Online Privacy & Security

The Basics

There is no such thing as perfect security.

Passwords

How to pick, manage, and secure them



"Geez, can't You think of a better way to remember all of Your passwords?"

What's a good password?

Worst passwords

- 123456
- password
- qwerty
- letmein
- iloveyou
- football
- welcome

If you're using any of these right now, no judgment, you didn't know, but please change them as soon as you can.

Hackers can try a list of the most common passwords on your account in a blink of an eye.

How to choose a good password?

- The longer the password, the better
- Create it randomly
 - Diceware
- Use a sentence with a twist
 - Ex: weholdthesetru_ths, theuseconstitut_ion

Password Security Tips

- Should I write my passwords down?
- How often should I change my passwords?
- Don't reuse passwords (too much)



Reasons for not reusing passwords

- 360 million Myspace accounts -2008
- 165 million Linkedin accounts -2012
- 150 million Adobe accounts -2013
- 68 million Dropbox accounts -2012
- 66 million Tumblr accounts 2013

If hackers get your username/email and password for one site, they can try that same combination on other sites

Check to see if any of your account information has been stolen

https://haveibeenpwned.com/

2 Factor Authentication

- Adds an extra layer of security to your accounts
- 1. Log in to a website
 - 2. The website texts you a code or sends it to an authenticator app
 - 3. Enter the code into the website
- https://www.turnon2fa.com

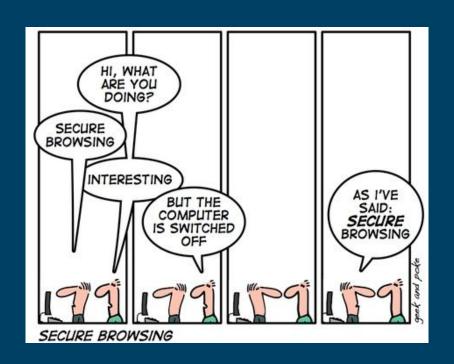


Use a password wherever possible



Browsing the web

Tips, tricks, and traps

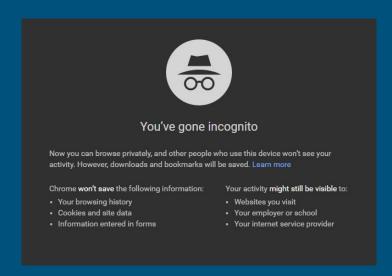


Choosing a browser

- Firefox and Chrome are your best bets
 - Secure, fast, support extensions
- Microsoft Edge and Safari
 - Edge is the replacement for Internet Explorer
 - Limited extensions, less secure
- Internet Explorer
 - Bottom tier
 - Insecure, slow, webpages may format poorly

Private Browsing

- Good for keeping information safe on shared computers
- Doesn't hide data from:
 - -Hackers
 - -Network
 - -ISP



Public WiFi

 Assume that everything you do on public wifi is being read by someone else

There is no simple way to ensure your privacy on a public

network



Browser Extensions

- Add ons for your web browser
- Chrome and Firefox have wide array of extensions



HTTPS Everywhere



- Forces a website to use HTTPS if available
- HTTP vs. HTTPS
 - Entering sensitive data over an HTTPS connection is secure
 - HTTP is vulnerable to allowing information to be stolen



Privacy Badger

- Built by Electronic Frontier Foundation
- Blocks spying ads, invisible trackers
- Helps keep your information private from third parties



uBlock Origin or AdBlock

- UD
- You can whitelist sites you like, trust, support
- Helps protect you against malicious and intrusive advertisements
- AdBlock is better known
- uBlock Origin is smaller, lighter

Email Safety



Phishing

- Emails that use deception to steal your information
- Make sure you recognize the sender before clicking on anything
- How people "spoof" trusted email domains:



service@bankofamreica.com

service@bankofamreida.com

support@googleservices.com

http://googleservices.com/

Having to sign up for sketchy sites

- Having a dummy email
- Keeping your personal email free of spam
- Guerrilla Mail

