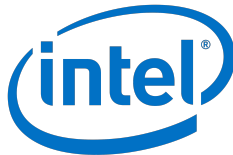**CYBER SECURITY BOOT CAMP**

Authentication

Session 3

Introductions

Instructors

- Name
- Job / Company
- Industry Experience
- Something interesting

Volunteers

- Name
- Job / School
- Something interesting

Authentication

- Securing the digital identity

- Passwords, passwords & more passwords

- Biometrics:

  - *Fingerprint scanner*

  - *Retina scanner*

  - *Face detection*

  - *Voice*

- Easy way to authenticate - passwords

- Are passwords secure?

What is Authentication

- Lets watch it:
  - *https://www.youtube.com/watch?v=teV_VMpvv5Y*
  - *Teacher materials: video-3.1*
- Discuss with students

YELLOW CIRCLE
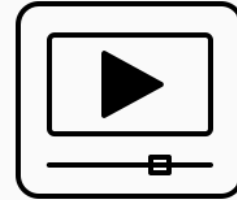
What is Authentication?

Authentication is the process of determining whether someone or something is, in fact, who or what it is declared to be. It is a process in which the credentials provided are compared to those on file in a database of authorized users information on a local operating system or within an authentication server. If the credentials match, the process is completed and the user is granted authorization for access.
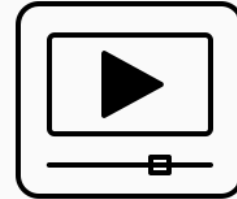
Class Discussion

What makes authentication strong?

- *Something you know*

- *Something you are*

- *Something you have*

What is your pa$$w0rd?

- Lets watch it:
    - *https://www.youtube.com/watch?v=opRMrEfAliI*
    - *Teacher materials: video-3.2*
- Pause to discuss at any time

YELLOW CIRCLE

How secure is your password?

- Pass "top worst passwords" sheet

- Groups or Individuals

- DO NOT share / use their own passwords

- https://howsecureismypassword.net/

- Test some passwords from worksheet

1. 123456	11. admin	21. hello
2. password	12. welcome	22. freedom
3. 12345678	13. monkey	23. whatever
4. qwerty	14. login	24. qazwsx
5. 12345	15. abc123	25. Trustno1
6. 123456789	16. startwars	
7. letmein	17. 123123	
8. 1234567	18. dragon	
9. football	19. passw0rd	
10. iloveyou	20. master	

Having a good password is very important. If it is easy to guess or a word from the dictionary, then a hacker can easily crack it. The most common password is "123456". Do not have that password or any password that you see in the list above. They are all too easy!You must be able to remember your password. You must not write it down!

Use this website to test your password: https://howsecureismypassword.net/

Tips for a good password:

- Your password should be 8-12 characters long
- Do not use your name or words in the dictionary like school
- Have lower and upper case letters like ahTjow
- Have letters and numbers like oP87sDbU
- Use symbols like @#$%()*?!
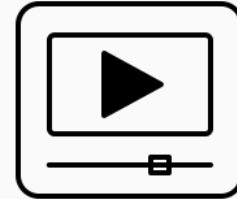- The best passwords are like this: 8fG$lwR56#

YELLOW CIRCLE

YELLOW CIRCLE INC
PO Box 2383
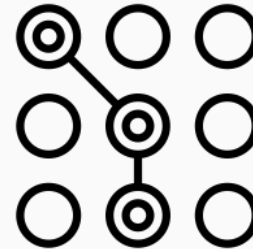Elk Grove California 95759-2383

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What is two-factor authentication (2FA)?

- Lets watch it:
  - *https://www.youtube.com/watch?v=0mvCeNsTa1g*
  - *Teacher materials: video-3.3*
- Pause to discuss at any time

Class Discussion

Discuss

- What is two-factor?

- Why is it safer than passwords?

- Potential problems with two-factor

- Teaching family & friends

Open discussion on

- Using biometrics at home
- iPhone's face detection to unlock
- Fingerprints, pros & cons
- Retina scanners
- How expensive is multi-factor

Closing / Wrap-up

What we learned...

- Authentication process

- Multi-factor authentication

- Passwords: Weak & Strong

- Biometrics

End of session 3

- Time for break

- Snacks served in Cafeteria

- Remember to use restrooms