INTRODUCTION TO TABLETS: ANDROID

BASIC GUIDE

TOPIC: INTRODUCTION TO ANDROID TABLETS

WHO IS THIS WORKSHOP FOR?

Tablets are a revolutionary new way of accessing the Internet, playing games and communicating. They can do a lot of the things your computer can do, and they can be used or carried pretty much anywhere. This workshop is for people who have never used a tablet but are interested in finding out what they can do. You don't need to have a lot of PC or mobile smartphone experience.

WHAT YOU’LL NEED

Each workshop attendee will need an Android tablet, or be able to share a tablet with another attendee. (iPad tablets are covered in a separate workshop.)

WHAT YOU’LL LEARN

In this workshop, we'll walk you through:

- The hardware and basic interface of a tablet
- Touchscreens and gestures
- Installing and using apps such as games, web browser, communications tools and more.

TIMETABLE

Total time: 2 hours

The workshop is broken into three topics and six activities, with a break in the middle. Times are indicative only, so don’t feel limited by the recommended duration of each task. Feel free to repeat any activities (practise makes perfect!) and ask questions at any time.

Subject: A tour of the tablet. Duration: 15 minutes
Subject: Getting to know your tablet. Duration: 20 minutes
Subject: Using inbuilt apps. Duration: 15 minutes
Break. Duration: 10 minutes
Subject: Activity: turn the lock screen on. Duration: 5 minutes
Subject: Activity: setting an alarm. Duration: 5 minutes
Subject: Activity: enlarging the text on a tablet. Duration: 5 minutes
Subject: Activity: using the calendar. Duration: 10 minutes
Subject: Activity: using the camera. Duration: 10 minutes
Subject: Activity: visiting the Google Play store. Duration: 10 minutes
Subject: Activity: using the web. Duration: 10 minutes
Subject: Summary. Duration: 5 minutes
Total. Duration: 120 minutes

SUBJECT: A TOUR OF THE TABLET
Time: 15 minutes.

TYPES OF TABLETS:
Tablets come in a variety of different sizes and shapes from all different manufacturers. They are typically defined by two key characteristics:

- The screen size, listed in inches. Like television screens, the screen size is a diagonal measure of the distance between opposite corners of the rectangular screen.
- The operating system. This is the “base” software that runs the tablet and controls how it functions. Different operating systems look and work a little differently, although there’s also a lot in common between tablet operating systems.

There are three main operating systems used today in tablets. The first is iOS, which is used exclusively by Apple in the Apple iPad line. iPads are the world’s best selling tablet range.

The second is Android, which is used by a number of different tablet makers, including Samsung, Sony, Huawei and others. Different manufacturers sometimes modify Android a little, but the core
experience is very similar – and indeed very similar to the iPad. Android itself was created and is managed by Google.

The third is Windows, which looks and works very similar to Windows on a desktop or laptop computer. Windows is currently the least popular of the three main operating systems for tablets, but there are a few tablet makers who use it – Dell and Microsoft, for example.

Throughout this workshop, we’ll be providing guides for Android tablets.

DIFFERENT ASPECTS
One big difference between the iPad and Android tablets is what is called the aspect ratio. This is the ratio of the width to the height of the tablet. The iPad is squarer, like old TV sets, while Android tablets are usually wider or taller, depending on which way you hold the tablet, like a new flat screen TV. Each has its pros and cons. The iPad, for example is better for reading, since it has more of a “book” shape. Android tablets tend to be designed for watching widescreen movies, which should fit on screen without any black bars.

LOOK AT THE HARDWARE
If you look at your Android tablet, you’ll see a lot of little buttons, switches and holes for plugging things in. The position of each button varies between brands, but generally they appear where described below.

On the front:

- The multi-touch screen, which is the main display for the tablet.
- The Status bar and app icons, which appear on the display. We’ll talk about those when we get to the next part of the workshop.
- A tiny pinhole front camera. This is so you can make video calls with other people while being able to look at their face on screen.
- A physical or onscreen Home button. On most Android tablets, this will be the middle of the three navigation buttons in the Status bar, either on the screen itself or just below the screen.

  When you’re using the tablet and have an app open (for instance, if you’re playing a game) and you’d like to return to the main screen to launch another app, you can press the Home button.

