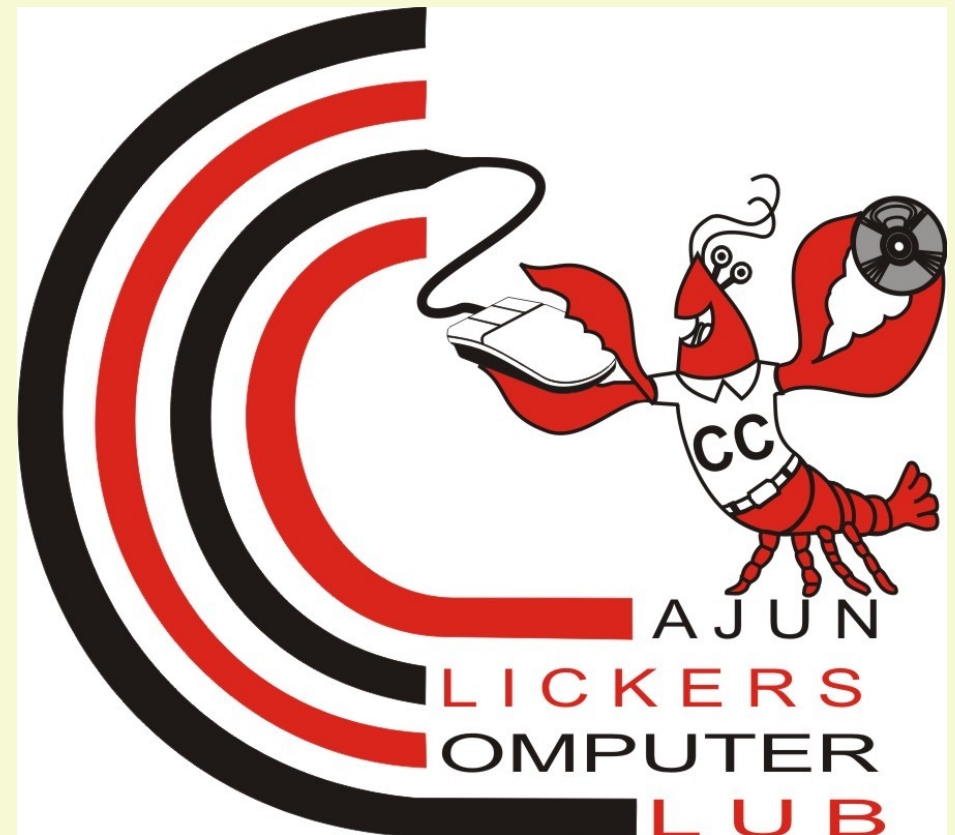# Password Management

September 9, 2024

Discussion Topics

- Brief History of Passwords

- How Passwords Work

- Choosing a Password

- Password Safety

- Three Important Rules

What's a Password?

A password, sometimes called a passcode, is a memorized secret, typically a string of characters, usually used to confirm the identity of a user.

Nuggets of Password History

- First used in ancient times

- Examples found in the Bible – Shibboleth

- Julius Caesar used substitution ciphers

- Ali Baba and the Forty Thieves – Open Sesame

- Who is Fernando Corbato? Why is he important in Password History?

Fernando Corbato

Worked at MIT in 1960

All workers shared on main frame computer

Invented password algorithm to keep individual files private from other workers

Called the "Godfather of the Modern Computer Password"

All modern secure computer systems store users' passwords in an encrypted format. Whenever a user logs in, the password entered is encrypted initially, then compared to the stored encryption of the password associated with the user's login name. A match succeeds and a mismatch fails. Isn't that simple?

Password Problems

- Site might not use strong encryption

- Password might be exposed prior to encryption

- System support techs might not be trustworthy

- Could be logging into the wrong site

- Different sites have different rules

Tips For Choosing A Password

- Use stronger passwords for important things
- Longer passwords are usually stronger
- Include uppercase, numbers, special characters, etc.
- Don't use obvious personal information
- Select your password hints wisely
- Don't reuse passwords
- Decide when to change your passwords
- Use multi-factor authentication if available

THREE

RULES

TO KEEP

YOUR

PASSWORDS

SAFE

PASSWORDS are like UNDERWEAR

1. Change them regularly

2. Don't leave them on your desk

3. Don't loan them to anyone

THANKS FOR LISTENING ☺