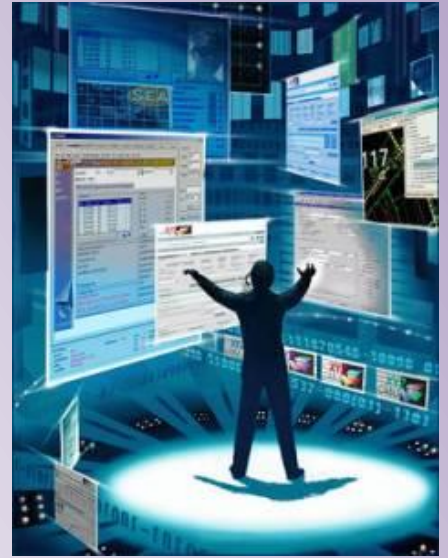
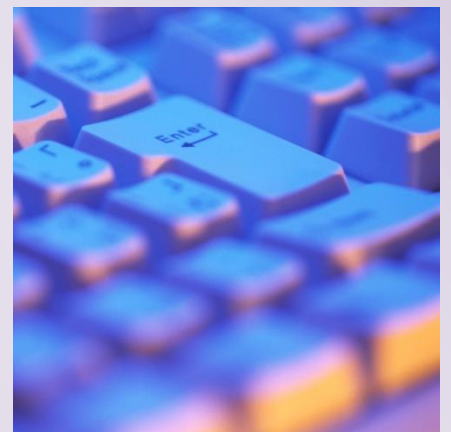


# MEM16008A



*Interact with computer technology*



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## LESSON 1 – Computing Basics:

### Required Skills:

On completion of the session, the participants will be able to:

- Create a new folder within Windows Explorer.
- Rename, Move, and Copy Files and Folders.

### Required Knowledge:

- Setting up a structure of folders.
- Basic use of keyboard and mouse.

### Aim:

The aim of this lesson is to develop the skills to allow folders and files to be created, renamed, copied and moved between drives and other folders.

### Introduction:

Virtually all software written today employs user interface toolkits and interface builders, concepts which were developed first at universities. Even the spectacular growth of the World-Wide Web is a direct result of HCI (Human-Computer Interaction) research; applying hypertext technology to browsers allows one to traverse a link across the world with a click of the mouse. Interface improvements more than anything else has triggered this explosive growth and ongoing research leading to the user interfaces for the computers of tomorrow is happening at universities and various corporate research labs.

Technological innovation is enhancing business performance by improving operations or enabling new products, services and business models in areas of global communications, interactive wall technology, personal services, virtual collaborative software and virtual meeting corridors. Computer technology allows the use of extensive databases and instant communication by linking and providing toolsets that enhances teamwork and communication between remote project teams.

The Computer – Human technology enhances the effectiveness of the workforce and drives business performance by collaboration, interaction and visualisation.

### Collaboration:

Collaboration enhances the way we interact with each other (including how our gadgets talk directly to other devices) and provide new communication opportunities for project and team oriented work by enhance team work in geographically dispersed organizations by providing a virtual meeting space.

### Interaction:

Interaction controls how businesses and consumers can use new technologies to improve not only the way they interact, but also the content that they share. In the past, many large organizations relied heavily on paper forms for record keeping, work orders or applications and had not been able to take full advantage of the digital world. The advances in modern computer technology has changed the way data is accessed and

stored and enabled businesses to improve performance with cost savings and efficiency gains.

**Visualisation:**

Provides new ways to navigate and discover data and information by embedding elements of the virtual world into reality and/or bringing attributes of the real world into a virtual environment using very large, high-resolution interactive screens that displays vast amounts of information at peoples' fingertips, helping them see the "big picture" whether at the office desk or display data at a conferences, colleges or universities.

**Basic Computer System:**

In 1801, Joseph Marie Jacquard made an improvement to the textile loom by introducing a series of punched paper cards as a template which allowed his loom to weave intricate patterns automatically. The resulting Jacquard loom was an important step in the development of computers because the use of punched cards to define woven patterns can be viewed as an early, albeit limited, form of programmability

Since the early 1970's computers have advanced from a basic calculator that could do simple computations involving the 4 mathematical operations (addition, subtraction, multiplication and division) to scientific calculators capable of complex algebraic equations using trigonometry and scientific notation to today's modern personal computers and notepads.