- The Back button takes you back to the last thing you were at, similar to the Back button in a web browser. The application selector brings up all the apps you’ve recently used on screen, and you can select whichever one you want. This lets you quickly switch between apps.
However, this is not universal. Some tablets (like the Galaxy Tab pictured) have physical buttons that serve the same function, rather than onscreen buttons.

On the back:

A camera aperture. This is the rear camera, for taking photos just like you would on a mobile phone or digital camera.

On the sides:

At the top is the Sleep/Wake button. This turns the screen off and wakes it back up again. Like a mobile phone, you don’t have to ever shut the tablet down, but to save battery power you should put it to sleep whenever you’re not using it. A quick press of the sleep/wake button will do that. To wake it back up again, press it again quickly. Like a mobile phone, the tablet will also go to sleep itself after a period of time if you’re not using it. That said, occasionally shutting down the tablet and restarting can help it run more smoothly.

The headphone jack is a port into which you can plug a set of standard headphones. Most Android tablets have speakers, but if you don’t want to disturb people around you, you can use this instead.

On the side are the up and down volume buttons.

On Android tables that can access the internet through the mobile phone network there will also be a slot for a SIM card which links the tablet to a mobile account. Other Android tablets can still access the Internet through your home wireless network if you have one.

On the bottom of the tablet is a dock and connector port. This is where you connect the charging cable or dock to recharge the battery. If you ever need to connect the tablet to the computer, the cable to connect it plugs in here too.

Many Android tablets also have an extra plug. Some have SD card slots, in which you can insert a memory card to expand the tablet’s storage. Some might also have USB slots, used for both charging and attaching external devices such as flash drives, again used for expanding the storage of the tablet.

SUBJECT: AN INTERFACE GUIDE

Time: 20 minutes.

TURNING ON AND UNLOCKING:

Turning on the tablet is easy. Just do a quick press of the power or sleep/wake button. You’ll do the same to turn it off.
If the tablet is starting “cold”, it might take a minute to load up. Most likely, it will start instantly.

What you’ll see next is the swipe in/activation screen. This can be a pin number you have to enter, but generally it’s going to be a simple slide-to-unlock screen.

You’ll mostly likely see a circle with a lock in it. Touch the lock, and the circle will expand, and there will be another lock to the right. Keep your finger in contact with the screen and drag your finger over to that lock.

Note that on some Android tablets, this may be a little different.

USING TOUCHSCREENS AND GESTURES

Before we actually start using our tablet, we should talk about how the tablet is controlled. Most tablets don’t come with keyboards and mice, although on some tablet models you can attach a separate keyboard and mouse if you need to.

Instead they rely on touch. Touch works like mouse clicks on your computer. When you need to type something, a keyboard will appear onscreen and you can tap keys to enter letters and numbers.

There is also a kind of special “language” of gestures that lets you control the tablet in new ways. A double-tap will zoom a web page. Holding your finger on the screen may bring up a special menu.

Although there are a variety of gestures that tablets can use, some involving up to three fingers at once, there are really just six that you need to know:

1. Tap
   - This is simply a quick touch of the screen with one finger. It’s the simplest gesture there is.
   - Tap is used to launch apps, select items, follow web links and so on.
   - Tap is the equivalent of a left-click on your PC.

2. Tap and hold (and drag)
   - Touch a part of the screen, and keep your finger in contact with the screen.
   - The effect of this varies, depending on the application.
   - Tap and hold is often the equivalent of a right mouse click on your computer, bringing up a context menu. In a tablet web browser, for example, it might be used to Open link in new tab and other options.
   - On your Home screen, tap and hold can be used to move icons and widgets around. Tap and hold an icon, then drag it to where you want it. It might be used for similar drag and drop operations in other applications.

3. Scroll
• Simply touch a part of the screen that doesn’t have a button or link. Keep your finger in contact with the screen and move it up or down, left or right.
• This is most commonly used for scrolling documents or web pages. If you visit a web page that’s too long to see on the screen, for example, touch near the bottom of the screen, any part of the page that’s not a link, then push your finger up the screen, as if you were pushing the web page up to reveal the rest of it. This will cause the web page to scroll.
• Obviously, you can do the same in reverse to scroll back up – or left and right if the page or image is too wide.

