#### HACKERS.MU



# FIVE HOURS OF CODE. HACK TILL YOU DROP.

Open to all University students: The first edition of UoM Code Wars!

Be trained by Hackers.mu members and contribute to real life open-source projects.

Venue: ETB LAB, Engineering Tower, UoM

Date: 21 September 2017

**POWERED BY:** 





# **WHOIS**



#### **SCENARIO**

- RC4 has been declared insecure.
- You have been tasked by hackers.mu to audit every piece of software.
- Find and patch the vulnerabilities.



# **BABY STEPS**



### COURSE OF ACTION(COA)

• Suggestions?



#### **SCENARIO**

- RC4 has been declared insecure.
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#### **COURSE OF ACTION**

Know your enemy – RC4

Know your tools – Check

Seek and Destroy – Software

'IP99' certified – RC4-proof

# Know your enemy - RC4

What is RC4?

• How is it vulnerable?

Attacks on RC4?

#### Know your enemy - RC4



- RC4: A stream cipher.
- Aliases: ARCFOUR, ARC4
- **Vulnerabilities?** Output keystream is not discarded, non-random or related keys are used
- Practical attacks? WEP attacks

### Know your tools

• GNU/Linux

• GNU Make



GIT

## Seek n Destroy

• Mission 1 : Lynx

## "IP99" Certified

• RC4-Proof



#### You're the Hero!

- You saved the day!
- Your code is used by millions