Modern personal computers, laptops and notepads are assemblies comprising Hardware and Software.

**Hardware:**

The term hardware covers all of those parts of a computer that are tangible objects. Circuits, displays, power supplies, cables, keyboards, external and internal hard drives, USB memory sticks, printers and mice are all hardware.

**Software:**

Software refers to parts of the computer which do not have a material form, such as programs, data, protocols, etc. When software is stored in hardware that cannot easily be modified (such as BIOS ROM in an IBM PC compatible), it is sometimes called "firmware" to indicate that it falls into an uncertain area somewhere between hardware and software. Software falls into 5 areas:



- Operating system – Microsoft Windows, DOS, Mac OS
- Library – Multimedia
- Data – File Format, Protocol
- User Interface – Graphic User Interface, Text based user interface
- Application – Office suite, Internet Access, Audio, Education, Games, Video, Audio, Graphics.

**Microsoft Windows:**

Once the computer is turned on and the user has logged on the Windows Desktop is the first screen displayed. The desktop can be customized to suit the individual using the Control Panel and displays an assortment of icons that can be clicked on to open an application such as Word, Excel, AutoCAD or a game etc. The Windows Explorer is a great tool for finding your way around your internal and external drives as you can quickly locate files and folders, or browse for something in particular.

The desktop contains a series of shortcut icons that when double-clicked, will open the application. Typical icons that you will be using during this unit are:

- Microsoft Word 
- Microsoft Excel 
- Microsoft Access 

- AutoCAD 
- Hard Copy 



The Microsoft programs are commonly loaded on nearly all computers however AutoCAD and Hard Copy must be downloaded and installed.

AutoCAD is a licensed program costing in excess of \$5000 however a student version is available for download, free of charge, for academic use only. Hard Copy is shareware where the basic version can be downloaded and installed free of charge for educational use.



Figure 1.1

Accessing Windows Explorer is simple, the confusion probably lies in which way to open it and the best way to visualise it. The following methods provide ways of accessing Windows Explorer, one way is as good as another so it is up to the user to select a method suitable to them:

Blackline D



Figure 1.2


### Method 1:

- From your Desktop, Click the **Start** button in the bottom left hand corner of the screen
- Click the green "**All Programs**" button
- From the Sub menu that pops up, click on **Accessories**
- From the cascading sub menu, click on **Windows Explorer**.







### Method 2:

- From your Desktop, Click the **Start** button in the bottom left hand corner of the screen
- Click My Documents at the top right corner of the menu – refer to Figure 1.2.

### Method 3:

From the Desktop, double-left click on the **My Documents** icon .

On entering Windows Explorer, the screen appears shown in Figure 1.3. To change the display appear as shown in Figure 1.4 the **Folders** button on the Standards toolbar is clicked. Figure 1.4. shows the Browser Panel on the left and the Files Panel on the right.

Folders in the Browser Panel have a  or  icon to the left of the folder name. The  icon shows that there are additional sub-folders contained in the folder; left-click once on the  icon to expand the folder. The  icon is displayed next to the folder's name when the folder is expanded; clicking on the  icon collapses the folder.