4. Swipe
• Swipe is a quick slash across the screen. It can be in whatever direction is required.
• Swipe is most commonly used when flipping between pages (in a book) or images (in a slideshow). The swipe is like flinging the current page or image aside to reveal the next page or image.
• In an image program for example, swipe right to left to move to the next image.
• Swipe is also used on your tablet’s Home page: if you have a lot of apps installed (too many to fit on one screen), you can have several Home pages. You swipe left or right to switch between them.
• Swipe can also be used for fast scrolling – you can fling a web page up or down. The velocity of the swipe actually determines how far it scrolls.

5. Pinch-to-zoom
• Pinch-to-zoom requires more than one finger. Place two fingers (usually the thumb and forefinger, but it doesn’t really matter) around a part of the screen you want to enlarge or zoom out of. Then move the two fingers apart to zoom in (enlarge that part of the screen), or pinch them closer together to zoom out.
• You can think of it like squeezing or expanding the screen.
• Pinch-to-zoom is often used in web browsers, allowing you to zoom in on part of the page that might not be clear, or might have a link that’s difficult to tap. It’s also used in image programs to zoom in and out of a photo.

6. Double tap
• This gesture involves simply tapping on the screen twice in quick succession.
• It most often serves a similar function as pinch to zoom: in your web browser, double tap on a part of the page you want to zoom in on (which makes it easier to touch hyperlinks); double tap again to zoom out.

We’ll have a chance to try out all of these in our activities, but if you want to do a little practise, you can switch on the tablet screen (a quick press of the power/sleep button) and give them a try.
SUBJECT: USING INBUILT APPS
Time: 15 minutes.

THE HOME SCREEN

Once the tablet is switched on, you should find yourself at what is called the Home screen. This is where you launch your apps.

Apps are mini programs that add functionality, such as a calendar, clock, game or web browser. Tablets come with a number of apps pre-installed, and you can also download new apps from online stores and install them onto your tablet. There are more than a million apps to choose from.

On screen, you'll see a number of icons. Icons are graphical images each representing a different app. You could see an envelope icon for your email program, a play icon for video, a camera icon for taking photos and so on.

TOO MANY APPS

One special thing about the Home screen is that you have more than one. If you have so many apps installed on your tablet that their icons can’t fit on the one screen, extra icons will appear on secondary (and tertiary, and quaternary and so on) Home screens.

To access additional Home screens you use the swipe gesture, anywhere on the Home screen. Swipe left to go to the next home screen, swipe right to go back.

Android devices also have a thing called the App Drawer. It’s a button on the Home screen that usually looks like a set of small squares. Android lets you manage what icons appear on your Home screen (so you can remove or add icons), and the app drawer shows you a full list of your installed apps.

If your Home screen doesn’t have an App Drawer icon, try pressing the app icon above the Home button and swiping up.

THE HOME SCREEN

You may also see extra things on the Home screen, like a clock, local weather, a Google Search bar or notifications window.

On the very top or bottom of the screen on most Android tablets you'll also see a black bar. This is the Status/Notifications bar. It will have a clock, battery indicator and a number of indicator lights, such as wireless signal strength and little icons for notifications for specific
apps. Often, if a notification appears, such as a new email or a calendar event that is about to happen, tapping on the notification icon will bring you to the relevant app.

LAUNCHING AN APP

You may also see extra things on the Home screen, like a clock, local weather, a Google Search bar or notifications window.

On the very top or bottom of the screen on most Android tablets you'll also see a black bar. This is the Status/Notifications bar. It will have a clock, battery indicator and a number of indicator lights, such as wireless signal strength and little icons for notifications for specific apps. Often, if a notification appears, such as a new email or a calendar event that is about to happen, tapping on the notification icon will bring you to the relevant app.

ACCESSING SETTINGS

In addition to the apps, we need to access a special section of the tablet: the settings. The Settings controls many of the core functions of the tablet: the wireless network, the lock screen, app security, SD card settings, app store accounts, email and messaging accounts, time and location settings and much more.

