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### **M3 Ch11 Beyond the Book - Passwords and Pass-Phrases**

In the 21st Century, the security of online accounts and sensitive information is even more important than in the past. Learning about effective password practices is key to safeguarding our digital footprint. Let's dive into some valuable insights gained from this module's resources.

Firstly, avoiding common words and phrases is a basic rule. Cybercriminals have tools that systematically try out words from dictionaries, including those in various languages. Selecting more complex combinations rather than easily recognizable words is a strong defense against such attacks.

Secondly, the length of a password plays a significant role in its strength. Longer passwords are much harder to crack using brute-force methods, where attackers run through countless combinations. A good rule of thumb is to have passwords that are at least 8 characters long.

Lastly, crafting a strong, solid password involves a mix of characters. Combining upper-case and lower-case letters, numbers, and symbols increases complexity. A creative way to do this is by using passphrases. These are basically phrases or sentences combined into new "passwords", like "0U812sillyRa33it!". This not only enhances security but also makes passwords easier to remember.

While testing some passwords I used in the past, I discovered that a password I had used and thought of as a secure "passphrase" was not so much. It appears that this particular password had been involved in at least two data breaches. I have indeed been pwned. Luckily, I had used the password only for free trial accounts that were less significant and never involved my financial information. Obviously, I have learned much since using this password (I haven't used it in years).

In conclusion, it is clear that practicing smart password habits can go a long way in protecting our online presence. By avoiding common words, creating longer passwords, and incorporating character variety, we can significantly reduce the risk of falling victim to cyber threats. As the digital world continues to evolve, adopting these password best practices remains a vital step towards a safer online experience.