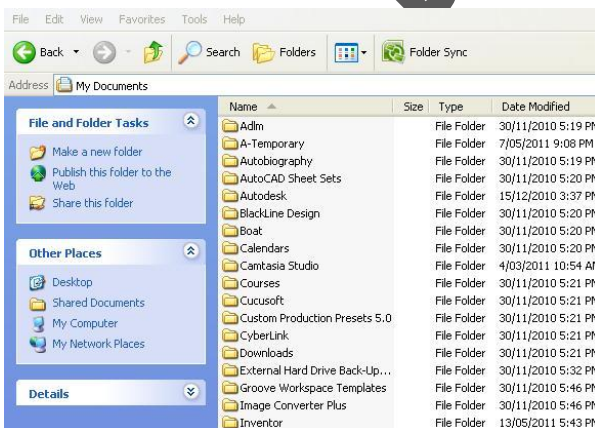


Figure 1.3

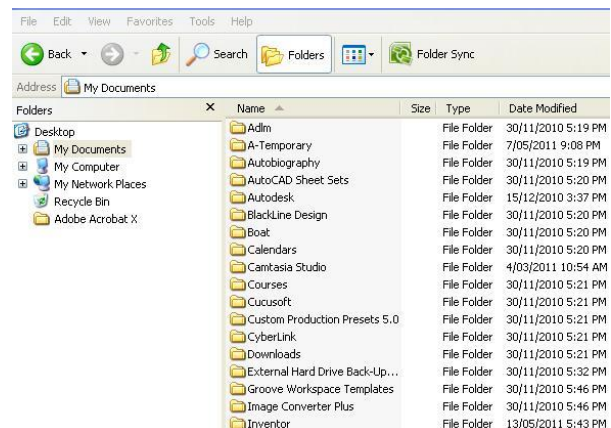


Figure 1.4

In Figure 1.5, the C-drive has been expanded to show the sub-folders contained on the drive. Documents and Settings has also been expanded, the main user of the computer is Warren which is where all of his private and work files are stored.

Every person is different how they store and backup their data. Some people work by saving their files directly on the C-drive by creating sub-folders in their working area called My Documents and then backup their work to an external hard drive; other people do not store any work on the C-drive but work directly off a USB Flash Stick and backup to an external drive. Other save their work but do not backup – **a very dangerous habit to develop.**

All program software is stored on the internal drive called the C-drive in the Programs folder.

All computers have different names for the external drives but can be easily identified in the Browser Panel of Windows Explorer as shown in Figure 1.5. The K-drive is used to backup all Warren's work while they can also be transferred to USB Memory Sticks on drives F, G, H or I, or even burnt to a CD/DVD on the D and E drives.

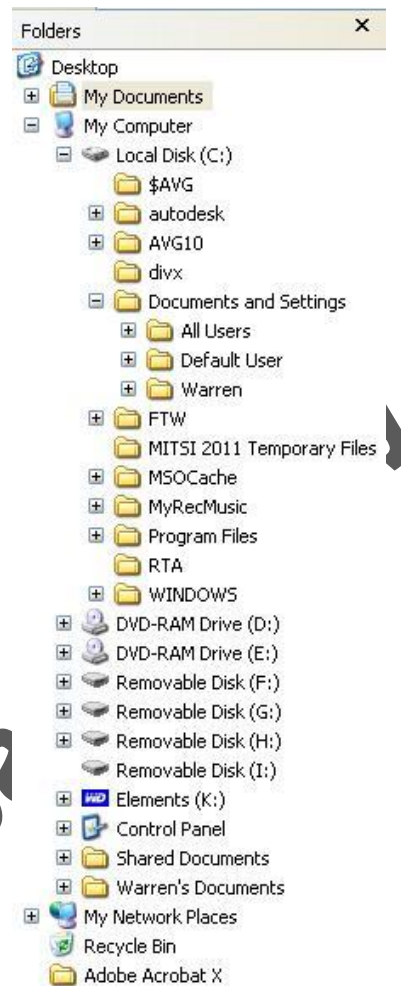


Figure 1.5

### Create a Folder:

The Windows Explorer is a great tool for finding your way around your hard drive; you can quickly locate files and folders, create, move, copy or delete folders and files, or browse for something in particular.

A logical set up of the folders can save time and money; as usual with computers, there are several ways to create a new folder. In this session we will concentrate on only one of those methods; you will be able to explore other methods later as you become more familiar with the computer.

- With Windows Explorer open, navigate to the area where the new folder is to be created using the Browser panel on the left side of the window.
- On the menu bar across the top that has File, Edit, View, Go, Click the **File** option once with your Left mouse button
- From the menu that drops down, move your mouse pointer to **New**
- A sub menu appears as shown in Figure 1.6.
- Click on "**Folder**" once with the left button.



