

# WHAT IS A CTF?

---

# 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

# 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

assembler 123	discrete 227	kernel 393	recorder 479
kernel 470			

crypto

This is RSA 124	bobble 144	urara 240	shockwave 327 ✓
crack001 393			

misc

Whisper 51 ✓	Survey 64	WiFithrough 305	CONWool 345
-----------------	--------------	--------------------	----------------

web

Beginner's Capsule 130	Milk 186	Capsule 197	Milk Revenge 205
para 184			

reversing

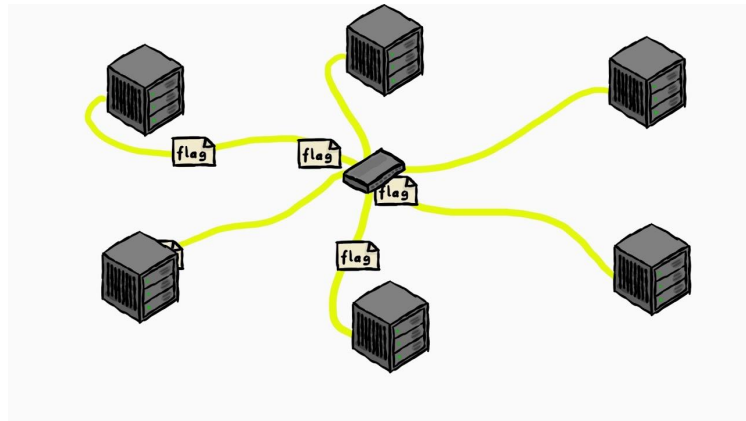
SCRAM Reversing 129	True 311 ✓
------------------------	---------------

# 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.

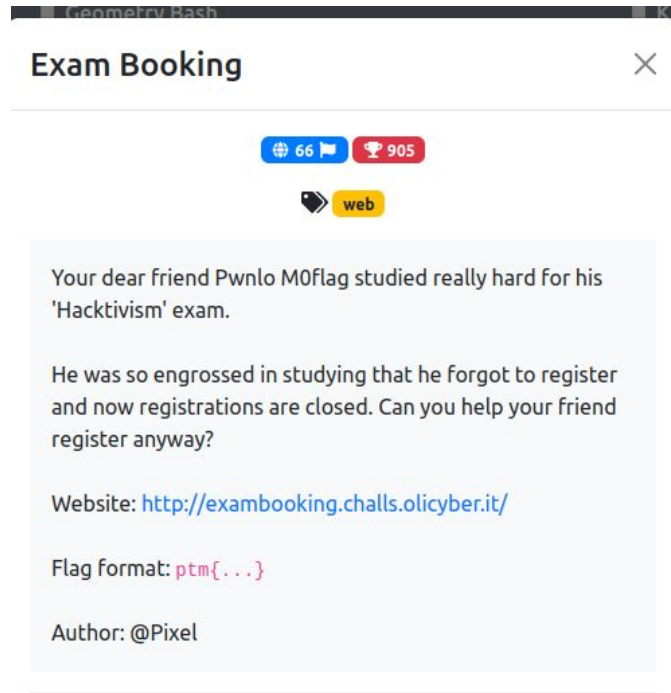
Players have to **find vulnerabilities** in these services, exploit them to **attack** others and patch the services to **defend** themselves from the attacks.



# Here's an example of a challenge

This challenge is from the **Beginner CTF 2021**

<http://exambooking.challs.olicyber.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/>
- <https://tryhackme.com/>
-