

Essential Digital Skills



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Introduction

The fast pace of technological change and the presence of digital technologies in all aspects of life places new demands on everyone. This booklet describes the essential skills needed safely to benefit from, participate in and contribute to the digital world of today and the future.

Silver City Surfers has produced this booklet to help you to understand and apply these skills. We run free drop-in sessions with one-to-one tutoring, and a cuppa, around Aberdeen City. Here are the locations and times:

- Monday @ Michie's Chemist Tearoom: 1:30 – 2:30 pm
- Wednesday @ Crown Terrace Methodist Church: 2 - 4pm
- Thursday @ Cummings Park Community Flat:
11:00 am – 1:00 pm
- Saturday @ Central Library: 10:00 am – 11:30 am

These were correct as of the time of printing but in case they have changed, check our website: <https://silvercitysurfers.co.uk/>

You can use this booklet to find out what you already know and what you have yet to learn; bring it with you to any of our sessions to structure your learning with our tutors. We have also left plenty of space for you to make your own notes.

Foundation Skills

You need to have the following basic skills, which underpin everything else:

Can you:

Turn on the device and (if necessary) login ?	
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Use a mouse and keyboard on a computer or use a touch screen on a smart phone or tablet ?	
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☺ A **smart phone** is a mobile phone, which can browse the **Internet** (see below) and access online content, for example video, music and gaming.

Use settings menus to change the display to make things easier to read ?	
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Start an App by choosing the correct icons on the home screen?	
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☺ An **App** (short for Application) is a program that allows you to do something specific e.g. open your email, book a flight, order a taxi, etc. Each App has a small picture (icon) to identify it.

Connect your device to the Internet at home using WiFi , typing in a password when required?	
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☺ The **Internet** is the global system of interconnected computer networks allowing you to access information and content.

☺ **WiFi, meaning Wireless Fidelity**, allows you to connect to the Internet using radio signals. The WiFi icon can look like this:



Connect a device to the Internet on public WiFi using the WiFi provider's login page?	
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☺ You'll find **public WiFi** in restaurants, hotels, airports, etc. Very often, once you have connected to the WiFi, you will be taken to a login (or splash) page where you may have to give your email address and will be asked to agree to some conditions (e.g. not to use too much data).

Open a web browser by clicking on its icon and then find a web page on the World Wide Web ?	
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☺ The **World Wide Web (WWW)**, commonly known as the **web**, is a system where documents and other items (e.g. photos) called ... **web pages** are identified by unique web addresses and are accessible over the Internet.

☺ A **website** (or web site) is a collection of web pages, which are typically identified with a common name. Notable examples are *wikipedia.org*, *google.com*, and *amazon.com*.

☺ Users may access the items on the web by using an App called a **web browser**. Browser icons can look like this:

Chrome:



Safari:



Edge:



Firefox:



For example, the Surfers web site is accessed by typing *silvercitysurfers.co.uk* into the address box at the top of your browser.

Keep login information (including passwords) for any device or website secure and update them?	
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☺ **Passwords** and personal information need to be kept safely, as they may have value to others. They should **not** be written down and left prominently near your device.

Further advice on passwords is given later.

Communicating

The skills you need to communicate, collaborate, and share information. It is important that you understand the need to communicate **securely**.

Can you:

Set up and use email?	
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Set up and use a group on messaging platforms, such as WhatsApp , to talk to friends or family members?	
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😊 **WhatsApp** is a free, messaging service which works mainly on smart phones. It allows the sending of text messages and voice calls, as well as video calls, images and other media, documents, and user location. The WhatsApp icon can look like this:



Use word processing software such as Word to create a CV or a letter?	
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Send photographs and other documents to friends and family as an email attachment ?	
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Set up and use apps such as Facetime or Zoom for video communications with friends and family?	
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😊 **FaceTime** is an app developed by Apple enabling people to talk for free over the internet using video. FaceTime icons can look like this:



😊 **Zoom** is a similar product. The Zoom icon can look like this:



Post messages, photographs, or videos on social networking platforms ?	
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😊 There are many social networking platforms. Perhaps the best known is **Facebook**. Others include:

Instagram: is an American photo and video-sharing social networking service owned by Facebook.

Twitter: is an American micro-blogging and social networking service on which users post and interact with messages known as "tweets"

Nextdoor: a private social network for you, your neighbours, and your local community where you and your neighbours can exchange messages online.

Mumsnet: A site where parents (and grand-parents!) can swap advice about bringing up children - and the associated problems!

Handling information and content

The skills you need to find, manage, and store digital information and content securely.

Can you?

