

## Beginning Computing: Zero Point

### ➤ The Operating System

All computers have an **Operating System** (OS) which is the program which controls the overall operation of the machine. Most new PCs will be supplied with Windows 7, Windows Vista and Windows XP will be common on older machines. You can check which you have but watching your machine start up and seeing what flashes by on the screen!

Apple Mac computer have their own operating systems and although they are superficially similar to Windows they are actually significantly different in operation and so will not be considered here.

Some newer Netbooks (miniature laptops) are supplied with the Linux operating system installed and again their operation is significantly different from Windows and will not be considered.

These instructions are for an IBM compatible Personal Computer (PC) running Windows XP or Vista. Earlier versions of Windows are similar in principle if slightly different in appearance, as will be Windows 7.0. It is assumed that your computer and all the various peripherals have been cabled up and it is working normally.

### ➤ Switching on

The power switch for you computer is usually located on it front panel (although there may also be a second switch on the back)! You may also find a small switch marked **Reset**, which you should ignore. A few second after you switch on your screen should light up and may display a series of jolly, if large irrelevant moving messages. Eventually the screen will settle to a static image with a series of small icons (pictures) scattered over it. This screen is called the **Desktop** and is you starting place.

### ➤ Icons

Icons are just small pictures, which give you quick access to a particular program or function on the computer. (Programs are frequently called applications and we will use this term in future). The appearance of the icon attempts to indicate what the application does, but they can be very obscure!

### ➤ Launching an Application

If you double click (two clicks in fast succession) on the left mouse button while pointing at an icon, the application behind the icon will start (or launch).

As a general rule for most Windows applications:

- ⊕ One (left) click selects an object (application, file etc )
- ⊕ Double (left) clicking selects the object and causes it to start.

Whenever you are told to '**Click**', you can assume it's with the left mouse button unless specifically told otherwise

➤ **Switching Off**

Given the triviality of switching on one would expect that switching off would be as simple. Not so; just pushing the power switch would be rather akin to trying to stop a car by jumping out when it was travelling along a road. Even though you may not be using your PC, all the time it is switched on it is busying away.

**Windows XP**

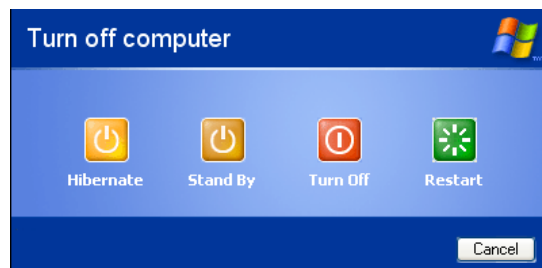
To switch off; position the mouse pointer (called the cursor) over the green **Start** ⇨ button in the bottom left hand corner of the screen and click the left mouse button. (sounds bizarre but that's how it works!)



A box will pop up ⇨  
part of which is shown on the left  
Click on the red **Turn off Computer** button.



Another box will appear ⇨  
Click on the red **Turn off** button.



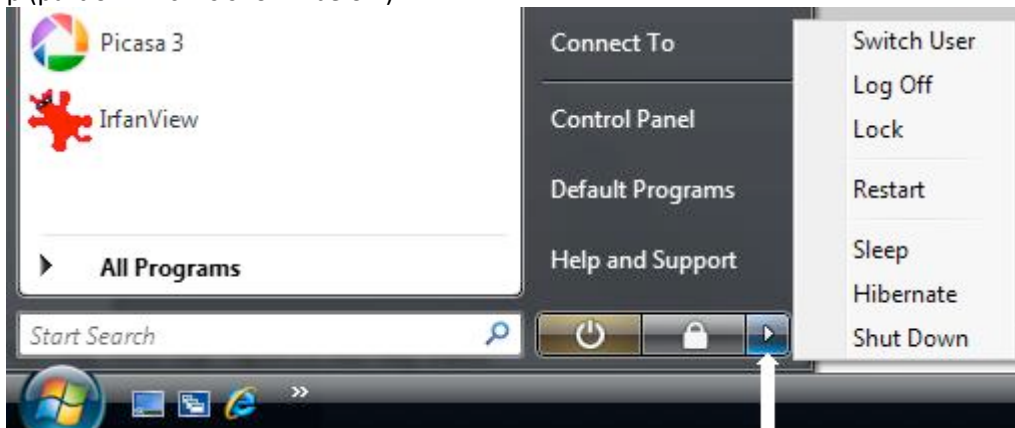
The computer will shut down in a controlled manner, which could take up to a minute before the screen finally goes blank.

**Windows Vista**

To switch off; position the mouse pointer (called the cursor) over the Windows button in the bottom left hand corner of the screen ⇨ and click the left mouse button.



A box will pop up (part of which is shown below)



Click on the small blue button indicated  
And then click on **Shut down** from the list which appears

Even when your computer is apparently turned off it is still consuming power and if you are leaving it for some time; say for a holiday, it is as well to switch it off at the socket.

## Anatomy of a Window

Switch on your computer and wait until the normal desktop appears. Using your left mouse button double click on the **My Documents** icon (or **Documents** icon for Vista) icon. A box will appear, or to use Windows terminology a 'window'. At this stage we are not concerned with its contents but with its controls, which will be essentially the same whatever application you open.