Figure 1.6

A new folder will be created on the selected drive and folder. The new folder will appear right at the bottom of all of your other folders and files, under the last one so you might

have to scroll across to see it. You can tell it's your new folder because it says, quite helpfully, "New Folder" while the box is highlighted with a blue fill.

In Figure 1.7 below, the new folder was created directly on the C-drive and then renamed "wpProjects".

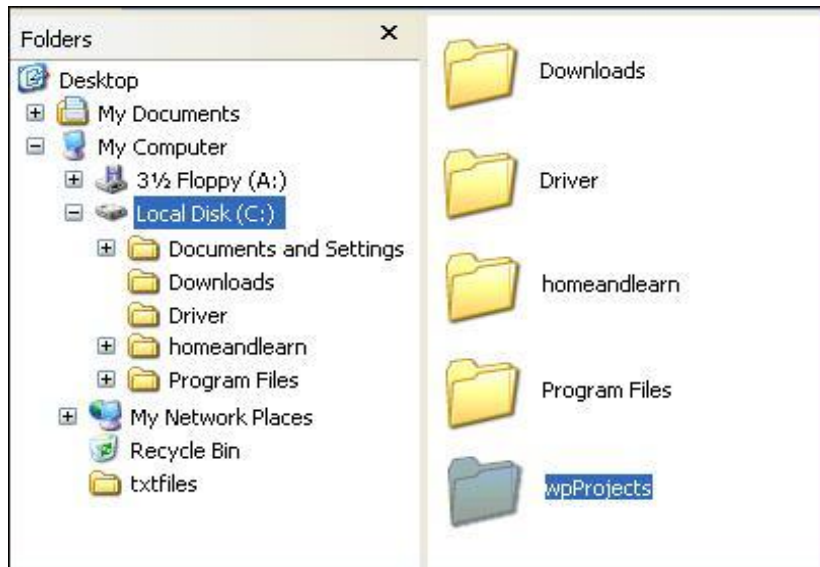


Figure 1.7



Figure 1.8

### Rename a Folder:

If the folder has been incorrectly spelt or the name needs to be changed, it can be done as long as no files contained in that folder are currently opened.

To rename a folder or file:

- Click on your new folder, but click on the folder with your right hand mouse button
- A menu appears as shown in Figure 1.8.
- From the menu, click once with your Left mouse button on the word **Rename**
- Type a new name for your folder
- Press the **Enter** key.

### Moving and Copying Folders:

Once the structure of your working area has been setup, there will be occasions when some folders may need to be moved from one area to another. Two methods are available for moving folders, "Drop and Drag" and "Cut and Paste". The main point to remember in moving a folder is that if files and folders are linked, a file may not be able to locate all of its linked files. Typical files that rely on linked files are Excel, AutoCAD, Inventor and most other 3D drafting/design software packages.

#### Drop and Drag.

The easiest way to move one folder to another folder is to use drag and drop. The easiest way to explain drag and drop is by doing it! To drag a folder, do the following:

- Click on the folder once with the left hand mouse button.
- The folder will be highlighted
- Keep you left hand mouse button held down.
- Move your mouse around the screen. You should see a faint outline of the folder moving with your mouse.
- Now move the folder over the top of the folder to where the folder is to be moved (still with your Left mouse button held down!).



- The destination folder highlight.
- Once the folder is highlighted, let go of your left hand mouse button
- The new folder will disappear. It has been moved to its new location

### Cut and Paste.

Cut and Paste can be used as an alternative method to move the folder instead.

To cut and paste one folder inside another, do the following:

- Click on the folder you want to move (One click, left hand button).
- From the File, Edit, View, Go menu bar in Windows Explorer click "**Edit**".
- From the menu that drops down, click the word "**Cut**" with your Left mouse button.
- The folder you selected will appear fainter.
- In the left Browser panel, double left-click on the destination folder where the folder is to be moved.
- Once in the folder, From the File, Edit, View, Go menu bar in Windows Explorer click **Edit**.
- From the menu that drops down, click **Paste**.
- Your folder will be pasted from its current folder to the new location on the destination folder.

