Earlier in this course, your <u>opinion</u> has been asked during course activities. An opinion is subjective, it is your point of view, your preferences, what matters to you. A well-reasoned opinion, supported by facts and principles, is an argument. An argument carries weight, could change others' point of view, and could matter to many other people.

See http://theconversation.com/no-youre-not-entitled-to-your-opinion-9978

- ✓ **Note for this or any course**: answers copied and pasted from Internet sites this includes ChatGPT without proper citation and referencing, or where such text forms most of your answer, will receive zero marks and may be subject to Academic Integrity review.
- ✓ Some links below are from years ago but their content remains current.

Today's subtheme: "The crisis takes a much longer time than you think, and then it happens much faster than you would have thought." Rudi Dornbusch, economist.

### Activity 1 of 2: (50 marks = $4 \times 12.5$ )

Identity, credentials, and authentication have become a serious issue now that you can't do much of anything in life without a user ID and password passphrase. Your digital identity is becoming part of your real-world self. (Have you watched <u>Black Mirror</u>?)

Our digital lives allow us to access the world's goods and services from anywhere. Consequently, we have an overwhelming number of accounts for which we must remember passwords passphrases. What are you doing to safeguard your digital integrity?

Best practice is to have a <u>unique</u>, <u>long passphrase</u> for <u>each account</u>.

Argue for and/or against the following potential solutions to that imperative.

Use a passphrase manager like 1Password (Canadian), Bitwarden (Open Source)

- Five myths about password managers (from a trustworthy source)
- o Web Search: password manager comparison 2023
- https://xkcd.com/1820/ online security advice
- https://xkcd.com/936/ passwords: for computers or humans?
- https://xkcd.com/792/ password reuse
- https://xkcd.com/1286/ password leak
  - You can always lookup explainxkcd.com/#### to go deeper into the issues.

### Passphrase Manager

- → Advantages
- → Disadvantages

Diceware, 1Password, and other strategies can be used to generate long, memorable passphrases and/or random answers to security questions. Is that enough?

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- o https://en.wikipedia.org/wiki/Diceware
- o http://world.std.com/~reinhold/diceware.html
- o <a href="https://theintercept.com/2015/03/26/passphrases-can-memorize-attackers-cant-guess/">https://theintercept.com/2015/03/26/passphrases-can-memorize-attackers-cant-guess/</a>
- E.g. <a href="https://www.rempe.us/diceware/#eff">https://www.rempe.us/diceware/#eff</a> to generate random PassPhrase Or <a href="random.org">random.org</a> and <a href="https://www.eff.org/document/passphrase-wordlists">https://www.eff.org/document/passphrase-wordlists</a>

# Passphrase Generator

- → Advantages
- → Disadvantages

I already have a User ID and Pass<del>word</del>phrase! Sign on with Google or Facebook or bank credentials rather than having an account for each website. This is also known as Single Sign On. Seneca uses Microsoft as much as practical.

- https://www.techlicious.com/blog/should-you-use-facebook-or-google-to-log-in-to-other-sites/
- o <a href="https://www.itworldcanada.com/article/mobile-industry-organizes-to-unseat-facebooks-digital-identity-dominance/403809">https://www.itworldcanada.com/article/mobile-industry-organizes-to-unseat-facebooks-digital-identity-dominance/403809</a>
- See <a href="https://spin.atomicobject.com/2016/05/30/openid-oauth-saml/">https://spin.atomicobject.com/2016/05/30/openid-oauth-saml/</a>

# Use single sign on where possible

- → Advantages
- → Disadvantages

## What do you do IRL?

https://tech.co/password-managers/how-secure-is-my-password

What method(s) do you use to safeguard passwords and your digital life?



Why is that (or why will that be) the best method for you?



Why won't you use other methods?

**→** 

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# Activity 2 of 2: (50 marks) "If you're not paying for the product, you are the product."

→ What is the price of free? We've Entered the Era of Hyper-Personalization (It's been fed by free.) Discuss and <u>arque</u> your point of view in 250+ words. Before writing, see below; there is much food for thought.



Sean Parker, cofounder of Napster and the founding president of Facebook (summary and interview):

"The thought process that went into building [social media], Facebook being the first of them, ... was all about: 'How do we consume as much of your time and conscious attention as possible?'

And that means that we need to sort of give you a little dopamine hit every once in a while, because someone liked or commented on a photo or a post or whatever. And that's going to get you to contribute more content, and that's going to get you ... more likes and comments. It's a social-validation feedback loop ... you're exploiting a vulnerability in human psychology."

"Attention is a limited resource, so pay attention to where you pay attention." – Howard Rheingold

Folks, <u>nix notifications</u> to short circuit the <u>dopamine loop</u>.

"I don't think anyone knew when we were signing up for Gmail accounts, that we'd be getting direct marketing of things we write in our private emails. It turns out it was kind of hijacking all of human content and turning it into money." — Win Butler of Arcade Fire

N.B. Google stopped reading your email to target their advertising in mid-2017. They don't need to do that anymore. They snoop, glean, and infer your online behaviour and turn that into money.

