Lesson 2 – Basic Systems Exercise

Throughout this exercise, we will be exploring how to send an email, how to connect to WiFi and manage connections. Additionally, as there is some cross over with internet use, we will learn how to manage passwords and create accounts.

Connecting to WiFi

First, it would be prudent to make sure that we have an internet connection. We may already have an internet connection at Mecure, so you can read through this exercise and familiarise yourself with the controls or you can try connecting to a WiFI network which will be made available.

Step 1:

If you are using windows, use the notification area and find connections. This may be indicated by an icon such as the highlighted or by a "signal" indicator representing wifi.

If you are using ChromeOS, You will find this in the same right hand corner.

Locate connections

Note: You can locate the same information by going to start > settings > network & internet

Step 2.   **Select the network to connect too.**

Once you have located the networks which are available. You will be able to choose which one you wish to connect too.

For this exercise, we will be choosing **Sobek**

Do not worry if there are numerous other networks available. We are in a hotel and it is likely multiple businesses operate in the area.
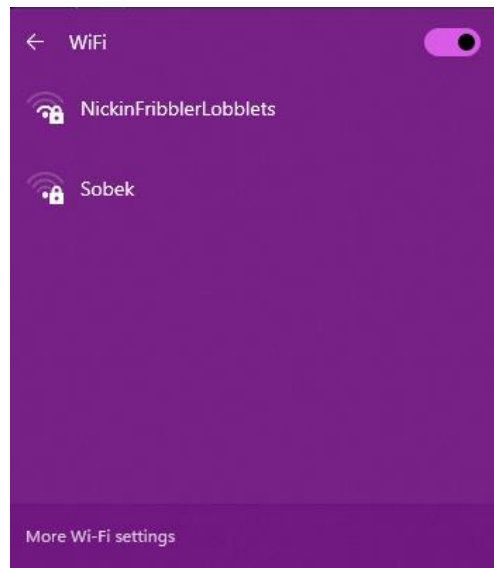

Note: You should not connect to public wifi unless you are sure it is safe. Some people mimic official people wifi spots in order to get people to connect and send personal information through the connection. Only connect to networks you know are safe.

Step 3.

The key is 66cf3ccc.

Once you have entered the key, click next or hit enter and you should connect. If there are any errors, you will be prompted to enter the key again.

Enter the details to connect to the network
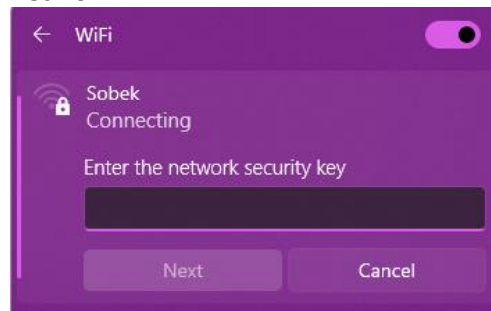
Managing Networks

When you have established the connection to Sobek, navigate to Start > Settings > Network & Internet (This may be different based on your version of Windows, or ChromeOS). You should see a list of networks in use on the device, and some information about them. For example, on my desktop the networks in use are:
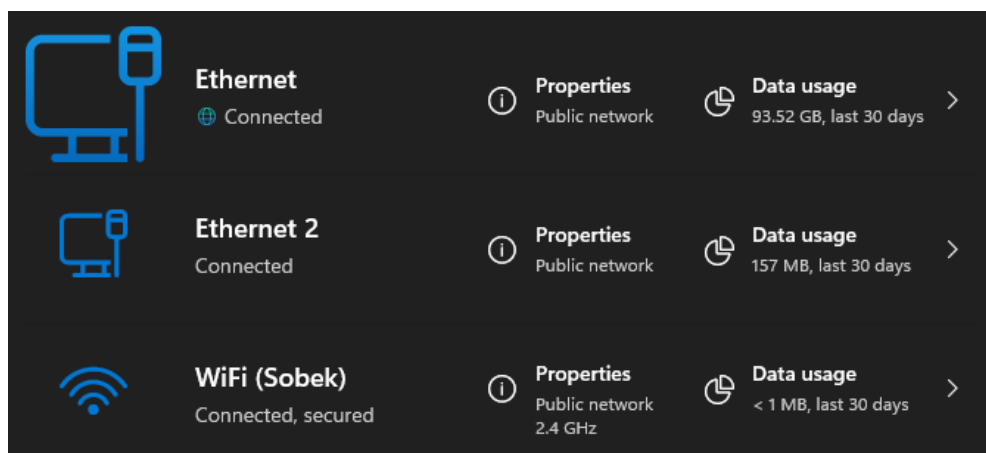
We can see that the main connection in use is Ethernet and nearly 100gb of data has been used in the past 30 days. Similarly, as I've just connected to Sobek, under 1mb of data has been used.