Use a web search engine to find the information you want on the web, e.g. news?	
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☺ A **web search engine** is a software system that allows you to enter one or more words relevant to the information you are trying to find (search terms) and returns several links to web pages which you can follow by clicking. The best-known search engine is **Google**.

Use bookmarks to save and retrieve information on your web browser?	
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☺ Setting a **bookmark** for a web page allows you to go to it quickly again without having to search.

Access information and content from different devices ?	
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☺ Sets of information such as your **emails, contacts** and **calendar** can be accessed from your smart phone, tablet, and laptop; they will automatically be kept in step.

Use a cloud storage account for a music or photo collection?	
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☺ The **Cloud** allows you to store information and content on computers elsewhere (and managed by whichever Cloud company you are using) in such a way that it can be accessed from different devices (e.g. laptop, tablet, or smart phone). Cloud icons can look like this:



Use the internet to legally access content for entertainment e.g. films, music, games?	
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☺ Using the internet in this way is normally called **streaming**. A **stream** is a sequence of data elements made available over time, e.g. watching a movie or listening to music. Well known music sites are **Spotify** and **Apple Music**; popular movie sources are **Netflix** and **Amazon Prime**.

Evaluate what information or content may, or may not, be reliable ?	
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😊 Not everything you see on the web is true, so check the source of what you are reading and make a judgement accordingly. Beware of **fake news** – anyone can make a website and put anything on it without it being checked. Just because it’s on the web doesn’t mean that it must be true.

😊 **Wikipedia** is a multilingual online **encyclopaedia** with exclusively free content and no advertisements. It is the largest and most popular general reference work on the web. It is moderated and checked by a large voluntary community and is usually accurate!

Transacting

The skills you need to register and apply for services, buy and sell goods and services, and administer and manage transactions online.

Can you:

Access and use public services online, including filling in forms ?	
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☺ E.g. requesting a service from your **local council**, making a **GP** appointment or requesting a repeat prescription, making a tax return to **HMRC**, ...

Set up online accounts with retailers such as Amazon and eBay and buy goods online?	
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☺ **eBay** is an online auction and shopping **website** in which people and businesses buy and sell a wide variety of goods and services worldwide. eBay icons can look like this:



Use travel websites and apps to book tickets and make reservations?	
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Use different payment systems to make payments for goods or services online?	
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☺ Usually you will get a choice of ways to pay: credit/debit card, bank transfer or **PayPal**.

☺ **PayPal** is a service which you can use to hide your bank and credit card details from a supplier. Payments are made to the supplier from a PayPal account which then recovers the sum from your nominated account.

Upload documents and photographs when this is required to complete an online transaction?	
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☺ **Uploading** means transferring information from your device to a website. A good example of this would be uploading a CV for a job application.

Use online banking using your bank's website or app?	
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☺ **Online** banking means that you can look at your account whenever you want, and easily pay others without writing out a cheque. It has been around for quite some time, and, if used responsibly, is secure and reliable.

Problem solving

The skills you need to find solutions to problems using digital tools and online services.

Can you:

Use the Internet to find information that helps you solve problems ?	
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☺ For example finding a recipe or finding information that helps plan travel.

Use chat facilities (where available) on websites to help you solve problems?	
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☺ A **chat** facility allows you to type messages into a box on the web page. Someone from the organisation owning the web page will reply to you and their message will appear on the screen below yours.

Use online tutorials, FAQs, and advice forums to solve problems and improve your skills?	
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☺ A **FAQ** is a list of **Frequently Asked Questions** and answers on a particular topic.

Find out how to do something by using a tutorial video such as those found on YouTube ?	
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😊 **YouTube** is an American video-sharing website. The YouTube icon can look like this:



Being safe and legal online

You need to understand that:

- There are **risks and threats** involved in carrying out activities online and security is important. However don't get this out of proportion; staying safe is mostly a question of **common sense**. You wouldn't give a copy of your front door key to anyone who asked for it!
- **Viruses** can damage your computer and security software should be used to prevent this.
 - ☺ A computer **virus** is a piece of computer code which can copy itself and typically has a harmful effect, such as corrupting the system or destroying data.
- Your online activity produces a **permanent record** which could be accessed by others and used both now and in the future. Don't put anything online that might come back to haunt you!
- Others can **capture** and use your data maliciously e.g. for identity theft. You can protect and secure your personal data against such threats through privacy settings.
- You must not **share** other people's data, e.g. photos, online without their consent.
- It is important to keep your computer systems and security software **up to date**.
 - ☺ Software providers work constantly to improve their systems and to remove security loopholes. You will usually be prompted to install these **updates** and you should act accordingly.