Email provider alternatives:

- For end-to-end security: <u>ProtonMail</u>, <u>Tutanota</u>, <u>Thexyz</u> (Canadian), and <u>StartMail</u>.
- For privacy and good use case coverage: Fastmail. <a href="#">1Password</a> has integration to set up accounts with unique email UserIDs.
  - search?q=fastmail+review and search?q=fastmail+1password
     Most <u>love it</u>, some <u>not so much</u>, expensive if you don't use all the features.
- Be careful of apples and oranges comparisons: security and privacy are complimentary, not synonymous.
  - They do have overlap but also have their unique use cases.
- Guerilla Mail for anonymous email.

Web search alternatives: <u>DuckDuckGo</u>

- Web search: google chrome data harvesting disclosures
- What data does Google collect in Chrome and link to you? Commentary about Instagram, Facebook, and Google practices as a result of Apple App Store's new App Privacy disclosure requirements.
- What does Google know about me? Many opinions both pro and con.

Facebook's new mission statement in June, 2017:

"Give people the power to build community and bring the world closer together."

"What Facebook does is watch you, and then use what it knows about you and your behaviour to sell ads. I'm not sure there has ever been a more complete disconnect between what a company says it does – 'connect', 'build communities' – and the commercial reality." – John Lanchester

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Google's mission statement: "to organize the world's information and make it universally accessible and useful." It's unofficial motto was "Don't be evil," but that phrase no longer appears in Google's Code of Conduct page for employees and investors.

Here are some questions you might ask yourself:

- If it's free, what are they selling?
- Is using Facebook, Google, SnapChat, InstaGram, etc. really *free* to the end user? Would you rather pay a fee for use of web systems and keep your privacy? Is selling privacy the next terrific business idea?
- Who owns the content of your life?
- Is the benefit you gain worth the bargain? Are you sure what bargain is? *Cui bono?* A Latin legal term: For whose benefit?
- Does using social media create a security hole and/or an opportunity for identity theft?
- Is what Facebook and Google do consistent with what they say they do?

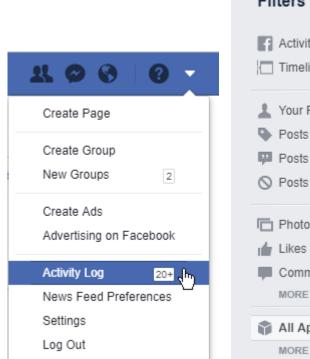
### References for your information:

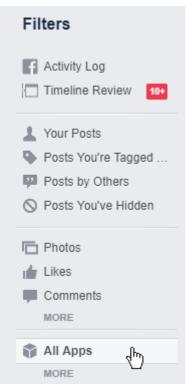
- xkcd 1050 the real-world version of a free service
- <u>xkcd 1390</u> ethics of a free service
- Tim Berners-Lee: I invented the web. Here are three things we need to change to save it
   https://www.theguardian.com/technology/2017/mar/11/tim-berners-lee-web-inventor-save-internet (very important and directly on point to this activity) and this
   https://www.theguardian.com/technology/2017/nov/15/tim-berners-lee-world-wide-web-net-neutrality and just go read everything here <a href="https://webfoundation.org">https://webfoundation.org</a> (I know, you're busy but this stuff is important.)
- <a href="https://www.theglobeandmail.com/business/commentary/article-going-online-should-not-require-risking-your-privacy/">https://www.theglobeandmail.com/business/commentary/article-going-online-should-not-require-risking-your-privacy/</a>
- John Wu in *The Attention Merchants: From the Daily Newspaper to Social Media, How Our Time and Attention Is Harvested and Sold* argues that capturing and reselling attention has been the basic model for a large number of modern businesses, from posters in late 19th-century Paris, through the invention of mass-market newspapers that made their money not through circulation but through ad sales, to the modern industries of advertising and adfunded radio and TV and YouTube and Google and Facebook and almost every website except Wikipedia.
  - The difference is posters, newspapers, radio, and TV didn't know anything about you personally or actively manipulated what you saw in real time. That media was distributed before necessarily knowing who would consume it.
- For a deep read on the topic, see John Lancester's essay:
   <a href="https://www.lrb.co.uk/v39/n16/john-lanchester/you-are-the-product">https://www.lrb.co.uk/v39/n16/john-lanchester/you-are-the-product</a>
- How to reclaim your privacy online, from 1Password
- Google targets the brain and our thirst for knowledge. Facebook is trained on the heart and our need to develop empathetic and meaningful relationships. Amazon targets the guts, satisfying our hunter-gatherer impulse to consume. And Apple, with its sleek, sensual products, has its focus firmly on our genitals.