### Copying.

Instead of cutting the folder and pasting, you can just Copy the folder instead. To copy the folder instead of cutting, follow the steps outlined above, but when the menus drop down select "Copy". Then select "Paste" after you have double clicked on the My Documents folders.

### Files.

Files can be moved and copied similar to folders. In other words, you can rename a file like you did to a folder, you can copy a file, move it with drag and drop or cut and paste, and you can even create a file with Windows Explorer. Just click on File. From the sub menu select New. You'll see a list of software packages that you can create new files for.

### Tutorial Exercise 1-1:

In this exercise you will use a USB Flash Stick (Memory Stick) to create new folders where your work will be stored. If you are working on your home computer, you may like to create the folders in your "My Documents" folder.

Create a folder called TAFE and inside the new folder create new folders called Tutorial Exercises, Skill Practice Exercises and Notes.

#### **Procedure:**

1. Place your USB Flash Stick in one of the USB slots on your computer.
2. Open Windows Explorer, left-click on **Start**, then **All Programs**, then **Accessories** and finally **Windows Explorer**.
3. Expand the My Computer folder by clicking the  $\oplus$  icon.
4. Locate your Flash Stick – all computers are different, it could be the E:, F:, G: H: or I: drives. With a bit of luck the name of your flash stick (SamSung, Western Digital, Esko etc) will be besides the drive you are using.
5. Click on your drive.

*Create the new folder called TAFE.*

6. Left-click on **File** in the Standard Buttons menu bar.
7. Move the mouse over **New**.
8. Left-click on **Folder**.
9. A new folder is created on the main directory of your flash stick.

10. Type **TAFE** and then press the **Enter** key.

*Create a new folder in the TAFE folder called Tutorial Exercises.*

11. Left-click on **TAFE** in the left Browser panel.
12. Left-click on **File** in the Standard Buttons menu bar.
13. Move the mouse over **New**.
14. Left-click on **Folder**.
15. A new folder is created on the main directory of your flash stick.
16. Type **Tutorial Exercises** and then press the **Enter** key.

*Create a new folder in the TAFE folder called Skill Practice Exercises.*

17. Left-click on **TAFE** in the left Browser panel.
18. Left-click on **File** in the Standard Buttons menu bar.
19. Move the mouse over **New**.
20. Left-click on **Folder**.
21. A new folder is created on the main directory of your flash stick.
22. Type **Skill Practice Exercises** and then press the **Enter** key.

*Create a new folder in the TAFE folder called Notes.*

1. Left-click on **TAFE** in the left Browser panel.
2. Left-click on **File** in the Standard Buttons menu bar.
3. Move the mouse over **New**.
4. Left-click on **Folder**.
5. A new folder is created on the main directory of your flash stick.
6. Type **Notes** and then press the **Enter** key.

