



CTF

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ctf_

Ice breaker:

1. What did you do over break? What was the highlight?
2. What do you think CTF challenges are?



What is CTF?

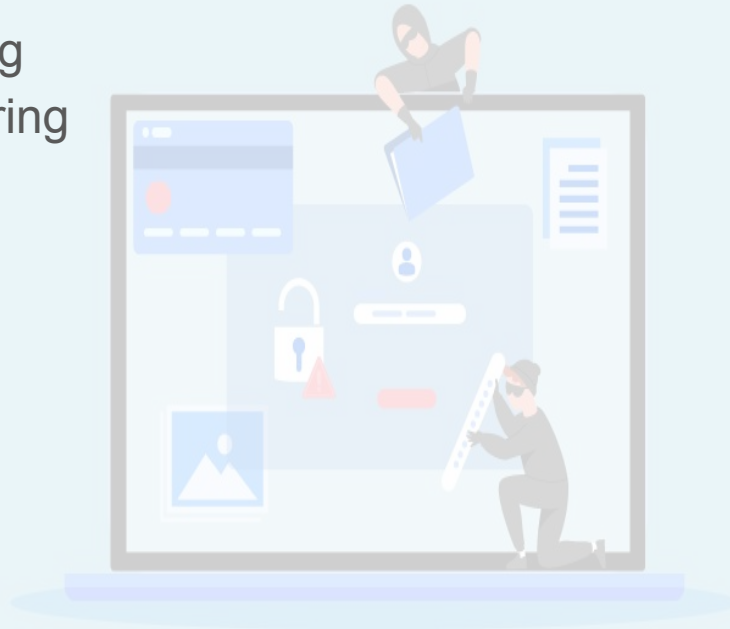
- A cybersecurity competition that tests your skills
- A puzzle where you have to find the flag
- Flag format: `flag{#####}`
- The flag is hidden in websites, files, etc. can be found with cybersecurity skills

WHAT IS CTF?



Main topics in CTF:

- Attack and defend
- Web exploitation
- Password cracking
- Reverse Engineering
- Cryptography
- Forensics



Attack and defend

One team defends their servers while the opposing team attempts to find the flags through vulnerabilities

Web Exploitation

Finding flags in website vulnerabilities

Steps:

- Use inspect first to find if flags are hidden in the html or css pages
- Use online tools like Burpsuite to intercept web requests

Password cracking/cryptography

Cracking passwords and code

Steps:

- Find out the type of hashing/encoding method
- Use libraries that can decrypt the encoding method
- Use correct terminal command to crack password

Reverse engineering

Most of the time in the form of python or bash files

Steps:

- Understand the language syntax of the file
- Understand what the code does and you will get the flag

Forensics

In the professional world, it is about finding the digital traces of something

CTF Purpose: Figure out where a file or data came from and its characteristics

Steps:

- Find metadata using tools
- Use metadata and the web to find out clues and eventually lead to flag

Which topic interests you the most?

Will go deep into that topic and do some hands on if possible next week

Complete challenge

A decorative background image featuring a silhouette of a person pushing a large sphere up a hill. The scene is set against a light blue sky and a greyish-brown ground. The person is positioned on the left side of the hill, pushing the sphere towards the right. The sphere is large and occupies a significant portion of the upper left area of the image.

1. Go to cybuture.org
2. Go to CTF Practice page
3. Go to link provided in Web Exploitation Level 1 and find the flag

Thanks for listening!