INTRODUCTION TO CYBERSECURITY

WHAT IS CYBERSECURITY?

Cybersecurity is the practice of protecting systems, networks, and programs (an end user and their devices) against data breaches and digital attacks.

COMMON TYPES OF CYBERSECURITY THREATS

- **Phishing attacks**: Hackers use fake emails and messages to gain access to personal information.
- **Malware**: This includes viruses, spyware, and ransomware delivered from suspicious sites or sources.
- **Password attack**: Hackers crack poorly chosen passwords to gain entry and access data and networks.
- **Denial-of-Service (DoS) Attacks**: Hackers flood a network with requests to exhaust bandwidth. DoS attacks are more of a nuisance than anything else.
- **Man-in-the-Middle (MitM) Attack**: Hackers insert themselves into a two-party communication to steal data.

LEgITIMATE VS. MALICIOUS URlS

- Most legitimate sites have an SSL certificate (in the form of a padlock icon and HTTPS where the website URL is). Websites with an SSL certificate encrypt the connection between the website and your device.
- Look at the content of the website for grammatical errors.
- Perform a Whois lookup on registrars like Register.com or Network Solutions to trace the ownership and tenure of a domain name.
- Other tools like Google’s Transparency Report can check if an URL has malware or unsafe content.

COOKIES

Cookies are cached files from websites stored on your computer and have good and bad effects. Cookies allow sites to load faster, especially if the website features heavy image or video content. It also allows websites to offer the user a personalized experience, from retaining login information to user preferences.

However, they also allow websites to track your movement, from what webpages you’re looking at, to how long you spend on them, to how you navigate the site. This can be especially concerning if cookies are hijacked by malicious sources and used to track your browsing history across the web on other sites.