Sometimes, we need to manage networks. This might be to find a problem, remove the connection all together, find out information – such as how much data has been used – or enhance security by adding firewall protocols.

Today, we need to disconnect from Sobek and remove the connection.

Step 1.

From the network and internet page, click wifi and find Sobek.

If you are using ChromeOS, You should be able to go to settings > connections
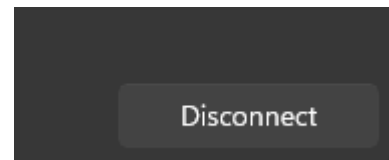
Find Sobek in the list of available networks

Step 2.

Now that we have located the network, we can disconnect from it.

This disconnects your computer from the network, but your computer remembers the network in case you want to connect to it again in future.

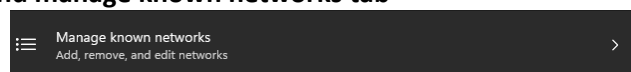Our next task we be to remove the connection all together.

Click Disconnect

Step 3.
This tab should be located directly beneath the "Show available networks" tab, however again, this will be dictated by the version of windows and operating system you are using.

Find manage known networks tab

Step 4.
When you have found the Manage Networks tab, click it and you should see a list of networks which the computer has connected to previously. We only want to manage Sobek.

Click on Forget.

This tells the computer to erase any details of the network and means that if

you want to reconnect to the network in future, you will need to re-enter the password.

Creating an Account

Now that we know how to connect to a network and manage the connections, we are ready to connect to the internet and begin communicating with people! But first, we need an email address.

Important! **You may already have an email address. But for the purposes of this exercise, we are going to create a new one and use it for classes. As such, please continue through the tutorial and do not share your password with anyone.**

Step 1.
Yes, you read that right. Practice makes perfect!

Reconnect to Sobek

Step 2.
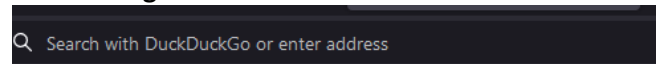For the majority of windows users, this was Edge last week. Alternatively, it may have been Chrome. The icons were:

Open your internet browser

Step 3.
In the address bar, type gmail.com and hit enter.
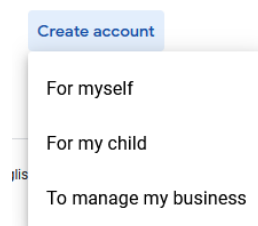
Browse to gmail.com

The web address bar is where you can type a domain (such as gmail.com) to locate the website or service provided. Most modern web browsers also support searching via this method.

Step 4.
When you have landed on Gmail.com, look for "create account" and click the button.

You will be presented with 3 options as seen. You

Create account

need to select "for myself".

Continue to fill in details and proceed all the way through the form.

Throughout the process, you will be asked for an email or a phone number. These are optional and you do not need to provide these.

You will also be asked to confirm privacy and advertising options.