To access Settings on an Android tablet, there is a Settings button, but its appearance may vary depending on which tablet you’re using.

ACTIVITY: TURNING THE SCREEN LOCK ON

Time: 5 minutes.

TASK

Locking your device means that if you leave it somewhere or it is stolen, you can be confident no-one can access your content. Setting up a screen lock is easy – let’s go!

TURNING THE SCREEN LOCK ON

A screen lock helps protects the contents of your tablet from unauthorised use. When the screen lock is turned on, your code needs to be keyed in every time you turn on your tablet, and when it has been in sleep mode.
Android tablets offer a number ways to set up a screen lock. You can trace a pattern on the screen, use your fingerprint, or set a password or a four-digit PIN (personal identification number). Our example describes how to set up a PIN on the Samsung Tab S4, but the process will be similar for most Android tablets.

- Tap the Settings icon, then tap Lock Screen.
- Tap Screen Lock Type and select PIN from the options.
- Type four digits into the box, then tap Continue.
- Be sure it’s a number you can remember, and
- make a note of it somewhere. Re-type the digits to confirm your passcode and tap OK.
- On the next screen, tap Done, then tap the Home icon to return to the tablet’s Home screen.
- You can change the lock screen code as many times as you like.

**ACTIVITY: SETTING AN ALARM**

**Time:** 5 minutes.

**TASK**

Let’s try setting the alarm so that the tablet will ring at set times

**SETTING THE ALARM**

- Tap on the Clock icon. If it is not visible on the Home screen you may have to tap on the App Drawer icon (the one with six boxes).
- The current time will appear in big numbers onscreen. There may be a Set Alarm button, or possibly a plus sign. Tap on it.
- Tap on Add/Create alarm or possibly a plus sign.
- A new window may pop up.
- Tap on Time if required.
- Another window will pop up. You’ll see the time set into three columns (hour, min, am/pm). For each, touch the column, and keeping your finger in contact with the screen, move your finger up and down to change the setting. Alternatively, you might see a clock face.
- Tap Done to close the time selector.
- Tap OK to save your new alarm.
You'll now see the new alarm in the list of alarms, with a tick or switch next to it to indicate that the alarm is switched on. To turn a specific alarm on and off, just tap on the tick or switch, or the empty box where the tick would go.

ACTIVITY: ENLARGING THE TEXT
Time: 5 minutes.

TASK
Changing the text size on a tablet to make it more readable.

CHANGING THE TEXT SIZE
Changing the text size is performed in the Settings app. Tap on the Settings icon on the Home page to get started.

- You'll see a list of categories. Under Device you'll see one called Display. Tap on it to bring up the display options.
- In the main window, tap on Font size.
- A window will pop up, giving you a list of options: Small, Normal, Large, Huge. Tap on the one you want.
- Tap on the Home or Back button to return to the Home screen.

PINCH-TO-ZOOM
The above technique makes the text in all your apps and on the Home screen and Settings appear larger. If you don’t want to make a global change just to view, for example, a single specific web page in your Internet browser, you can instead use pinch-to-zoom.

Remember that gesture? That’s where you use two fingers and pull them apart or squeeze them together. In a web browser, this lets you zoom in on a particular part of the web page. It’s also used in lots of other apps, and works for pictures as well.
ACTIVITY: USING THE CALENDAR

Time: 10 minutes.

TASK

Let’s try adding a calendar entry. This works just like a normal calendar, but with one added bonus: the tablet will also pop up a notification on the Home screen to remind you of important events.

USING THE CALENDAR

- Tap on the Calendar app (as with Clock, it may be hidden and you might have to look for it in the App Drawer).
- Swipe left or right anywhere on the screen to change the month. Tap on a day of the month. A small window will popup saying that nothing is planned on that day. Tap anywhere in that window.
- A new window with event settings will appear. At the top of the window, there will be some grey text: Enter titles, people, times, places. Tap on it.
- The onscreen keyboard will appear. You can use it to type in a quick description of the event.
- Next to the clock icon there will be two times: a beginning and an end time. (There’s also a switch to just make it an all-day event, which you can tap to switch to on).
- Tap on the time. Then tap on the hour, then on the minutes. Then tap Done.
- There are other settings you can change here, like the notification time (it defaults to 30 minutes beforehand), add notes or change the entry colour. You can play with those if you like.
- Tap Save when you’re done.
- You’ll see that the entry is now in the calendar, and you can tap on a day to “zoom in” on that day’s events.

