

Student workbook

**BSBITU111**

**Operate a personal digital device**

­

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# Icon legends

| Icons | Descriptions |
| --- | --- |
|  | **Practice activity**  Learning activities are the tasks and exercises that assist you in gaining a clear understanding of the content in this workbook. It is important for you to undertake these activities, as they will enhance your learning.  Activities can be used to prepare you for assessments. Refer to the assessments before you commence so that you are aware which activities will assist you in completing your assessments. |
|  | **Collaboration**  Whether you discuss your learning in an online forum or in a face-to-face environment discussions allow you to create and consolidate new meaningful knowledge. |
|  | **Self-check**  A self-check is an activity that allows you to assess your own learning progress. It is an opportunity to determine the levels of your learning and to identify areas for improvement. |
|  | **Readings (Required and suggested)**  The required reading is referred to throughout this Student workbook. You will need the required text for readings and activities.  The suggested reading is quoted in the Student workbook, however you do not need a copy of this text to complete the learning. The suggested reading provides supplementary information that may assist you in completing the unit. |

# Introduction

## About this workbook

This workbook describes the skills and knowledge required to start up and use a range of basic functions on a personal digital device. After working through this resource you will be able to perform a range of routine digital tasks in the various sectors of the business services industry and generally work under direct supervision. The activities in the workbook will allow you to practise and gain competence and confidence in using your digital device.

Topic 1

**Activate personal   
digital device and   
access features**

# Topic 1: Start your device and access features

## Different devices

In this workbook we will be working with the following commonly used devices:-

* smartphones
* tablets
* personal computer.

### Smartphones

Smartphones are mobile telephones that have computational capabilities. Smartphones typically have a computer operating system such as Android, IOS (Apple), Blackberry and Windows.

Smartphones allow people to make phone calls, check emails and browse the internet, allowing the user to carry only one device with them that can perform all of these tasks.

Smartphones have an internal rechargeable battery which can be connected to a computer by a USB cable, or a cable used to charge the phone via the electrical mains to be charged. Smartphones usually include earphones and microphone so they can be used as a hands-free device or as an MP3 player.

Many smartphones have a micro SD card in them, which is a very small memory card. This memory card extends the phones storage capacity and can also be used to transfer data to a computer such as music or photographs. Some phones are recognised as another hard drive when connected to a computer whilst other phones require special software to transfer data between the two.



Photo of Smartphones by [Hal Gatewood](https://unsplash.com/@halgatewood) on unsplash.com under [Creative Commons CC0](https://creativecommons.org/licenses/by-nc-nd/4.0/)

### Tablets

Another digital device in common use is the tablet. This has similar functions to a smartphone (in many cases they use the same operating system) except it cannot make phone calls. A tablet can browse the internet and check emails, with a larger screen than a smartphone which makes it easier to use.

A tablet usually has a USB cable to share data and charge the internal battery.

Headphones or external speakers can be used with the tablet so it can be used as an MP3 player. Although, due to its larger size it is harder to use as a portable device. Tablets also have inbuilt speakers but due to their compact size, sound reproduction is not high quality.

A tablet can transfer and synchronize data via a USB cable with a computer or by using a wireless network (Wi-Fi) Bluetooth, or infra-red for cable free connection.

Tablets can also have external keyboards attached to aid use, and some tablets can use other peripherals such as USBs and printers.



Photo of tablet device by [Lost Co](https://unsplash.com/@lostco) on unsplash.com under [Creative Commons CC0](https://creativecommons.org/licenses/by-nc-nd/4.0/)

### Personal computers (PC)

The operating system Windows 10 will be used throughout this learning workbook.

Windows 10 is an operating system (OS) from Microsoft. Windows operating systems have versions for business, home and servers. Portable digital devices such as smartphones also have versions of Windows 10. Apple computers use Mac OS.

When you turn on the computer, which is also known as’ booting the computer’, you might see one or two black screens appear with information about the computer you are using. The operating system start screen will appear followed by the lock screen.

