

# PascalCTF 2026

(a bit too soon)

The making of a highschool **Capture The Flag**

# About us

## Marco **Balducci**

5th year of highschool

📍 Rimini, ITT Blaise Pascal  
🚩 Paolo, Ulisse

## Alan Davide **Bovo**

5th year of highschool

📍 Cesena, ITT Blaise Pascal  
🚩 Paolo, Ulisse

## Enea **Maroncelli**

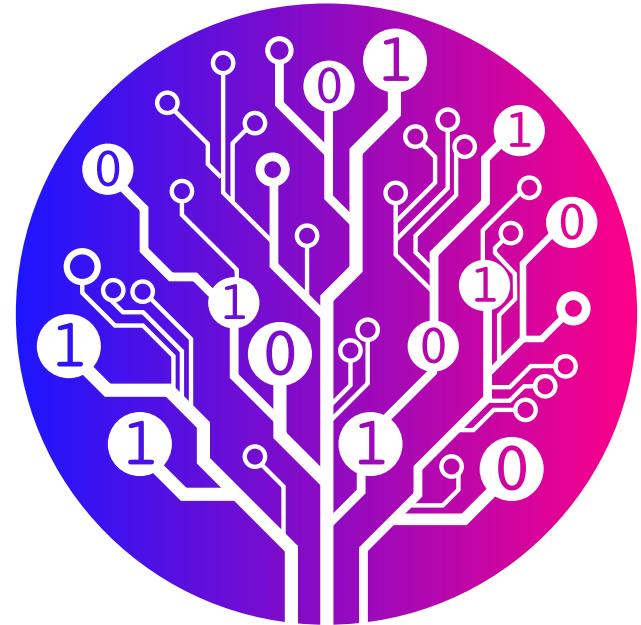
4th year of highschool

📍 Forlimpopoli, ITT Blaise Pascal  
🚩 Paolo

## Prof. **Matteo Lucchi**

Professor

📍 Cesena, ITT Blaise Pascal  
🚩 Head organizer of PascalCTF



# Team Paolo

# Why a Highschool?

We first discovered cybersecurity thanks to our older schoolmates who introduced us to this world. Their passion inspired us, and now it's our turn to pass that knowledge forward.

By creating a CTF for high-school students, we aim to spark curiosity, build new skills, and inspire the next generation of cybersecurity enthusiasts.



# Highschool standards

What can we expect from the average student?

- Basic programming and networking skills
- Zero experience in vulnerability detection and exploitation
- Low attention span 



# How 2 have fun???

## AI challenges

Something easy to get the participants in the right mood

## Gradually increasing difficulty

The challenges' difficulty had to be carefully chosen to make them accessible to everyone, and also to create a smooth difficulty curve.

## Help during the competition

The organizers' constant presence was ensured to answer every possible question (not regarding the solve ofc)

## No pwn 😞

Given how in the 2025 edition no one was able to solve a pwn challenge, we (sadly) had to remove them

# PascalCTF 2026

## Organization

All about finding sponsors and searching for interested students.

## Technical structure

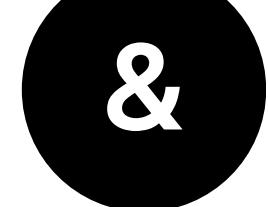
How we developed all the challenges and set up the infrastructure.

# Overall organization

Before starting the development we started focusing on these topics

## Sponsors

We wanted to organize a great event this year thus we needed enough liquidity to buy t-shirts, medals and gadgets.



## Searching students

As analyzed before highschool students have no idea whatsoever about the cybersecurity field thus we had to find some ways to make it more interesting.

2025

GRUPPO

Maggioli

Maggioli

in 

gruppo  
**VEM**

certego

VEM Sistemi

in 

  
**FlashStart**

Flashstart

in 

# Sponsors

Huge thanks to the companies that helped us  
in successfully accomplishing our goals!

# Students interests

For an highschool student there  
isn't anything better than skipping  
classes.