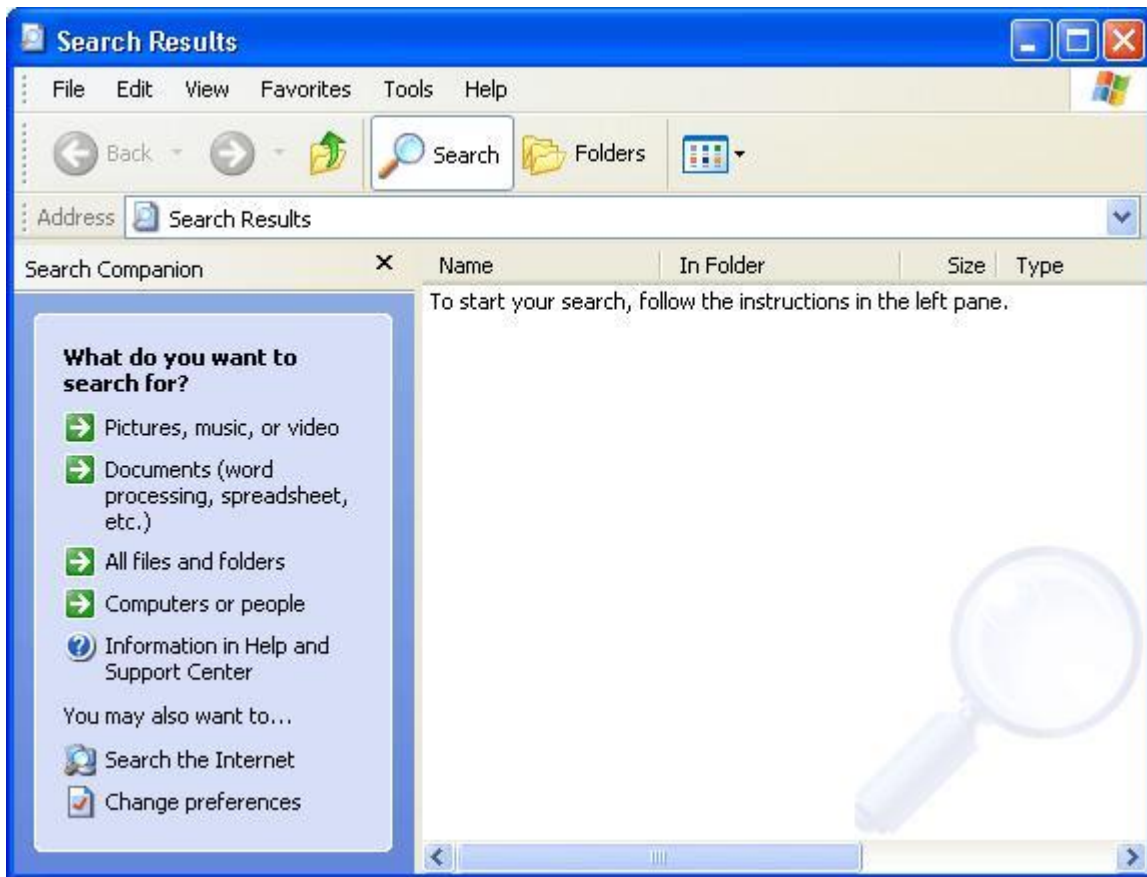
*Notice that although the folders in the right panel are in the order they were created, they are not in alphabetical order; however, the left Browser panel automatically places the folders in alphabetical order.*

### Search for a Folder or File:

A computer is a vast storage system containing many types of files; there are files to run the computer, files to operate the software programs, files for the documents that have been created within the software, and image, audio and video files that have been imported. Sometimes, you will have created a file or a folder, and just can't remember where it is especially if you have not structured or used your directories correctly. If you have a very big hard drive, there are a lot of places to look for a single file and you may never find it, even with the help of Windows Explorer, by looking in the many folders and drives. If it exists, a missing folder or file can be located easily using the Windows Search tool.

To locate a folder or file using Search:

- Click the Start button in the bottom left corner of the Desktop
- From the menu that pops up, locate the Search item (in the blue section on the right, at the bottom)
- Click on **Search**
- When you click on Search, the following window pops up



- An animated dog can appear at the bottom of the menu and can be turned off by right-clicking on the dog and then clicking "**Turn off animated character**".

The most commonly used options used are:

- Pictures, music or video. Figure 1.9
- Documents (word processing, spreadsheet, etc). Figure 1.10
- All files and folders. Figure 1.11



Figure 1.9



Figure 1.10

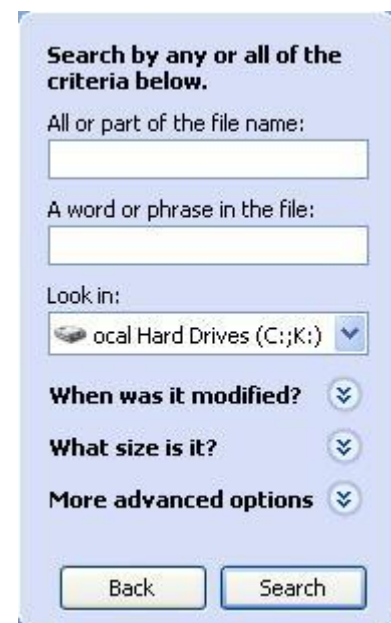


Figure 1.11

The search can be further refined by expanding the "Use advanced search options" and expanding the sections "When was it modified?", "What size is it?" and "More advanced options".