Most organisations, provide their users with a username and password to access the computer. If you do not have a username and password or if you enter this information incorrectly, you will not be allowed access.

**Username:** a set of characters and/or numbers that allows you to be recognised on a computer network.

Windows 10 allows multiple users, so computers can have different user accounts, and each person returns to their desktop settings when they log in.



Photo of PC personal computer by Pakata Goh on unsplash.com under [Creative Commons CC0](https://creativecommons.org/licenses/by-nc-nd/4.0/)

## Starting a digital device

Starting a digital device is referred to as booting.

Once the boot program has loaded it will load the other programs or applications necessary for the device to operate. Advantages of a boot program include:

* allowing the device to recover if a large program does not load properly
* the device can continue to boot and attempt to reload a program that did not load properly.

Access processes vary depending on the device. Telephone equipment, like your smartphone, might prompt for a PIN (personal identification number) or password for thumb print before the device can be used. Computers generally provide a full log on screen, with a place to enter the username and password.

A user’s login can give each user different access rights. For example, software may not be able to be uploaded and restricting internet access based on website rating.

### Logging in

Please note all log in screens can be different depending on your device and operating system.

Steps for logging in:

* Turn device on.
* The log on screen will open showing date and time.
* The last user that was logged onto that device will be shown.
* If that is you, log in using your password and press enter.
* To log on as another user name click the user name or icon or arrow key.
* The new user log in screen is loaded and you can enter your username and password.

### Passwords

Strong passwords are very important and should use a combination of upper and lower case letters, numbers and punctuation marks. The reason for passwords is to protect the user and the organisation. Passwords should not be common words that could be cracked using a dictionary attack. A dictionary attack is where a list of common words is tried to see if one is the password. A strong password will make this process a lot harder.

The user should easily remember their password and if needed, be written down and kept in a safe place away from the computer area.

To create a strong password:

* Use at least 8 characters, 14 characters is ideal.
* Add complexity—use upper and lower case letters, numbers.
* Use special characters, (@”$!#&\_ ).

Many large companies will require you to change your password on a regular basis, and you will not be able to use the passwords you have previously entered. So a new password will need to be applied.

### Fingerprint Scanners

Fingerprint scanners are devices that recognise the fingerprint of the user. The device replaces the need to enter a password during the log in process.

### Smartcards

Smartcards are plastic cards that have a magnetic (or similar) section containing user information. Cards used in automatic teller machine (ATMs) are an example.

### Tokens

Tokens display non-sequential numbers based on complex algorithms. The current number must be entered during the log on process (as well as a password) to confirm the identity of the user. Token systems are considered among the most secure.

### Desktop

When the log on procedure is complete the desktop will appear.

|  |  |
| --- | --- |
| Practice activity icon | Practice activity |

## Activity 1: Log onto a digital device

1. Click on your username or relevant icon.
2. Log in using your password (remember is it case sensitive and will be shown on screen as a row of asterisks).
3. Once the password is complete, press **Enter** key or arrow next to the password box.
4. The ‘welcome’ screen will become visible for a short while after log in.
5. When the log on procedure is complete the desktop will appear.

## Customising your desktop

A desktop refers to the main screen area of any Windows operating system. The desktop on your computer is very similar to your physical desktop. You can store a number of your commonly used items on your desktop for easy quick access. Icons on your desktop represent shortcuts for quick access to programs, files or folders.

Your desktop background can also be customised with a pattern or background of your choice.

Most digital devices reply on device settings so the user can experience the device at its optimum.

### Volume

This is the sound that is emitted by the device. Volume should be set so that the music, ringtone, and any other sounds can be heard but without causing distraction to others. Headphones can be used should you wish the volume to be of a higher level that could distract others.

Volume can be adjusted from the main screen using the sound icon (below) or you can access this under settings on your device.

Sound image icon that is located on your taskbar

Volume icon

### Visual display

You can alter the visual display of your device. Most devices with screens allow for brightness adjustment. Brightness is the amount of light transmitted by the device. If brightness levels are too high the images appear washed out while if the brightness is too low the images are too dark.