Can you:

Set automatic updates in the settings menu for the computer operating system and security software?	
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☺ To make life even easier for you, some providers make it possible for updates to take place automatically when you are connected to the internet.

Keep secure the information you use to access your online accounts?	
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☺ You should use different and secure **passwords** for your accounts and ensure that online login information is not shared with anyone.

Ensure your posts on social media are not offensive or inappropriate ?	
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Ensure that nothing is posted on social media about others, including children, without their permission ?	
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Identify secure websites by looking for the padlock and https in the address bar?	
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☺ **HTTPS** (**H**yper **T**ext **T**ransfer **P**rotocol **S**ecure) is the secure version of the way by which data is sent between your browser and the website that you are connected to. It means all communications between your browser and the website are **encrypted** so that they cannot be read by anyone who intercepts them.

Create passwords which are difficult for others to guess?	
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☺ See the section on **passwords**.

Set privacy settings on your social media and other accounts?	
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☺ Make sure that only those people that you want (e.g. friends or family) can see posts and shared content.

Respond to requests for authentication for your online accounts and email?	
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☺ **Two-factor authentication** is a method of confirming your claimed identity by using a combination of two things:

- (a) something you **know** e.g. a password
- (b) something you **have** e.g. a bank card or mobile phone
- (c) something you **are** e.g. fingerprint or iris scan

A good example of two-factor authentication is the withdrawal of money from an ATM; only the correct combination of a PIN (a) and a bank card (b) allows the transaction to be carried out.

Often when changing a password you need the old password (a) and a onetime only code contained in a message sent to your mobile phone (b).

☺ **Useful web pages:** <https://www.getsafeonline.org/>
<https://www.ageuk.org.uk/>

Recognise suspicious links in email, websites, social media messages and pop ups?	
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☺ Clicking on these links or downloading unfamiliar attachments could put you and your computer **at risk**.

Activate pop-up blockers on your web browser to reduce the threat from malicious sites?	
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☺ Pop-up ads or “pop-ups” are forms of online advertising on the Web. A pop-up is usually a small window, that suddenly appears (“pops up”) in front of the window you are looking at on your device.

Ensure that any information or content is backed up frequently?	
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☺ **Backing up** means making a copy and storing it separately either in the cloud or on an external storage device.

Acknowledge that you cannot take and use content from the web that belongs to others without consent ?	
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☺ Online material may be subject to **copyright** and intellectual property legislation.

Passwords

A **password** is a string of characters used to protect something valuable. For example, your WiFi password stops outsiders using your connection; it is usually set by the supplier, but you can change it to something different. Other passwords are used to control access to accounts that you own e.g. email, online shopping, banking, etc. You normally generate these passwords yourself. Passwords should be very difficult for anyone else to find out – often called **strong** passwords - and must be **stored securely**.

How to create a good password†

A good way to create a strong and memorable password is to use three random words. Numbers and symbols can still be used if wanted or needed, for example: *3redhousemonkeys27!*

Some accounts may tell you what they want in your password e.g.

- number of characters (usually eight or more)
- UPPER and lower case
- digits (1, 2, 3 ...)
- special characters (# ? % ...)

† *This advice comes from the National Cyber Security Centre!*

Be creative and use words memorable only to you, so that people can't guess your password. However your social media accounts can give away vital clues about yourself so **don't** use words the following personal details which might be easy for people to find.

- Current partner's name
- Child's name
- Other family members' name
- Pet's name
- Place of birth
- Something related to your favourite sports team
- etc.

Cyber criminals are very smart and know many of the simple substitutions we use, such as *Pa55word*, which utilise symbols to replace letters.

Some passwords are more important than others. It makes sense to put most effort into safeguarding your most important passwords. Think about it:

- How worried would you be if a criminal got access to your **bank account**?
- How worried would you be if access was to your account with your **local library**?
- How worried would you be if someone pretended to be you by using your **email address**?

How to keep your passwords secure

Ideally you should keep them in your head! But ...

As we get older, our memory can let us down. Also, we tend to need more and more passwords for different accounts.

You might think that one way to solve this is to reuse the same password repeatedly. **Wrong!** If a criminal gets hold of the password for one account, then he or she has access to them all 😞

Arguably the best way is to use a **password manager** which is a way of securing your passwords in a software vault and making them available to you on demand.

If this isn't for you, then you are going to have to write them down. You are often told not to do this, but if you must, get a separate book – not the back of your diary! - and keep it secure. **Don't write passwords on post-it notes stuck to your computer.**

Acknowledgements

This booklet is derived from the Essential Digital Skills Framework published by the Department for Education in April 2019, which can be found at

<https://www.gov.uk/government/publications/essential-digital-skills-framework/essential-digital-skills-framework>.

