

WHAT IS A CTF?

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CTFs are hacking games

A CTF (**Capture The Flag**) is a (generally) competitive **hacking game**.

The goal is to find a specific string called **flag** and submit it

A flag usually looks like
something similar to this



ptm{th1s_1s_4_fl4g}



What do you usually do in a CTF?

During a CTF you are required to **exploit** a vulnerability, solve logic puzzles or **understand** what a process is doing and what to do in order to **abuse** it.

There are 2 main types of CTFs

- Jeopardy
 - Attack/Defense
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How jeopardy CTFs work

Jeopardy style CTFs are probably the **most common** type.

During this kind of CTF you are given a set of **challenges** (usually divided by category and difficulty) to solve in a given amount of time.

In this type of there is **no interaction** between different teams.

The main categories are:

- rev
- pwn
- Cryptography
- Web
- Misc

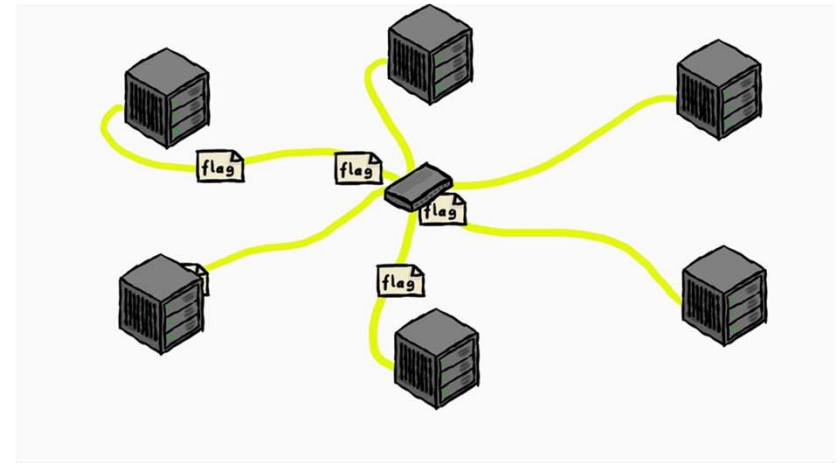
pwn	pwn0up 123	laynote 227	h0ack 393	encrypter 470
	both 470			
crypto	This is RSA 124	bobara 144	urara 240	edp0d0c 387
	crypt001 393			
misc	Webcam 11	Survey 64	WAF through 305	CONVusd 345
web	Beginner's Capsule 150	Milk 186	Capsule 197	Milk Beverage 205
	panix 248			
reversing	SCHEX Reversing 129	Fl00r 315		

How Attack/Defense CTFs work

During A/D CTFs, every team has a **machine** with its own services, which are the same for everyone.

Every machine is connected to the same **network** and exposes its services.

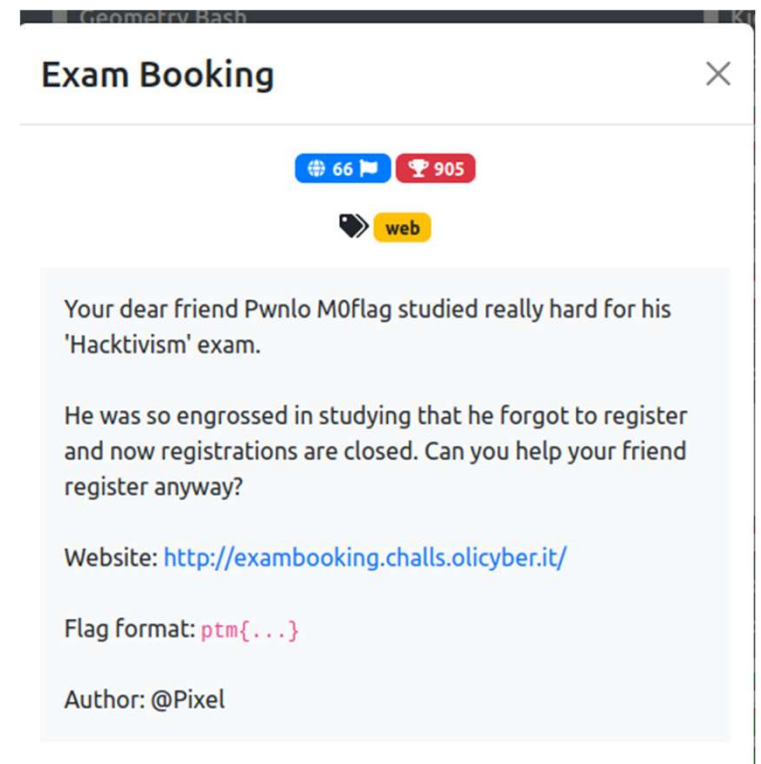
Players have to **find vulnerabilities** in these services, exploit them to **attack** others and patch the services to **defend** themselves from the attacks.



Here's an example of a challenge

We will see how to solve it in the **3rd workshop**

<http://exambooking.challs.olicityber.it/>



Useful ctf sites

(NOTE: you might need to register)

- <https://training.olicityber.it/>
 - <https://picoctf.org/>
 - <https://overthewire.org/wargames/>
 - <https://cryptohack.org/>
 - <https://portswigger.net/web-security>
 - <https://pwn.college/>
 - <http://pwnable.kr/>
 - <https://247ctf.com/>
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