Another adjustment that some systems allow is contrast. Contrast is the difference between lighter and darker parts of an image. Adjusting brightness and contrast together will allow the image to be perfectly adjusted. These settings can all be found under the settings icon on your device.

### Shortcuts

Many users like to create shortcuts to programs on the computer or applications on smartphones and tablets. Creating a shortcut to a program allows the program to be opened in its original location.

Some organisations have strict rules about what you can display on your desktop.

To create a shortcut you select the program you want and right click on the icon and click **create shortcut**. You should be able to see the shortcut now on your on main screen. Alternatively you can drag the icon/folder/file from the computer window to the desktop. When you delete a shortcut, the original item is not deleted, just the shortcut to it. The original item still exists on your computer in its original location.

NOTE: Shortcuts can be identified by the arrow at the bottom left corner of the icon.

### Smartphones and tablets

Apple products install apps directly to the desktop. They can be grouped by dragging an icon on top of another. The lower icon will enlarge so it is in a box and the app being dragged can be placed in the box. The operating system will assign a title to the group which can be changed by the user.

Android devices install apps to the apps folder. Apps can be dragged from this location and dropped onto the desktop. Groups can be created in the same way they are created on Apple products.

|  |  |
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| Practice activity icon | Practice activity |

## Activity 2: Customising your device

Try the following on your device, seeking assistance from your neighbour or teacher where necessary:

* Adjust volume.
* Change the brightness and contrast to suit your needs.
* Add shortcuts.
* Change your wallpaper.
* Compare your device’s screen with your neighbour and discuss the differences. Do they have different apps and wallpaper? Ask them how they customised their devices (there is often more than one way!)
* If you want to know more check out these Lynda videos [iPhone and iPad Essential Training](https://www.lynda.com/Android-tutorials/Android-Essential-Training/557775-2.html?org=tafensw.edu.au) or [Android Essential Training](https://www.lynda.com/Android-tutorials/Android-Essential-Training/557775-2.html?org=tafensw.edu.au).

## Help function

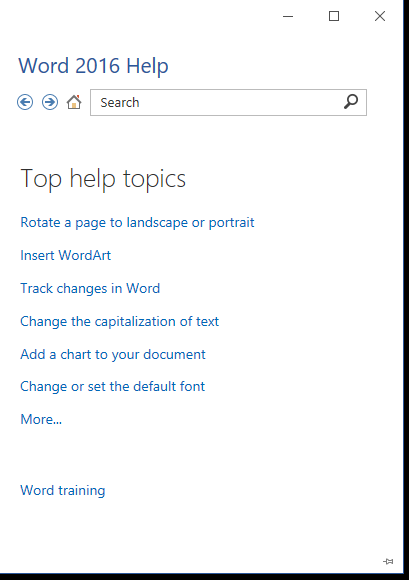
Your computer has a Help option that provides help and support information about Windows or applications.

**To access Help:**

* Press **F1** on the keyboard.

If you have an internet connection, a window will appear displaying a help search screen. You can then enter your topic you need help with in the browser and search for a response.

If you have used the Help function but still need assistance with using your device, you should ask a more experienced work colleague. Try not to interrupt them all the time. It’s a good idea if you have lots of questions to write them down and ask all of them at an appropriate time.



Help Function Dialog box.

|  |  |
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| Practice activity icon | Practice activity |

## Activity 3: Help Function

Following the steps above, use the Help function on your device to search for instructions to install a printer to your device. Record the list of instructions below:

Topic 2

**Navigate and   
organise file   
or application   
environment**

# Topic 2: Navigate and organise file or application environment

## Computer hardware

Computer systems are made up of hardware and software. Hardware refers to the physical, material parts, such as the electrical motherboard and the monitor, keyboard and mouse. Software, on the other hand, is virtual. It is the computer code that gives instructions to the hardware so that data can be processed. Software is also what creates the graphical interface – the visible, interactive aspect of your computer.