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book review of Scott Galloway's The Four: The Hidden DNA of Amazon, Apple, Facebook and Google

- <u>View your timeline in Google Maps</u>. It knows where you've been. <u>Download everything</u> Google knows.
- Find out what Apple knows, how Tiktok is "For You"
- See who told Facebook about you: <u>Your Off-Facebook Activity</u>
  What does <u>FB know about you</u>?
  How to parse FB's data about you





- TED playlist: Who's watching us? In the age of smart tech, privacy is a definite concern. Here's the download on who has your information and what they're doing with it. https://www.ted.com/playlists/666/who s watching us?
- Is it possible to get something for nothing? TANSTAAFL
- Time for the Facebook teenager to grow up
- Google and Facebook now have direct influence over 70%+ of internet traffic. https://staltz.com/the-web-began-dying-in-2014-heres-how.html
- What is Your Attention Worth?
- We're building a dystopia just to make people click on ads
- <u>Surveillance Capitalism</u>
- See the article below by Elizabeth Renzetti in the Globe and Mail

https://beta.theglobeandmail.com/opinion/facebook-youre-like-a-bad-boyfriend-and-its-about-time-we-break-up/article36281554/

OPINION: Facebook, you're like a bad boyfriend and it's about time we break up

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#### ELIZABETH RENZETTI, Globe and Mail, SEPTEMBER 16, 2017

I hate to have to tell you this, Facebook, but you're turning into quite the creepy boyfriend.

At first, I thought you just wanted me to be happy, showing me joyful pictures of friends' new books and babies. You let me reach out to people who were grieving far away. I thought you liked me because I once posted a picture of a pea that looked like George Burns. I thought we had shared goals. I was wrong.

The first hint of something suspicious came when I tried to post a photo from my new phone, and you told me that I would have to give you access to all the photos on my phone. Um, no. I'm not letting you read my diary, either. Then you wanted me to "wave" to strangers, and to buy ads to attract visitors to the ghost town that is my author's page. Next thing I know, you're going to be asking my colleagues where I went after work.

I began to suspect that, like Morris Townsend in the novel Washington Square, you did not love me for me, but for my father's fortune. Since my father didn't have a fortune, what you wanted, obviously, was my eyes, which fuel my desires, which control my wallet.

When the ads appearing on my page reflected my search history with terrifying accuracy – Erase those dark circles! Buy these Chelsea boots! – I realized I may have let a stalker into the house. And when you would never introduce me to the mysterious algorithms you liked so much, I started to worry. I started to worry about all the other people you were dating, and what you were telling them.

This week, for instance, I understood from the website ProPublica that those algorithms actually allowed advertisers to target anti-Semites with their ads. Until ProPublica brought it to light, "the world's largest social network enabled advertisers to direct their pitches to the news feeds of almost 2,300 people who expressed interest in the topics of "Jew hater," "How to burn jews," or, "History of 'why jews ruin the world." Yeah, that's profoundly troubling. It's not something you mentioned when we started dating.

You also didn't mention the Russian troll farms buying advertising during the U.S. presidential election. Don't play innocent – you know which troll farms! You told congressional investigators about the \$100,000 that Kremlin-affiliated Russians spent buying ads targeted at specific demographics, in violation of your own policies.

I didn't listen to the people who criticized you. They didn't understand our love. I didn't follow the lead of my Facebook-shunning siblings, or the people who worried about privacy or the dissemination of counterfeit news. I believed you when you said you were in the business of connecting people. I gave away the milk away for free. Until, that is, the warnings became too loud and pervasive to ignore.

When everyone was sharing John Lanchester's essay about you in the London Review of Books, I clicked on the link. He wrote, "Facebook, in fact, is the biggest surveillance-based enterprise in the history of mankind. It knows far, far more about you than the most intrusive government has ever known about its citizens. It's amazing that people haven't really understood this about the company. ...

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"What Facebook does is watch you, and then use what it knows about you and your behaviour to sell ads. I'm not sure there has ever been a more complete disconnect between what a company says it does – 'connect', 'build communities' – and the commercial reality."

And then I read Tim Wu's book The Attention Merchants, in which he compares Facebook users to "renters willingly making extensive improvements to their landlord's property, even as they were made to look at advertisements." He says you're in the business of "attention arbitrage." I'm slowly beginning to understand what this means, and it was not in your dating profile.

Can it all be true? It can't be true. I thought you just wanted to see pictures of our kids on their first day of school. I thought the "like" button was a friendly diversion, not a heat-seeking missile aimed at my money and my vote.

At least that's what I would have said a couple of years ago, before the Brexit referendum and the U.S. election. Now everyone's talking about how you and your micro-targeted ads and selective news feeds are actually driving people further apart, socially and politically. The Information Commissioner in Britain is investigating whether politicians and advocacy groups might have broken British laws in their mining of voters' data from you and other social media platforms.

It's not easy for me to tell you these things. And no, it's not over forever. Maybe you'll become slightly less creepy, and our relationship won't resemble one of those movies released around Halloween. Besides, you've got a dating pool of two billion people, so you and your algorithms won't be lonely.

I'm sure I'll be back one day, when my kids do something funny or I've got a book to flog. That's just human nature. In the meantime, though, I think I should see other platforms.

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