### ➤ The Title Bar



You can have more than one application running and hence on the screen at the same time. If they do not fill the entire screen you can move them around by clicking on the title bar, holding down the mouse button and then 'dragging' the window by moving your mouse.

There are three buttons on the right, which are common to most windows.



The **Minimise** button – collapses the window, which can then be restored by clicking on the mini title button at the bottom of the screen



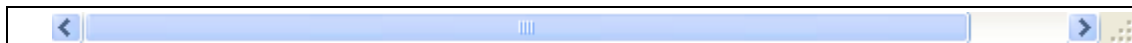
The **Maximise** button – causes the window to fill the screen.

When this happens this button is replaced by the **Restore** button ⇔ which if clicked on will reduce the window back to its original size.



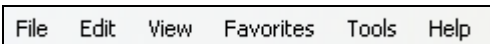
The **Close** button – closes the window and so shuts down the window

### ➤ The Scroll Bar



If the content of a window is too large to fit on to the screen a scroll bar will appear automatically. Depending on which dimension is too large a scroll bar may appear at the bottom or the side of the screen or even both. Clicking on the arrows at the ends of the bar will cause the window to scroll across (or up and down) your screen. The length of the slider gives you some indication of how much of the whole window is being displayed.

### ➤ The Menu Bar



Each option on the menu bar gives access to a drop down menu

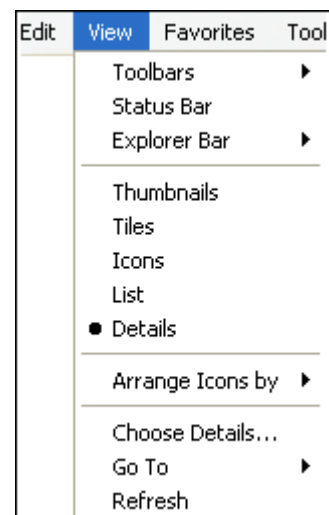
This is a typical example of the View Menu ⇔

The right pointing arrow by some options indicated that more sub-options are available if you click on that particular option.

The dot by 'Details' indicates that it is the option selected from the 5 possibilities in that group.

Occasionally an option will be 'grey-out' indicating it is not available.

Despite the wide variety of applications you will use many of the commands will be common across them all which does make for easier learning.



### ➤ **Launching an application**

Computer programs such as Word Processors and Web Browsers are usually called applications. To launch an application just double click on its icon on the desktop.

If there is no icon available you may still have the applications lurking in your machine it's just that accessing will be a little more obscure.

#### **Windows XP**

Click on the green **Start** button in the bottom left hand corner of the screen



#### **Windows Vista**

Click on **Windows** button in the bottom left hand corner of the screen

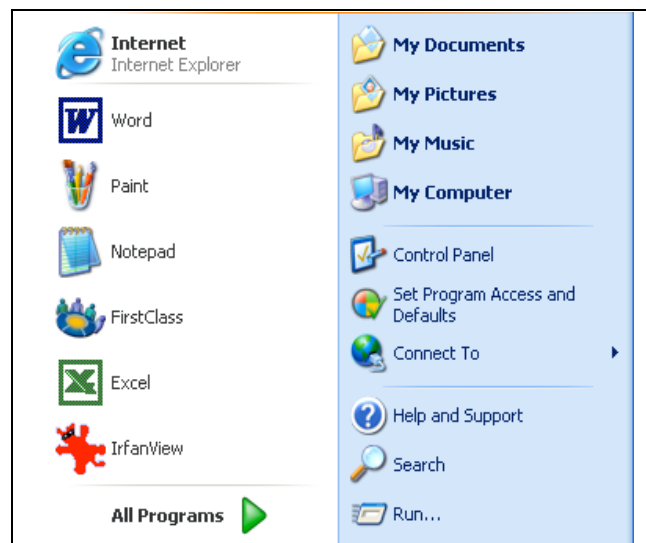


A box very similar to that shown below will appear. ↓

The application you want maybe on the left hand side of this box (eg Paint) and to launch it all you have to do is double click on it.

If your application has still not appeared; double click on the green **All Programs** (or in Vista the **Programs**) arrow.

This will give you a surprisingly large list to choose from. Again to launch the application double click on its name.



Each application behaves differently but you will find that there is a surprising amount of commonality between the icons used and the structure of the Menu bars on all applications.

### ➤ **Using the Mouse**

Using the Mouse maybe an unfamiliar skill which will need some practice in order to be efficient. The best way of practicing this is to play Patience on your computer (also called Solitaire).

Select **Start** (or the Windows button on Vista)

Then **All programs** then **Games** then **Solitaire (XP or Vista)**

To move the cards you need to **Drag and Drop**

- ⊕ If you see a card you want to move
- ⊕ Click on the card but hold the mouse button down
- ⊕ Now (holding the button down) drag the mouse across the screen
- ⊕ The card will stay 'stuck' to the cursor
- ⊕ When the card is in about the right place let go of the mouse button
- ⊕ The card will snap to the exact position  
(Or if you try an illegal move will snap back to the original position)

To deal just click on the card stack

To start a new game click on the **Game** option in the Menu Bar and select **Deal Good luck** (PS this can be rather addictive!)