Hardware devices fit into four categories: input, processing, output and storage devices. Each category of device has a different function and purpose:

### Input Device

You use an input device to enter data into a computer. Examples of input devices include:

* Keyboard
* Scanner
* Touchscreen
* Microphone
* Mouse

|  |  |
| --- | --- |
| Practice activity icon | Practice activity |

## Activity 4: Input devices

Write down any other input devices you can think of:

Discuss and compare your list with your neighbour? Did they think of any additional devices?

### Processing devices

The powerhouse of the computer is called the central processing unit (CPU). It is where software operations occur and calculations are made. The CPU usually contains several processing devices, or components that read instructions in computer code and send the signals that create actions.

The main components in the CPU are:

* The arithmetic logic unit (ALU), in which mathematical operations are performed.
* The control unit (CU), which sends directions to the CPU.

Just like a city’s traffic-light system, the CU controls all incoming and outgoing activities, such as reading internet signals, displaying information on the screen and directing data to the ALU for processing.

### Output devices

After processing or manipulating your data you can either publish that processed data using an output device, or you can save it to a storage device.

Examples of output devices are monitors and screens, printers, and speakers.

### Storage devices

To retain data in any form it must be saved onto a storage device. This can include:

* Hard disk inside the computer.
* USB flash drive/ thumb drive (a small, self-powered drive).
* Compact disc (CD).
* Digital versatile disc (DVD).
* Cloud storage such as Google Drive, Dropbox, SugarSync, iCloud, etc.

## Creating and renaming folders

Windows uses a hierarchical or layered filing system. Files are programs, photographs, documents, music, videos and so on. Folders are created to hold files and make it easier to find information. For example a Reporting folder might be created and within that Reporting folder is a folder for each month.

Files are called documents, particularly when they are created and saved by a program. Programs are also called applications or apps.

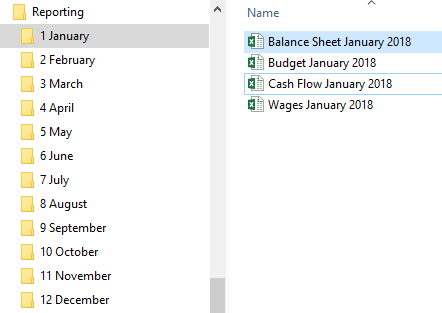
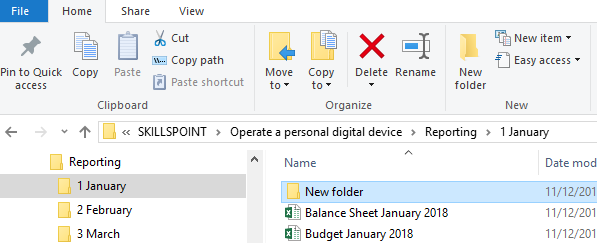


Image of computer Files (on the right) and Folders (on the left).

You can rename a folder by right clicking on the selected file or folder that needs renaming, or you can select the rename icon on the home tab.



Renaming and deleting a file.

|  |  |
| --- | --- |
| Practice activity icon | Practice activity |

## Activity 5: Creating folders

To create a folder:

1. Open File Explorer.
2. Move the folder location using the left pane. Folders can be expanded by clicking on the arrow alongside each folder. Double clicking a folder will also expand a folder. The contents in that selected folder will be shown in the right pane.
3. When the destination folder has been selected, click the **New folder** button from the New group on the ribbon **Home** tab.

A new folder is created. The name is highlighted so it can be changed.

If you’d like to know more check out these Lynda videos [Windows 10: Organising Files and Folders](https://www.lynda.com/Windows-tutorials/Organizing-Files-Folders-Windows-10/512734-2.html?org=tafensw.edu.au) or [Understanding files, folders, and directories (Mac)](https://www.lynda.com/Mac-OS-tutorials/Understanding-files-folders-directories/588033/720169-4.html?org=tafensw.edu.au).

