



Open Innovation Lab

Capture The Flag - Information Session

Before the Session: QR and QR :)

OIL Facebook

https://www.facebook.com/groups/cuhk_oil



CTF Training Camp Whatsapp

<https://chat.whatsapp.com/4fJLGw28bgHLLwHuchKJ8>





Agenda

- What is CTF
 - + our past competition
- Training Schedule
- Demo



What is CTF?????

Is it...



Just a little game...



To find a murderer ! ?



Capture the flag.

In fact...

The screenshot shows a game interface with a central world map. The map has several red triangle markers, primarily in Europe and Africa. The interface is divided into several panels:

- LEADERBOARD**:
 - ADMIN: YOUR RANK: 11, YOUR SCORE: 0 PTS
 - CAMBRIDGE: RANK 1, 3476 PTS
 - IMPERIAL COLLEGE
- ANNOUNCEMENTS**:
 - ▶ We have snacks downstairs if you need a break!
 - ▶ Hint: The biggest flag has 256 bits.
 - ▶ Egypt is open again.
 - ▶ Angola just got easier (32bits all the way!)
 - ▶ Belarus Crypto challenge is open.
 - ▶ Egypt challenge will be reopened later. Work on something else for
- ACTIVITY**:
 - ▶ [11:14:51] **oxford** captured United Kingdom
 - ▶ [11:15:16] **oxford** captured Austria
 - ▶ [11:17:25] **Cambridge** captured Austria
- NAVIGATION**: POWERED BY FACEBOOK, with a progress bar and labels: ▲ YOU, ▲ OTHERS, ALL
- SCOREBOARD**: (Empty)
- TEAMS**: A grid of 12 icons representing different teams or categories.
- FILTER**: CATEGORY STATUS, with options: ALL (selected), NONE, QUIZ, FORENSICS, CRYPTO.
- GAME CLOCK**: A digital clock showing 00:00:00.



What is CTF?

- Information security competition
- Format
 - Jeopardy
 - Attack-Defense
 - King of the Hill
 - Or Mixed
- Pwn, Reverse ,Cryptography, Web, Misc



Why playing CTF?

- Having fun, legally, for hackers
 - ◆ Challenging and exciting
- Learning information security
- Making friends
- Recruitment and employee training



Competition joined

- ASTRI inter-teritiary-institue CTF contest :
 - First Round: Rank 6 and 9
 - Final : Rank 4 and 6
- PwC Hackaday 2017 :
 - Final : Rank 1 and 4
- Some online CTFs
 - CTFtime



Inter-Tertiary-Institute Capture the Flag Contest 2017



PwC's HackaDay 2017





Online CTFs

- CTFtime
 - <https://ctftime.org/>
- ctflearn
 - <https://ctflearn.com/>



CTF  TIME



Schedule

Info-session - 29 Jan (Today)

Web: Chris, Raymond - 5 Feb

Crypto: Jason, Xaviera - 12 Feb

Binary reverse: Kyle - 26 Feb

Misc: Xianbo - 5 March



About this training camp

- You are expected to know
 - Web
 - What is HTTP, SQL, can read HTML, Javascript
 - Binary
 - Basic Linux usage, understand C and Python code
 - Misc
 - How to hide some information :)
 - Crypto
 - Basic Math e.g. mod operation, set theory
- Expected outcome:
 - Basic hacking skills
 - self-learning resources.



Demo



What's next?

- Sharif CTF (2/2)
 - <http://ctf.sharif.edu/ctf8/>
 - email: cuhkctfteam@gmail.com
 - pwd: cuhk@sharif
- Our training
- Share and discuss together

Q & A