I swear that anything is better than  
a lesson of Italian literature 

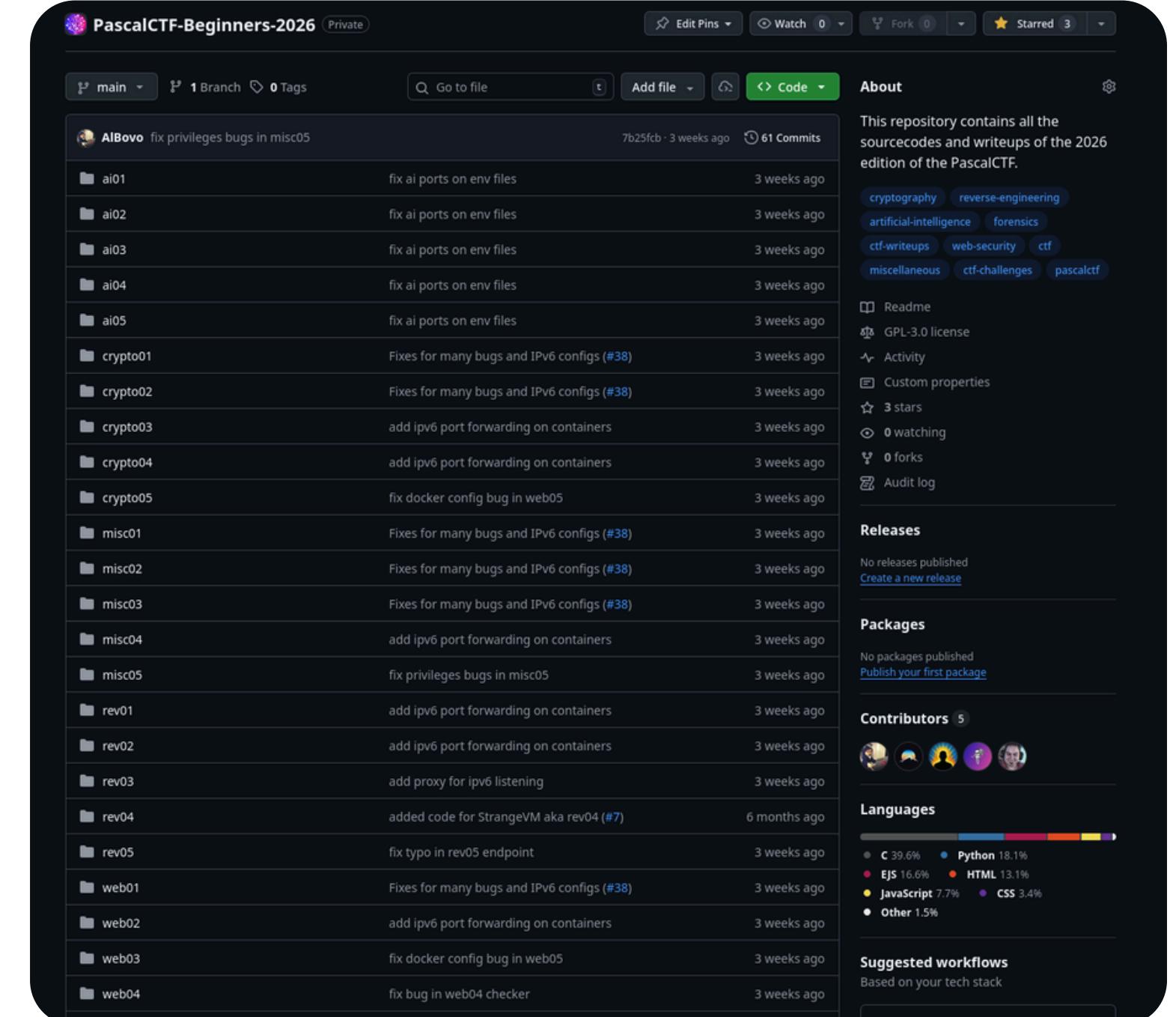
Nome	Cognome	Classe	Sezione	Percorso	Nome e cognome dell'amico	Risposte
Alan	Agostini	5 H				
Endi	Balla	4 N			Davide Gento	
Chris	Bartolini	2 F	Si		Denis Topa	
Marcu	Bianchi	1 F	No			
Alessandro	Bianchi	4 I			Luca Bonassa	
Francesco	Bianchi	3 E			Nicola Zani	x
Luca Gaetano	Bianchi	4 I			Alessandro Bianchi	
Matteo	Bonelli	4 I	Si		Ireneo Toscolli	x
Maria	Bonelli	1 F	No		Vittorio Gabelli	
Matteo	Boschi	4 I				
Filippo	Boschi	4 N				
Valentino	Colari	4 E	No			
Manuel	Campana	4 I			Matteo Mancini	y
Marco	Caprili	3 M				
Federico	Carronni	2 E	Si			
Nicola	Cassavechia	5 SN				
Samuele	Checola	1 H	Si		Leonardo Neri	
Maria	Cinotta	5 H			Lorenzo Shani	
Carmine	Coccimiglio	5 L			Samuele Romagnoli	x
Palio	Cozzani	1 E	Si		Tagliati boyan	
Stefano	Cozzani	4 I			Manuel Campana	y
Alessandro	D'Antuono	1 H	Si		Aron Palazzi	
Marcio	De Cola	2 E	Si		Meico Rossi	
Francesco	Dipiazza	1 H	Si		Samuele Mario Checola	
Luca	Domenicosi	5 G			Giacomo Gatti	
Adam	El ghalmi	1 F	No			
Simone	Fazio	1 H	No		Nicola Neri	
Francesco	Fazio	4 N			Francesco Palazzi, Meico Laffi	x
Vittorio	Gabbelli	4 I			Matteo Boschi	
Giacomo	Gatti	5 G			Raffaele Zanni	
