

Project 01

CHOOSING A PASSWORD

Choosing a password

We're coming to a point in our learning journey where we will need to set up an e-mail account – and an associated **secure** password!

There is heaps of advice online about how to choose such a password – just Google it!

There are also websites that check the strength of a password – some better than others!

Obviously, use these as a guide and **NEVER** enter the real password you plan to use!

Here's one to try:

<http://www.passwordmeter.com/>

Key considerations:

- Make sure you choose a password you (and only you) can remember
- Do not write the password down – but by all means write down a prompt that makes sense to you (and only you)
- Use a password with at **least 8 characters** – mix numbers, upper and lower case letters and special symbols – **more characters improves the security**
- One technique I sometimes use is to choose the first letters of a song, poem, proverb or whatever, **obfuscate** them (mix them up), and then add a unique serial number at the end
- That way, I can safely write down the serial number for each different web site

An example of “obfuscation” and length

I chose the phrase:

“I love gardening but not when it rains” and turned that into **!l9bNw!r**

That would take just 9 hours for an average computer to crack

But, when I add 4 digits at the end, it would take 34 thousand years to crack!

So, I can keep a list something like this:

- M&S – 3465
- HSBC – 7893
- Microsoft – 9274

But only I know the preceding part **!l9bNw!r**

Check a password strength at <https://howsecureismypassword.net/> but obviously **NEVER** enter your real or planned password

Which technique is more important?

Take the sentence:

“the wheels on the bus go round and round, round and round, round and round”

- Simple short:
 - `twotbgrar` – 22 minutes to crack
- Obfuscate it:
 - `Tw0!69r@r` – 275 days to crack
- Keep it simple, but make it longer:
 - `twotbgrarrarrar` – 13,000 years to crack
- Obfuscate it and make it longer:
 - `Tw0!69r@rr@rr@r` – 157 billion years to crack