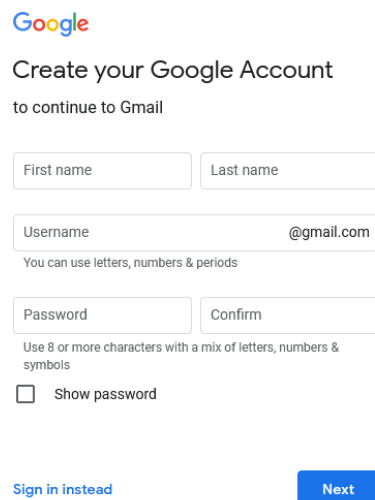I set all options to the minimum amount of data collection possible and selected generic advertising.

Step 5.
When you have completed the sign up process, you should see a screen very similar to the one opposite.

This is the main "gmail" (see: email) screen.

Familiarise yourself with this screen, click on each button and see what happens.

Which button allows you to write an email?

Google

Create your Google Account

to continue to Gmail

First name   Last name

Username   @gmail.com

You can use letters, numbers & periods

Password   Confirm

Use 8 or more characters with a mix of letters, numbers & symbols

☐ Show password

Sign in instead   Next

Open Gmail
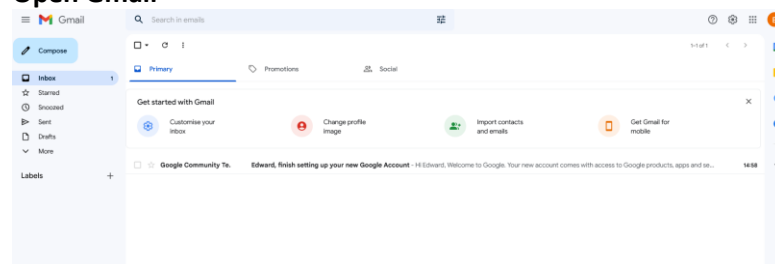
Sending an email

We now have an email account from which to send email. Now we need an recipient to send an email too! After all, what's the point in sending a letter if we don't have an address to send it too!

When I created my email, it was codheadclub@gmail.com.

When writing an email using the gmail browser interface, you will be presented with the following:

The subject of the email. For example "Ed's Secret Sauce Recipe"

The person or people you are sending an email too. Enter their email address.

The "Body" area. Write your message here.

Clicking the Formatting options button will bring up the bar, with lots of options to change the layout and text in the email.

Use the chain to insert a link to a web page or file on the internet. This is useful if you want to reference a resource on a specific word and link to the page.

Use the paperclip to attach files to the email.

You can also use the google drive and insert picture options to send attachments.

Using the above information, write me a short email about your favourite hobby (or something else you like if you don't have a hobby!) and use the tools available to include:

- A subject
- Bold writing
- Underlined writing
- Red writing
- A picture
- A web link

Finally, feel free to share emails between each other and practice throughout the week.

Advanced: Keeping Passwords Secure

Feeling brave? Good! Now that you've managed to get to grips to connecting to and managing networks, creating accounts and sending emails. You should think about how to properly store the credentials you created.

It's important to keep those details secure and easily accessible.

Ah ha! You might say. I have a little notebook and I write EVERYTHING in there!

Great. Mr. Hacker will come along when you're not looking and read your book, or maybe someone you know and don't suspect will take a glance or you might drop the book somewhere.

Then what?

The problem with storing such details in a notebook is that you write in "Plain Text", this means that your handwriting can be easily read and converted for use by a malicious actor to access your personal information. More so because it's not encrypted. It's also easily lost and not easy to change.

If you get hacked, or suspect you have been – you then need to re-write your password again and all of a sudden, you have a book full of old / new passwords.

There is a better way. It's called a password manager.

Examples are:

https://www.lastpass.com/

https://1password.com/

https://keepass.info/

https://passwords.google.com

All of these can be used across desktop and mobile devices and ensure that all of your passwords are stored securely.

Look at each of the password managers and try using one.

If you need to make your passwords more secure, you can use a secure password generator at: https://strongpasswordsgenerator.net/