Davide	Gento	4 N			Endi Balla	
Varun	Hier	1 H	No		Diego Stival	
Matteo	Landi	1 H	No			
Nicola	Landi	5 H			Gabriele Ventura	
Mario	Lafifi	4 N			Palazzo Francesco e Flora Frassonzo	x
Samuele	Ubacci	3 E				
Oliver	Lucyan	1 H				
Jordan	Maioli	1 H	Si			
Denis	Malvezzi	3 L	Si			
Matteo	Mancini	4 I				
Samuel	Mancuso	2 SG	No			
Lorenzo	Maria	3 L	No			
Ivanos	Maria	3 L	Si			
Alessio	Mazzetti	5 L				
Nicola	Mohrasso	4 F				
Giacomo	Montali	1 H	No			
Leonardo	Monti	2 G	Si			
Lorenzo	Morini	5 E			Fabio Riggiani	
Henri	Munzi	3 L	No			
Leonardo	Neri	1 H	No			
Nicola	Neri	1 H	No			
Giulio	Orlandi	3 M				
Aron	Palazzi	1 H	Si			
Francesco	Palazzi	4 N				
Federico	Pelizzetti	5 H				
Elia	Palpella	1 E	Si			
Roberto	Paoletti	4 I				
Olena	Pensopka	3 E				
Michele	Piacentino	5 G				
Gabriele	Piccone	1 H	No			
Michele	Poggi	3 L				
Lorenzo	Pozzi	3 E				
Simone	Raffoni	4 I				
Fabio	Reggiani	5 E				
Samuele	Ronsigholi	5 L				
Samuele	Ronsigholi	3 E				
Meico	Rossi	2 E	Si			
Andrea	Roselli	3 E				
Matteo	Sartini	4 I	Si			
Lorenzo	Shani	5 H				
Samuele	Sestini	5 L				
Diego	Shinal	1 H	Si			
Bryan	Tagliati	1 E	Si			
Maria	Terzi	3 M				
Lorenzo	Torolazzi	4 I				
Nicola	Zanetti	3 M				
Raffaele	Zanni	5 G				
Nicola	Zani	3 E				
Renzo	Zhang	3 M				