\*\*Try creating new folders, sub folders and renaming them\*\*.

## Downloading new applications

Much of today’s software is downloadable directly from the internet to your digital device. Software can be accessed from developer sites, vendors or from stores operated by your operating system. These include the App store for Apple, the Play store for Android devices, or the Microsoft Store for Windows Phones.

### Computers

Downloading software for a personal computer can be approached in two ways:

1. Download the file, when opened it will expand to provide all the files and the setup program.
2. Download the setup file. When this setup file runs it will download the resources needed to install the software from the internet throughout the installation process.

### Tablets and smartphones

Tablets and smartphones rely on users going to a central store to download new applications. To download an app, tap the App Store (Apple) or Play Store (Android) icon. This opens the store and you can search for the required app. Your search will then show the apps, price of the app and a brief description. To download the app, click the **‘get’** button if the app is free or click on the button showing the price. You may need to verify the purchase with your password.

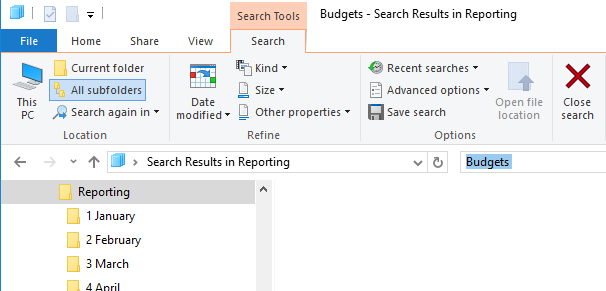
## Locating files using Search function

You can search files or folders by using the search function on your device. You can search using a term or phrase even if you do not know the filename.

To search you need to type in the filename, word or phrase in the start screen.

Wildcards can be used when searching for files. A wildcard search is a term that matches all results by using the asterisk (\*) in your search. For example searching for boo\*.txt will return all text files starting with boo, for example, books.txt, bookkeeping.txt.

The search tool is also available from File Explorer, where it can be used on specific locations.



Computer search function

### Tablets and smartphones

Tablets and smartphones rely on applications to keep track of the files they create. This means most searching, particularly on Apple devices, is through the applications search capabilities. In most cases this is an icon, sorted by date.

Android devices allow a greater level of control over your files. The ‘My Files’ app included with the operating system allows the user to navigate files and choose which app they would like to use to open the file.

## Removing storage devices safely

Removable discs such as external hard drives, USB flash drives, digital cameras and media players connect to your computer via a USB port. Even though USB devices are designed to be ‘plug-and-play’ (they will begin to work as soon as you plug them in), they still need to be removed safely. If you pull out a removable disc suddenly, without going through the proper process, the electrical current that runs continuously through a USB port may ‘zap’ the data on your device and damage it.

To prevent this from happening, click the **Safely Remove Hardware and Eject Media** icon on the bottom right-hand side of the taskbar. When you click this icon you will see a list of USB devices that are active. Click on the device you want to remove. Once the hardware has stopped working, you will see a message telling you it is safe to remove the device.

safely remove hardware and eject media screen grab

Safely remove hardware and eject media

|  |  |
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| Practice activity icon | Practice activity |

## Activity 6: Safely remove hardware

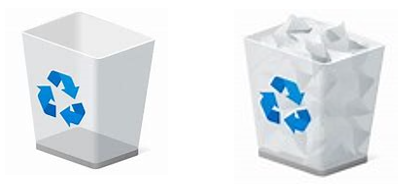
1. Connect a USB into your computer.
2. Take note of the contents of the USB.
3. Use the **Safely remove hardware and eject media** command to remove the USB safely.

## Remove files or applications

Folders and files can be deleted when they are no longer required. Files that are deleted from the computer hard drive are sent to the Recycle Bin, while from files deleted from a USB or network are permanently deleted.

The Recycle Bin icon is normally on your desktop. It has a fixed size, once full the oldest deletions will be removed.

