

### EMPLOYEE CYBERSECURITY TRAINING



## WHAT IS CYBERSECURITY?

Cybersecurity is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks.

With an increasing amount of Internet Based apps and services, the security threats that result in massive harm are increasing also.

### WHY DO I NEED TO LEARN SECURITY?

#### Isn't it IT's job?

Everyone who uses a computer and/or has access to sensitive information needs to understand how to keep it safe.



### PRESENTATION **OVERVIEW**

**Understanding Sensitive Data** Confidentiality Integrity Availability **Good Security Principles Common Mistakes** Malware Social Engineering Phishing **Email Security** Passwords **Incident Reporting** 

## **COMMON MISTAKES**

- Poor password management
- Not locking the computer when unattended
- Opening email attachments from unknown addresses
- Not running anti-virus programs
- Not reporting security violations
- Improper information handling



## **CONSEQUENCES OF SECURITY VIOLATIONS?**

- Damage to reputation
- Having to recreate lost data
- Identity theft
- Data corruption or destruction
- Loss of student / public trust
- Costly reporting requirements and penalties
- Disciplinary action
- Unavailability of vital data

### UNDERSTANDING SENSITIVE DATA

#### **PROTECT SENSITIVE DATA - PII**

INCLUDES:

- Social Security Numbers
- Home address & phone number

- Religion, gender, ethnicity, date of birth
- Student records
   protected by FERPA

- Health / Medical information
- Financial Information

### CONFIDENTIALITY

Confidentiality refers to protecting information from being access by unauthorized parties.

A failure to maintain confidentiality means that someone who shouldn't have access has managed to get it, through intentional behavior or by accident. This failure is commonly known as a breach.



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## INTEGRITY

Refers to ensuring the authenticity of information – that the information is not altered, and the source of the information is genuine.

### AVAILIBILITY

Information is accessible of authorized users.

Information is unavailable not only when it is lost or destroyed, but also when denies or delayed.

#### THE OPERATIONAL ZONE IS THE PROPER COMBINATION OF:

INTEGRITY

Data Integrity – authentic data

Data Availability – available data

Data Confidentiality – protected data



## MALWARE — It only takes one click

#### VIRUSES, HACKER, WORMS, TROJAN HORSES, ROOTKITS, **PASSWORD CRACKING, KEY LOGGING, RANSOMWARE**

#### PURPOSE:

- Extortion
- Cause Destruction
- Install Ransomware
- Exploit information/data
- To be an annoyance

#### METHODS OF ACTIVATION:

- Emails & IM's
- Spam
- Web
- Active X, Java Scripts
- Portable media
- Floppy, Flashdrive, PDA's

• Attachments (.exe .dat. screensavers)



## **MALWARE SYMPTOMS**

- Computer is slower than normal
- Increased/Continual CPU Processing
- Icons disappearing/moving
- Unexplainable actions
- Missing/New files
- Cursor moving by itself
- Entire hard drive encrypted
- McAfee shield has a red shadow

## **SOCIAL ENGINEERING**

The art of manipulating people into performing actions or divulging confidential information

- Preys on all users
- Creates Curiosity / Trickery ullet
- miss-delivered email with photo

John, Had a great time with you last weekend. You won't believe some of the pictures of us. Make sure you check out the one on the beach. See you soon... Love Jane

**EXAMPLE**:

### Social Engineering cont.

**PHISHING**:

An attempt to acquire sensitive information like a password by posing as a legitimate entity.

You get an email that looks like it comes from your bank, employer, credit card company, etc.

Asking you to "update their records" due to a fraud or some other important reason.

Prompts you to click on a link to enter your personal information.

This link takes you to a website disguised to look like the company's.

	Log In - Microsoft Internet Explorer
	view Favorites Tools Help → · ③ ② ③ ④ ⑤ Search ③ Favorites ⑥ Media ③ ⑤ · ④ ③ ⑤ ⑤
The second se	https://www.paypal.com/cgi-bin/webscr?ond=_login-run
PHISHING         EXAMPLE	Member Log In         Registered users log in here. Be sure to protect your pass         Email Address:         Password:         Forget yo         New users sign up here! It only takes a minute.         About   Accounts   Fees   Privacy   Security Center   User Agreent Mass Pay         an eBay Company





HIRING IMMEDIATELY ~ Work From Home





#### **Capitol Technology University**

**Approved Job Alert** 

You have received this email as you are selected for Shadow Shopper Inc. Walmart Review for Capitol Technology University students and staff.

You can earn as up-to a \$450/Weekly. Apply now if you are interested.

APPLY HERE



### **EMAIL SECURITY**

UNKNOWN EMAILS -DO NOT OPEN!

- Attachments may contain viruses
- Don't click on unknown web address links

EMAILS - PEN!	DELETE SPAM	LOOI ATT <i>A</i>
ents may	<ul> <li>Don't be curious</li> </ul>	• Lo

OK FOR PHISHING TACKS

Look like real website / email

• Try to get personal information ex. "Confirm password"

### CREATING PASSWORDS



Why great care and consideration should be taken when selecting the proper password



Lassword







- NO SINGLE DICTIONARY WORDS Any language
- NO NAMES Spouse, kids, aunt/uncle, username, pet
- NO PERSONAL INFO SSN, B-day, favorite football team
- AVOID LOOK ALIKE CHARACTERS 0 for o's, \$for s, P@s\$w0r|)
- DON'T WRITE IT DOWN!

# THE DON'TS



### THE DO'S **OF CREATING PASSWORDS**

- USE GOOD COMPLEXITY
- LENGTH 10 to 15 characters
- CHANGE REGULARLY
- PICK ONE YOU CAN REMEMBER

A good mix of numbers, letters (upper/lower), symbols

## • DIFFERENT PASSWORDS FOR DIFFERENT ACCOUNTS

## **CHANGING YOUR PASSWORD**

To change your password, navigate to https://account.captechu.edu/home.html?0 and click on "Change Password".



## **FORGOTTEN PASSWORD**

Should you ever forget your password, you can go back to https://account.captechu.edu/home.html?0 and click on "Forgot Password".





## PROTECTION

#### **1. KEEP YOUR PASSWORD A SECRET**

- No sharing
- Change often

#### 2. WATCH FOR SHOULDER SURFERS

Someone looks over your shoulder at keyboard while your typing your password.

#### 3. WHAT DO YOU DO IF PASSWORD IS STOLEN?

or even think it has been compromised? **Contact IT immediately!** 

### PRIOR STAFF AND FACULTY

If you have a prior association with Capitol Technology University as a student or professor you may need to contact IT at **ithelp@captechu.edu** to have your password reset as a new password may not have been generated for you.



## **REPORTING SECURITY** INCIDENTS

- Immediately report suspicious activity
- Report all incidents & breaches
- Report lost or missing equipment

### MAKE ALL REPORTS TO YOUR SUPERVISOR **& COMPUTER SERVICES IMMEDIATELY**

Email IThelp@captechu.edu

## **THANK YOU!**

#### PLEASE FEEL FREE TO CONTACT THE IT DEPARTMENT WITH ANY QUESTIONS OR COMMENTS.

