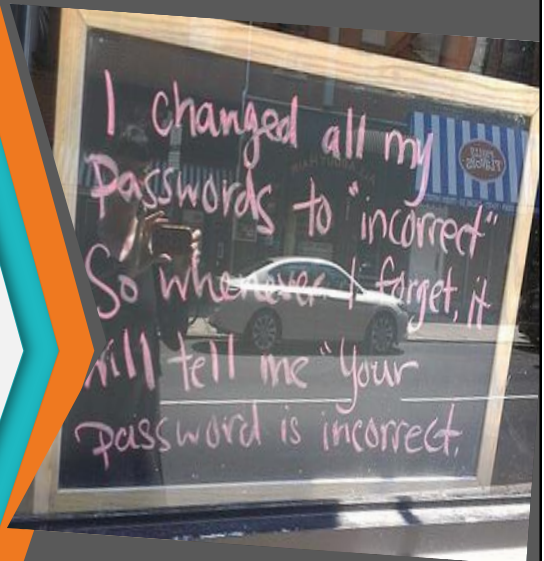
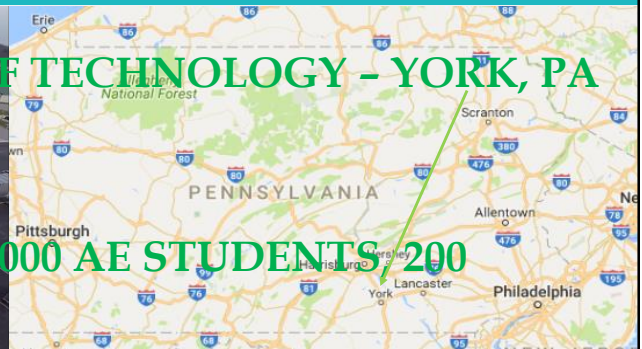


PASSWORDS

What, Why, Who
and WHAT?



School Demographics



• YORK COUNTY SCHOOL OF TECHNOLOGY - YORK, PA

• COMPREHENSIVE CTC

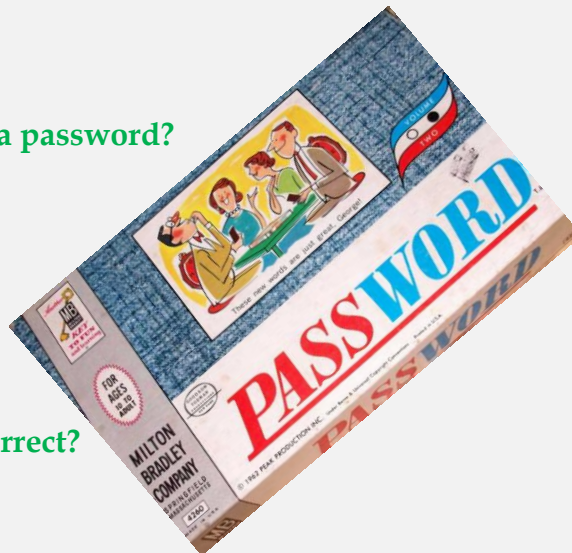
• APPROX. 1700 STUDENTS, 1000 AE STUDENTS, 200 FACULTY AND STAFF

• 2800 COMPUTERS-WINDOWS, MAC, ANDROID, LINUX

• 28 CAREER PROGRAMS

WHAT About Passwords?

- Passwords need complexity...right?
- What case is usually the first character of a password?
 - You guessed it...UPPERCASE
- What is typically the last character?
 - Right again... "!" or a number
- There is a need for strong passwords...Correct?
- So you want to know WHY?



WHY Passwords?

- Cryptolocker 2013
- MAC Virus - KeRanger 2016
- Largest DDOS attack ever by botnet on IoT devices
 - Why?
 - Didn't change their default passwords
 - Totally unsecured IoT devices
- 11-78 million internet pages for "Default Password Lists"



WHO Needs Passwords?

- Everyone and Everything

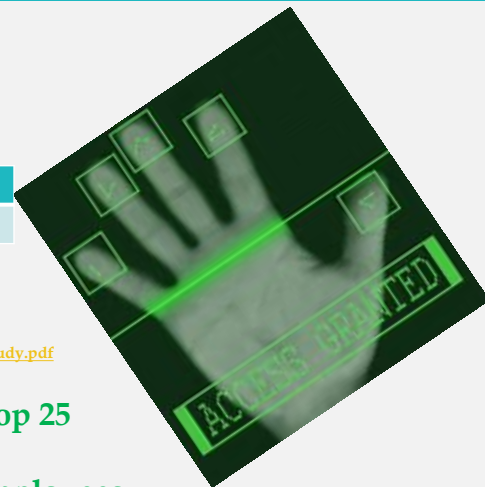
- Top 10 Passwords of 2016

123456	123456789	qwerty	12345678	11111
1234567890	1234567	Password	12323	987654321

- Link to top 25 Passwords of 2016

- <https://keeperssecurity.com/public/Most-Common-Passwords-of-2016-Keeper-Security-Study.pdf>

- 50% of 10 million passwords researched are in top 25
- 40% of all hackers target companies of < 1000 employees



WHAT Do We Need To Do?

- Implement stronger password complexity
 - See <http://csrc.nist.gov/> for recommendations
- Ensure password policies are strictly enforced
 - Walk around - look for password stickies
- Require employees to use biometric or number codes on their phones/tablets
- Implement two factor authentication
- **Educate the USERS!**



Questions