The reason for the Recycle Bin is so users can recover deleted files if you change your mind. The icon changes from empty bin to one containing documents to show it contains deleted files of folders.



Empty recycle bin and recycle bin with files.

### Computer

To delete a folder or files:

* Right click on the file or folder
* Click delete or select the file or folder and press delete on your keyboard
* You can also drag the unwanted files into the Recycle Bin
* Whichever method you use, you will receive a pop up message to confirm if you want to delete the file.

You can view the files in the Recycle Bin, by double clicking the Recycle Bin icon.

### Tablets and Smartboard

To delete an app from an Apple device, press and hold the app icon. It will then change the display, so there is a delete button (x) at the top left of the icon.

Android devices have an application manager that can be used to remove apps.

* To remove an app, you will need to open the settings screen
* Scroll down and tap on Application Manager
* Tap the app to be deleted
* Click Uninstall
* Click OK to confirm

Topic 3

Edit stored   
information

# Topic 3: Edit stored information

## Open, edit and save files

### Open

To open a file on your computer it can be located by a search or using File Explorer. By double-clicking the file will open in the application registered for the file type. Most Windows programs include a recent files list, allowing files to be opened quickly from the application.

#### Tablets and smartphones

To open an app on a portable device tap on the app icon. Files created using this app will be accessible from within the app.

### Edit

Applications, both on computers and portable devices, are all intended to do something. The process is:-

* open the application
* create a new file or open an existing file
* make changes to the file and save it.

If you have a text document, you will open this in a word processing application which will contain tools needed to enter text and format it.

### Saving work

Once you have entered information into a document you will need to save it for future use. The first time you save a document you will need to give your document a name by using the **Save** or **Save As** option. Every save after this can be just using the Save option.

The difference between **Save** and **Save As:**

* **Save As** allows the document/file to be named.
* **Save** allows the file to be re-saved as the same file name in the same location.
* If the current document needs to be saved with a different name, use the **Save As** option.

When using the **Save As** option, the dialog box will open:

* Use the left pane to navigate the location where the file should be saved.
* Enter a file name that matches the file name requirements.
* Click **Save.**

### Tablets and smartphones

Apps on portable devices will prompt you to save a file before closing.

|  |  |
| --- | --- |
| Practice activity icon | Practice activity |

## Activity 7: Saving

* Open a file or document on your digital device.
* Edit or modify the contents of the file (discuss this with your teacher) then save your work using a suitable file name.

Topic 4

Shut down/  
deactivate   
device Topic 4: Shut down/deactivate device

## Save and close all open applications

Closing all program or applications properly helps protect against loss of data. Most programs offer the choice of closing or exiting. Closing applies to the current document, if selected closing will close the current document but leave the application running. If the document has unsaved change, the program will prompt the user to save before closing.

To close a document either click the close button on the document (not application) window or click File and select Close. To exit a program click the X button at the top right of the application window.

### Sleep mode

Sleep mode is useful for saving electricity during periods when you are not using your device, but are likely to use it again fairly soon. Rather than turning it off, you can put your device into sleep mode.

### Shutting down your device

The action of shutting down your digital device closes the system in a controlled way so that you can then turn the power off safely. The shutdown process starts by closing any open files, then closing any open applications and finally shutting down the operating system and switching the power off. Remember to save any work prior to shutting down.

|  |  |
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| Practice activity icon | Practice activity |

## Activity 8: Sleep mode

* Practice putting your device into sleep mode, then waking it up.
* Practice shutting down your device.

# Summary

Well done on completing this workbook! You have learned to use a range of basic functions on personal devices. Best wishes for success in your assessments.

## Like to know more?

Check out these Lynda videos [Computer literacy for Mac](https://www.lynda.com/Mac-OS-tutorials/Computer-Literacy-Mac/588033-2.html?org=tafensw.edu.au) or [Computer literacy for Windows 10](https://www.lynda.com/Windows-tutorials/Computer-Literacy-Windows-10/449032-2.html?org=tafensw.edu.au).