# Challenges

We created a github repository with a simple structure.

We saved informations about:

- Ports and network configurations
- Descriptions/titles/points
- Writeups
- Checkers 🔥



"If it works, maybe ChatGPT  
cooked enough not to  
be blamed .

— Fent Shui, “How i left my family to capture flags”

# Checkers manager



A simple website able to manage checker scripts and verify the correct behavior of the challenges.

The images show the CTF Checker Manager application interface. The first image is the Dashboard, which displays a summary of checkers (Total Checkers: 2, Active: 2, Success Rate: 50%, Last Update: 52s ago), a list of existing checkers (Crypto03 and Rev02), and a note that checkers run every minute. The second image is the 'Add New Checker' form, which includes fields for Checker Name (e.g., Web Challenge Login Check), Environment Variables (Variable name: http://challenge.example.com, Value: http://challenge.example.com), Checker Script (a file input field with 'No file selected.'), and Expected Flag (a text input field with 'flag@example\_flag\_here'). It also includes a 'Checker Requirements' section with a list of rules and an 'Example Checker Script' code block. The third image is the configuration page for checker 'Rev02', showing its name (Rev02), creation date (2025-07-30 13:19), and configuration details like Expected Flag (passaCTF{0000\_lock\_giving\_your\_prizes\_md5}), Environment Variables (IP: 192.168.70.141, Port: 1337), and Script (86dc0771-291c-4eaf-8c12-5c1d4bf52a76.py). It also shows its execution history with two entries: a successful run at 07-30 13:20:20 and another at 07-30 13:20:20. The application is described as automated monitoring for CTF challenge checkers.

# Some statistics

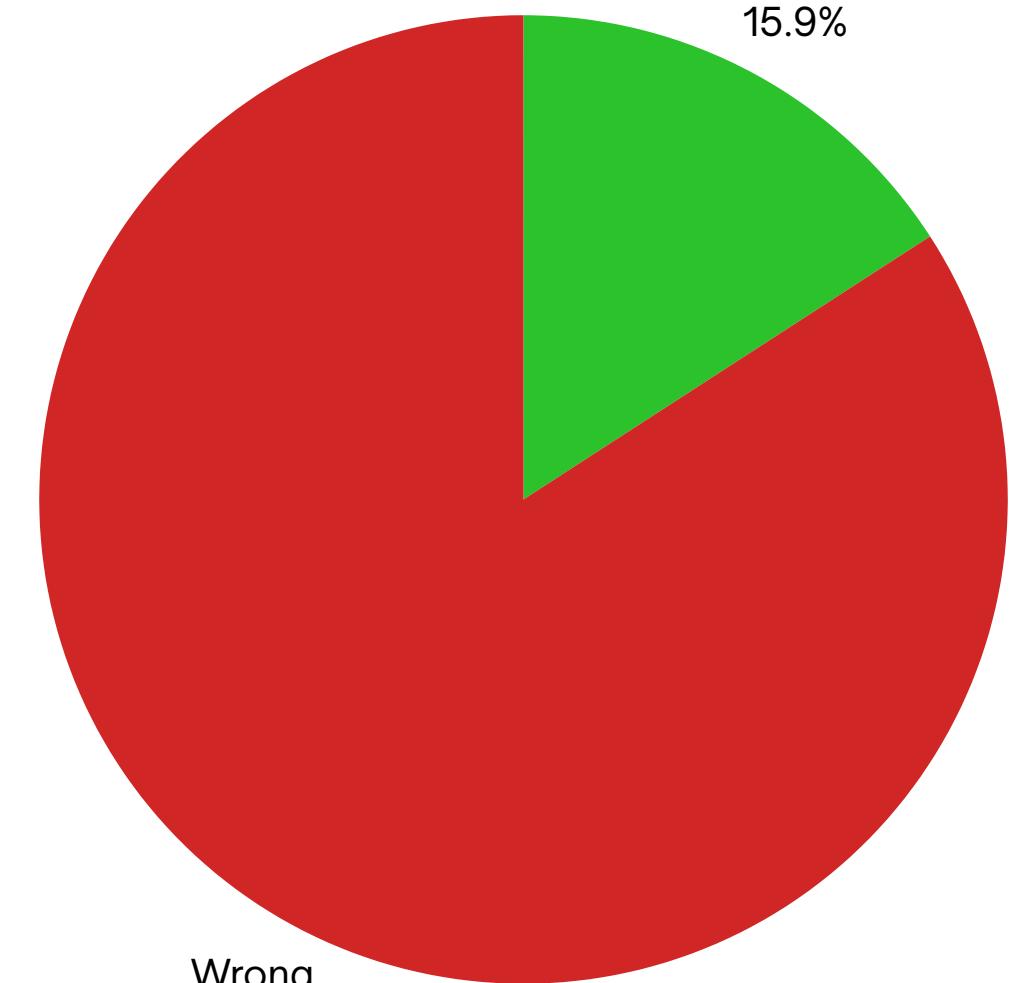
There were many challenges but almost all of them were easily solvable by an AI agent.