Guerrilla Mail

COM COM

Guerrilla Mail - Disposable Temporary E-Mail Address

Avoid spam and stay safe - use a disposable email address! Click the "WTF" button below for help. So far we've processed **7,236,440,057 emails**, Keeping your real inbox safe and clean (571600 emails going in / hour)

| | cmkckqod @ sharklasers.com ▼ Forget Me WTF? | |
|----------------------|---|----------------------------|
| | az65i2+9srvd9jjlfk2o@sharklasers.com | |
| EMAIL COMPOSE | TOOLS ABOUT | |
| Delete | | Next update in: 5 sec. |
| no-reply@guerrillama | ail،، Welcome to Guerrilla Mail <mark>Dear Random User, Thank you for using Guerrill</mark> | a Mail - your ten 14:54:08 |

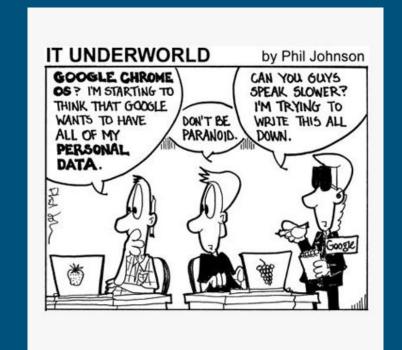
Google & Facebook

Google

- Can track:
 - Everything you search for
 - Every YouTube video you watch
 - Everywhere you go
 - Every app you use

See some of the data

- myactivity.google.com
- google.com/maps/timeline
- adssettings.google.com
- Takeout.google.com
- myaccount.google.com

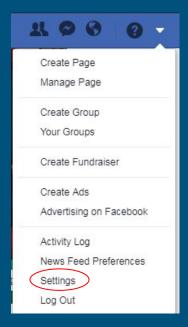


Facebook

- Been in the news for data breach
- Keeps everything you've ever done
 - Messages
 - Posts
 - Likes
 - Comments
 - Photos



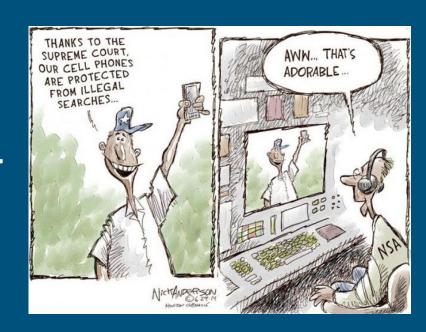
A quick introduction to Facebook settings





- Security & Login
 - Where you're logged in
 - Alerts for logins
- Privacy
 - Who can see what
- Ads
 - Your Information
 - What FB advertisers know about you

Mobile Security



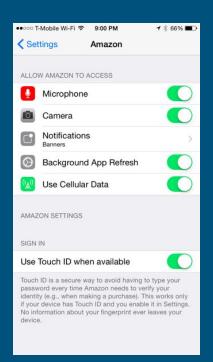
Location Services

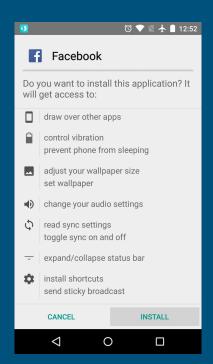
- Tracks and relays your location
- Good for navigating/GPS, bad for everyday privacy



Apps with access

- Be smart about what apps you download and what permissions you give them
- If you wouldn't trust an app with the access it asks for, don't download it





Predictive Keyboard

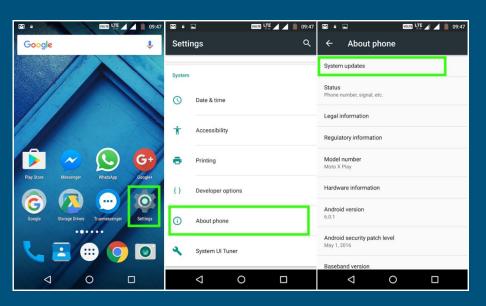
- Records your keystrokes
- Could leak your data
- Use with caution



Make sure your phone's OS is up to date

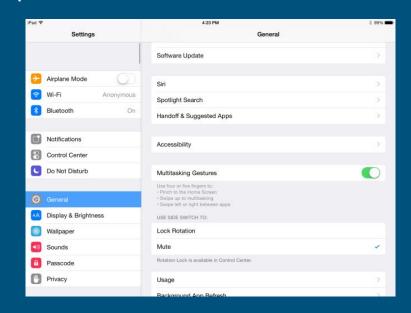
On Android

Settings -> System -> About Phone -> System Updates



On iOS

Settings -> General -> Software Update - Download & Install



How concerned should you be?

framinghamlibrary.org/tech

Questions or comments?