THE ONSCREEN KEYBOARD

Using the onscreen keyboard is pretty easy. Just tap on the letter you want, and tap Enter or the green tick when you’re done.

- To type upper case letters, tap on the Shift key, which is the arrow pointing upward. Double-tap the Shift key to turn on caps lock. Tap it again to turn off.
• The keyboard will appear in any situation where you need to type. If you tap on a text field on a web page (like the Google Search bar), the keyboard will appear. In any other app where you need to type it will also appear.

ACTIVITY: USING THE CAMERA
Time: 10 minutes.

TASK
Like your mobile phone, your tablet probably has a camera in it with which you can take photos. So let's take some photos!

USING THE CAMERA
• Tap on the Camera icon. The camera app is one of the areas where Android tablets differ from each other quite a bit. We'll try to provide a general guide here, but you might have to do a little experimenting to figure it out!
• Tap on the Camera icon. It usually looks like a camera. The main screen instantly switches to become a viewfinder. Lift your camera up and move it around to frame your shot. You can also rotate your tablet for portrait/landscape shots.
• On the right or bottom are your camera controls. Tap on the circle or camera icon to actually take the shot.
• An icon of the just taken shot will appear (tapping on it will open a picture viewer with it), but you can continue to take shots.
• If you tap on the Rotate Camera icon, the tablet will switch to the front camera – you'll suddenly see yourself in the frame. Take a few selfies for fun!
• You can later view all your photos by going to the Home page and tapping on the Photos icon.
ACTIVITY: USING THE WEB
Time: 10 minutes.

TASK
Let’s go web browsing. Obviously there’s a lot more to the web than we have time for here, but let’s just see how you can use your tablet to access it. If you’ve never used a web browser, don’t be afraid to ask your workshop leader for help.

BROWSING THE WEB

- Tap on the browser icon on your Android tablet.
- Like your computer browser, the browser has tabs at the top of the screen, allowing you to open more than one web page at once. To open a web page, tap on the Address bar near the top of the screen.
- The onscreen keyboard will pop-up, allowing you to tap in the web address of the site you want to visit. Try en.wikipedia.org, for example.
- You can also perform a search by typing the search terms into the Address bar. The browser will detect that it’s not a web address and will perform a Google search instead.
- Now the tablet should load up the web page. Remember your gestures?
  - Tap once on a link to follow it.
  - Tap and hold, then move your finger up and down to “push” the page up and down.
  - Swipe the screen to scroll really fast.
  - Pinch to zoom in and out. This makes targeting links easier.
  - Double-tap to do the same.
- Tap on the X in the tab at the top to close a tab you might need to scroll upwards to see it.
- Tap on the left and right arrows at the top of the screen to go back and forward, just like on your computer browser. You can also tap the Back button on the bottom of the screen
- When you’re done browsing, you can just tap on the Home button.
ACTIVITY: VISITING THE GOOGLE PLAY STORE
Time: 10 minutes.

TASK
You don’t have to limit yourself with the applications that came with your tablet. Much as with your computer, you can download new apps and install them on your tablet. There are literally hundreds of thousands of apps available, including:

- Games
- Productivity programs like word processors
- Media viewers
- News feeds
- Email and social networking applications
- Useful and fun tools
- Much, much more.

Some of these apps can be downloaded for free; others cost money, although prices are typically quite low.

VISITING THE APP STORE

- To download new apps, tap on the Google Play or Play Store icon.
- Google Play is a market for both media and apps.
- Across the top, tap on the type of things you’re looking for: Apps, Books, Movies.
- Alternatively, tap in the Search bar at the very top of the screen. Then you can just type in what you’re looking for.
- If you want to browse apps, you can tap on For You, Top Charts, Editor’s Choice or browse by Category. You navigate around Google Play with simple taps.
- Press the Back button (the left pointing arrow) at the bottom of the screen to go back to a previous window.
- If you find an app you’re interested in, tapping on its name will bring up a description. Tapping on Install will download it to your tablet.
SUMMARY
Congratulations. You’ve taken your first steps into the wonderful world of tablets. Soon, you’ll probably wonder how you ever lived without one.

