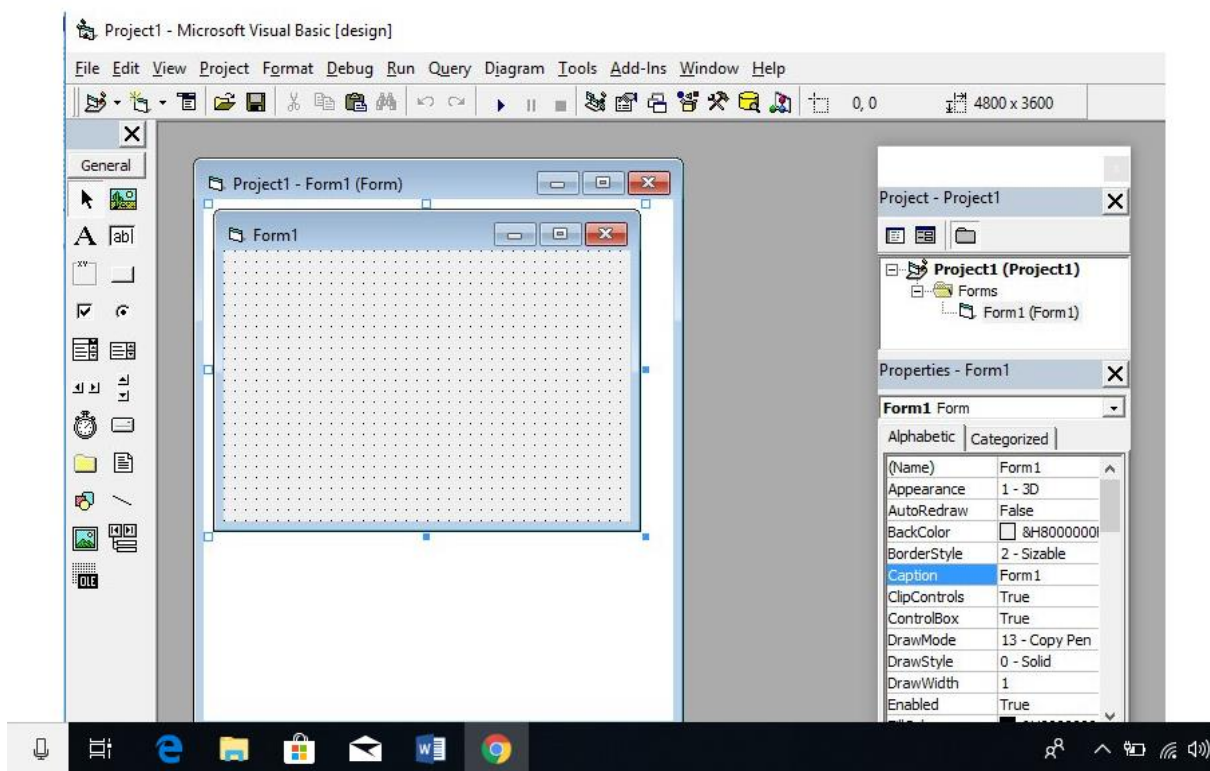
Before we can write programs in VB 6, we need to install Visual Basic 6 compiler on your computer. If we have already installed Microsoft Office in your PC or laptop, we can also use the built-in Visual Basic Application in Excel to start creating Visual Basic programs without having to spend extra cash to buy the VB6 compiler.

We can also install VB6 on Windows 10 but we need to follow certain steps otherwise the installation will fail. First, we need to run setup as administrator. Next, we need to use custom installation. Clear the checkbox for Data Access. If we don't, set up will hang at the end of the installation. Finally, click next and wait for the installation to complete. For complete instructions, please follow this link [Install VB6 on Windows 10](#). After installing the VB6 compiler, the icon will appear on your desktop or in your programs menu. Click on the icon to launch the VB6 compiler. On start up, Visual Basic 6.0 will display the following dialog box as shown in Figure



We can choose to either start a new project, open an existing project or select a list of recently opened programs. A project is a collection of files that make up your application. There are various types of applications that we could create, however, we shall concentrate on creating Standard EXE programs (EXE means executable). Next, click on the Standard EXE icon to go into the actual Visual Basic 6 programming environment.

When we start a new Visual Basic 6 Standard EXE project, we will be presented with the Visual Basic 6 Integrated Development Environment (IDE). The Visual Basic 6 Integrated Programming Environment is shown next figure. It consists of the toolbox, the form, the project explorer and the properties window.



## **What is Form and Its various properties:**

The Form is the primary building block of a Visual Basic 6 application. A Visual Basic 6 application can actually comprise many forms, but initially we will focus on developing an application with one form first. We will learn how to develop applications with multiple forms later. Before we proceed to build the application, it is a good practice to save the project first. We can save the project by selecting **Save** Project from the File menu, assign a name to your project and save it in a certain folder.