1st General Meeting

Computer Science Society - Feb 26, 2019

Agenda

- Introduction
- Events
- CTF Basics

Introduction

- Club Officers
  - Harrison Fernandez (President) - harrison.fernandez@jjay.cuny.edu
  - Shateeya Roberts (Vice President) - shateeya.roberts@jjay.cuny.edu
  - Addiel Almonte (Treasurer) - addiel.almonte@jjay.cuny.edu
  - Erick Jean Reyes (Secretary) - erick.jeanreyes@jjay.cuny.edu
- Faculty Advisor
  - Dr. Sven Dietrich - sdietrich@jjay.cuny.edu
- Club Goals:
  - Enable tech-interested students to gain extracurricular skills necessary to excel in life after college, by way of networking events, workshops, and collaborative projects including Capture the Flag Competitions, hackathons, coding challenges, and web development activities.

Events

- Weekly CTF Practice begins Friday, March 8th and continues every Friday 1:30pm to 3pm in L2.70.03NB.

- Next general meeting:
  - Tuesday, March 19th, 1:50pm to 2:55pm in 6.64.02NB.

- Elections:
  - Tuesday, April 16th, 1:50pm to 2:55pm, room TBA.

What is CTF?

Capture the Flag (CTF) is a computer security competition.

There are two main styles: attack/defense and Jeopardy.

Attack/defense: each team is given a machine or network to defend. Teams score by successfully defending their machine and attacking the opponent’s.

Jeopardy style competitions consist of categories of computer security problems, problems of different points and difficulty. Teams try to earn the most points in the competition's time frame, but do not directly attack each other.

May include reverse engineering, network sniffing, protocol analysis, programming, and more.

What do you need to CTF?

- A laptop.
- An internet connection.
- A want to learn.

What more do you need?

CTF can be done on any device and setup, but we recommend:

- A virtual machine setup (i.e. VirtualBox)
- An instance of Linux running in the virtual machine (i.e. Kali or Ubuntu)

What do I need to know?

- How to use the Shell.
  - Harrison demos
  - Shell Scripting
  - https://ryanstutorials.net/linuxtutorial/
- Ciphers and encryption/decryption
  - Caesar, affine, etc. https://www.dcode.fr/caesar-cipher
  - Base64, etc. https://www.base64decode.org/
- Hash cracking
  - SHA256, SHA512, etc. https://crackstation.net/
- A myriad of other security tools and knowledge
  - password cracking, packet sniffing, cross site scripting (XSS), how HTML, CSS, and Javascript work, etc.

Example:

Challenge: Picoctf.com

Solution: https://drhackher.wordpress.com/2017/07/31/pictoctf-digital-camouflage/

Thank You!

Email: computersocjjay@gmail.com

Github: jjcss && jjcss.github.io

Slack: jjcss.slack.com/signup

Instagram: jjcomputerscience

Discord: https://discord.gg/XnSrfay

Club Room: L2.70.14 NB, inside club row (L2.71.00 NB)