Time: 5 minutes.

RECAP
You should (hopefully) now be pretty comfortable with

- Turning the tablet on and off
- Most of the basic gestures and onscreen keyboard
- Launching and downloading apps
- Taking photos and adding calendar events
- Browsing the web on your tablet.

USEFUL WEBSITES
Android home page www.android.com
(If you need support, visit the device manufacturer’s page)
Samsung’s tablet page https://www.samsung.com/au/tablets/

GLOSSARY
Term: 3G/4G. Explanation: A type of mobile service that also offers Internet access.
Term: ANDROID. Explanation: An operating system for mobile phones and tablets.
Term: APP (APPLICATION). Explanation: A software program for tablets and phones.
Term: CAPACITIVE TOUCHSCREEN. Explanation: A type of touch screen that responds to your body’s electrical capacitance.
Term: GESTURE. Explanation: A particular type of movement that controls a touch screen.
Term: GOOGLE PLAY. Explanation: An online market for movies, books and apps on Android devices.
Term: IOS. Explanation: An operating system used on Apple’s iPhone and iPad.
Term: ITUNES. Explanation: Apple’s media player and online market for music, videos and books.
Term: ITUNES APP STORE. Explanation: Apple’s online market for iOS apps.

Term: MODEM/ROUTER. Explanation: A device that connects you to a particular broadband service.

Term: OPERATING SYSTEM. Explanation: The “core” software of a computer or computing device.

Term: RESISTIVE TOUCHSCREEN. Explanation: A type of touchscreen that responds to pressure on the screen.

Term: SYNC (SYNCHRONISING). Explanation: Making equal copies of a folder or set of files across multiple devices.

Term: WINDOWS 10. Explanation: New operating system from Microsoft that can be used on tablets.

Term: WIFI (WIRELESS HOME NETWORK). A short range wireless network, usually only covering a home, that lets wireless devices access a broadband connection.

DISCLAIMER
The information contained in this publication and any accompanying materials is strictly for educational and informational purposes. The publication and any accompanying materials do not constitute the promotion, endorsement or approval of any product or service referred to, shown or demonstrated in the publication and any accompanying materials.

The publication and any accompanying materials are designed to be used as an initial reference only. They are not intended to be a comprehensive guide or to apply in all situations.

Reasonable endeavours have been made to ensure that information appearing in this publication and any accompanying materials was correct at the time of production. However, the authors, producers and presenters of this publication and any accompanying materials (the Relevant Persons)* make no representation or warranty as to the accuracy, reliability, completeness or currency of the information in this publication and any accompanying materials.

The information and any advice provided in this publication and any accompanying materials is provided solely on the basis that the audience will be responsible for making their own assessment of the matters discussed herein and are advised to verify all relevant representations, statements and information.

* The Relevant Persons:
  i. exclude, to the maximum extent permitted by law, all express or implied warranties of any kind in relation to any information in this publication and any accompanying materials;
ii. are under no obligation to update any information in this publication and any accompanying materials or correct any inaccuracy on this publication and any accompanying materials which may become apparent at a later time; and
iii. reserve the right, in their absolute discretion, to delete, alter or move the publication (and any accompanying materials) and any of the contents therein (including the terms and conditions of this disclaimer) at any time without notice.

* The Relevant Persons include any individual, company, partnership or government department involved in the making of the publication and their respective officers, employees and agents.

TRADEMARK NOTICE
All product names or websites referred to in this instructional publication may be the trademarks of third parties.

INTELLECTUAL PROPERTY NOTICE AND DISCLAIMER
Copyright© Telstra Corporation Limited (ABN 33 051 775 556) . All rights reserved. Third party copyright and trademarks reproduced with consent by Telstra Corporation Limited (ABN 33 051 775 556). The material is protected by copyright under the laws of Australia and, through international treaties, other countries. No part of these materials may be released, distributed, reproduced, copied, stored, or transmitted in any form or by any means whether electronic, mechanical, recording or otherwise except for your own information, research or study.

October 2018 edition.