Figure 1.12



Figure 1.13



Figure 1.14

To start a search, enter the known information in the appropriate boxes and then click **Search**. If I Selected to do a search selecting "All files and folders", typed **tafe** IN THE "All or part of the file name" box and changed drive to "J" in the "Look in" options and then clicked on **Search**; the message shown in Figure 1.15 is displayed.

The results are shown in the right panel as shown in Figure 1.16. Even though the search criteria was entered using lower case, the result displays TAFE in upper case letters. The search engine is not case sensitive.

To open any folder or file in the results panel, simply double left-click on the name of that folder or file.

**Searching for files with "tafe" in the filename. Found 1 so far.**

- Looking in Drive (J:) and in subfolders.
- Looking in system folders.
- Not looking in hidden files and Settings\user\My Documents\Visual Studio\excel

Stop

Figure 1.15

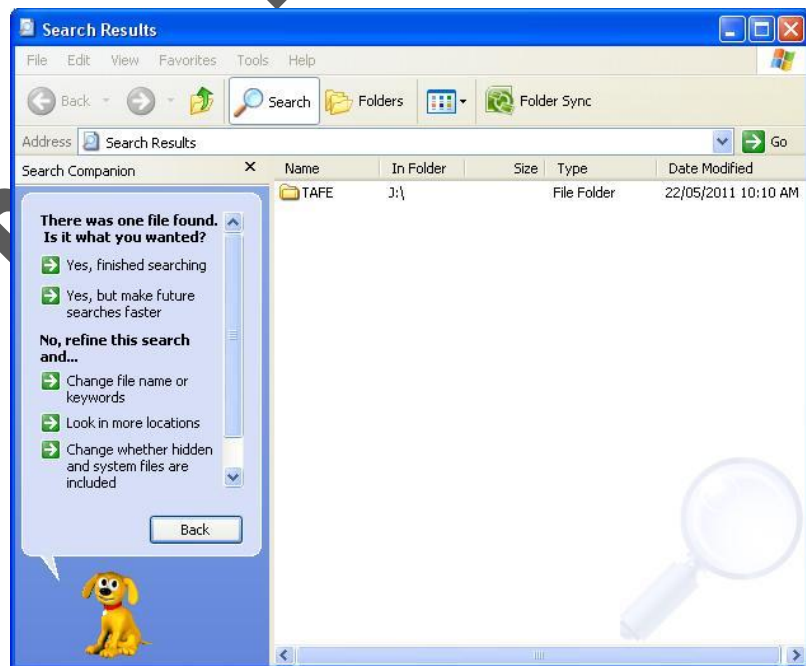


Figure 1.16



**Blackline Design - Sample Only**

## Skill Practice Exercises MEM16008-SP-101 & MEM16008-SP-102

### *Skill Practice Exercise MEM16008-SP-101*

On your hard drive, create a new folder call My TAFE in the My Documents folder. Create sub-folders from the 19549 Diploma Group 1 Mandatory Units in the in the My TAFE: MEM16006A, MEM16008A, MEM30012A and MSACMT251A.

Within each folder create sub-folders called Tutorial Exercises, Skill Practice Exercises and Notes. The directory will look similar to that shown below.

- [-] My TAFE
  - [-] MEM16006A
    - Notes
    - Skill Practice Exercises
    - Tutorial Exercises
  - [-] MEM16008A
    - Notes
    - Skill Practice Exercises
    - Tutorial Exercises
  - [-] MEM30012A
    - Notes
    - Skill Practice Exercises
    - Tutorial Exercises
  - [-] MSACMT251A
    - Notes
    - Skill Practice Exercises
    - Tutorial Exercises

### *Skill Practice Exercise MEM16008-SP-102*

Copy the folders to your USB Flash Stick and your backup external drive.