Cloudflare exploded in the meanwhile

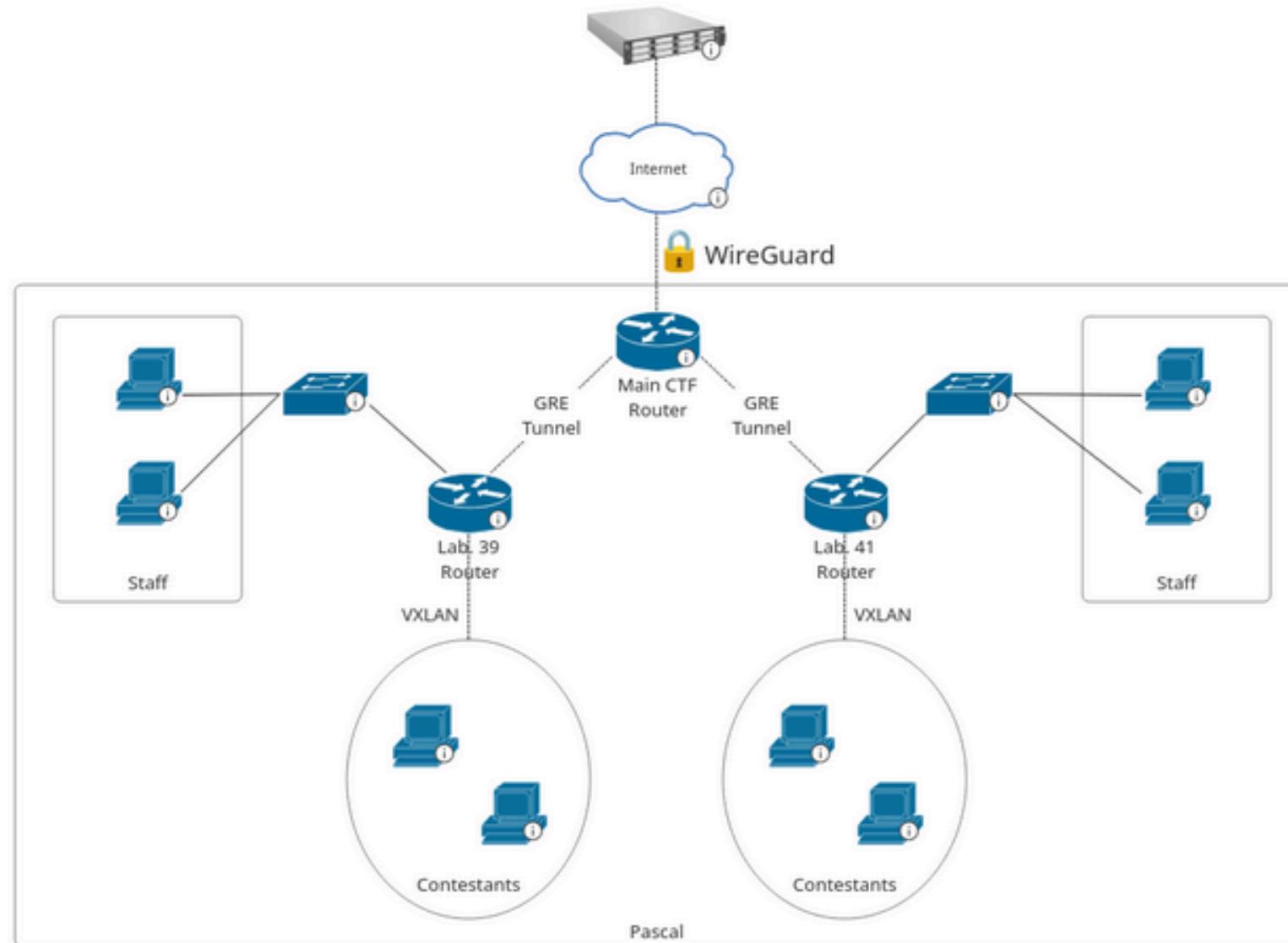


	Place	User	Bracket	Score	Visibility
1	Paladini Sharp			6322	visible
2	Cavallieri del Pitone			5323	visible
3	Chikichaka Squad			5131	visible
4	Binary Surghi			4278	visible
5	Alveare delle API			4116	visible
6	/whatever squad			3591	visible
7	I gabibbi			3324	visible
8	Aura Team			3305	visible
9	The Last Cyberagents			3290	visible
10	The bad doctors			2886	visible
11	Five Nights @ PWN			2296	visible
12	Capotreni dell'AI			2197	visible