The consultation and update of this framework were coordinated by Lloyds Banking Group and the Tech Partnership, overseen by a steering group including Accenture, Amazon, BT, British Retail Consortium, Corsham Institute, DfE, DCMS, DWP, Federation of Small Businesses, Good Things Foundation, Greater London Authority, Greater Manchester Combined Authority, HMRC, Microsoft, NHS Digital, Scottish Council for Voluntary Organisation and SSE.

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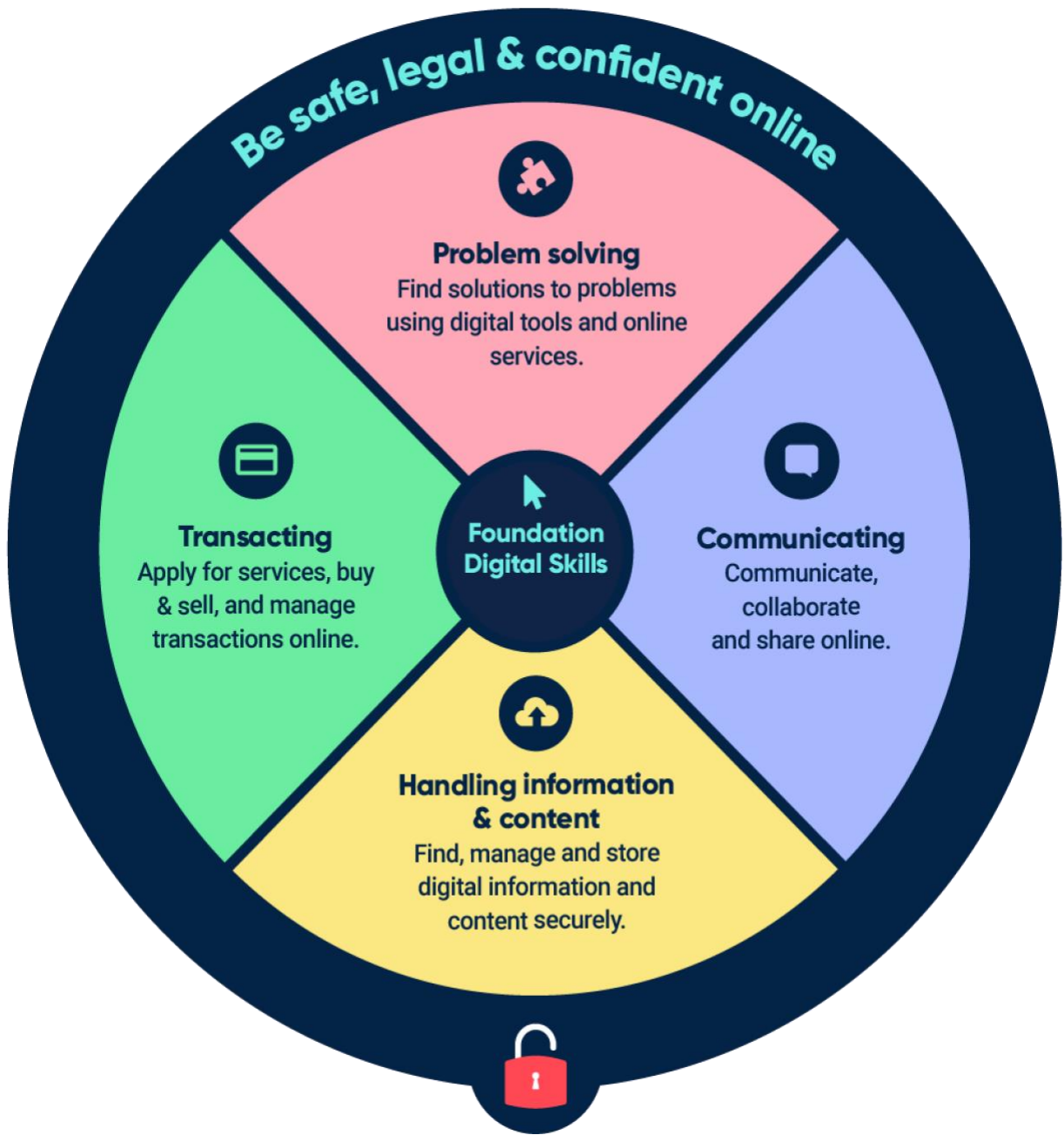
to copy, adapt and exploit:

The Essential Digital Skills Framework
Advice from the National Cyber Security Centre

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Notes

Notes (continued)



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