Flags submitted



# Infrastructure

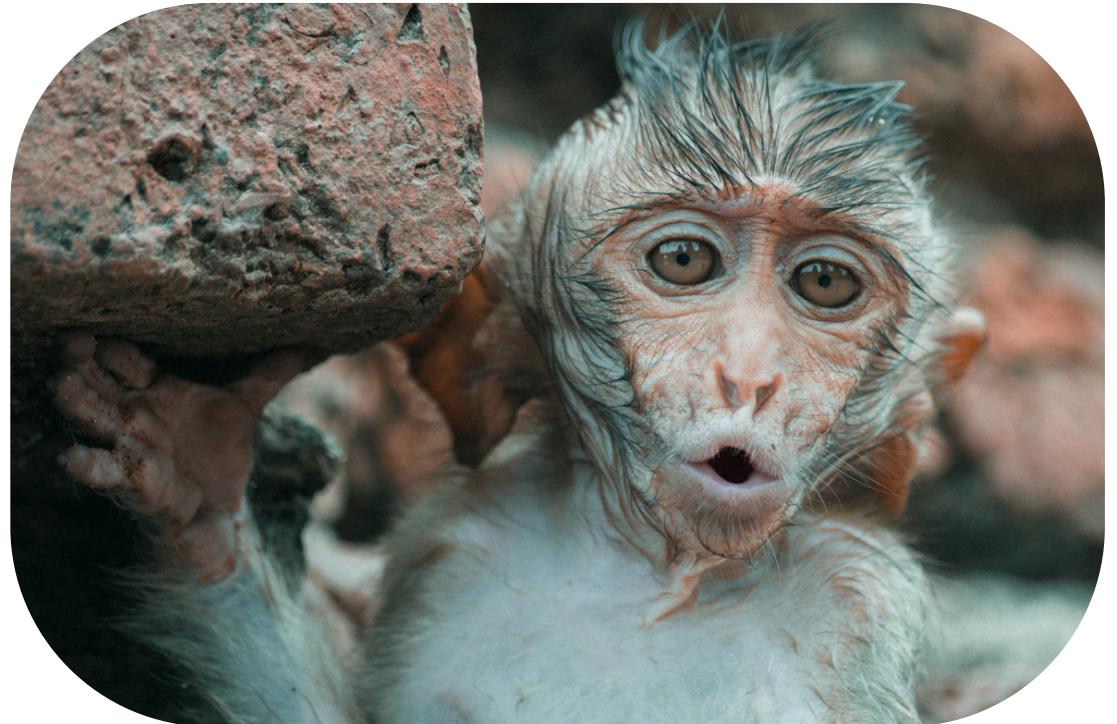


We've a really *complex* infrastructure, our infra guy projected it to be fully compliant with the requirements of our school's network.

our infra guy



# But how to interest people?



## Lessons

From the beginning of the year we had lessons focused on learning the **very basic** of cybersecurity

## Professors

Professors should **encourage** students to learn valuable supplementary skills, such as cybersecurity.

## Events

Events like the **PascalCTF** surely increase students interest, introducing them to cybersecurity in a fun way



# Lessons



Our lessons were designed for people with **zero** experience, ensuring nobody is left behind.

Cybersecurity is surely a difficult subject both to teach and to study, but at least last year, “students” said that we did a great job

The main focus of the CTF and the lessons was in fact interest as many people as possible, **hoping** that someone could get passionate about cybersecurity and join **Team Paolo**

# Suggestions

## Writeups

Make sure to write the best possible writeups, explaining everything about the exploits to help people learn new things

## Memes

JARVIS SOLVE  
THIS CTF CHALLENGE



## Easy challenges

Always keep some easy challenges in the ctfs for newbies, so that everyone can have fun

# Thanks

## PascalCTF Beginners 2026

sab, 31 Gen. 2026, 09:00 CET — dom, 01 Feb. 2026, 09:00 CET 

On-line

A [PascalCTF](#) event.

Format: Jeopardy 

Official URL: <https://ctf.pascalctf.it/>

Future weight: to be determined 

Rating weight: 0,00 

Event organizers 

- [Paolo](#)

