Cybersecurity Discovery Piscine

Shell 00

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Summary: *In this project, you will learn the fundamentals of using the shell.*

Version: 2.00

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Chapter I

About this Cybersecurity Discovery Piscine

Welcome!

Welcome to this Discovery Piscine in cybersecurity, a challenge where you will dive into the basics of offensive cybersecurity while experiencing the unique educational model of 42. Here, you won't find traditional classes or a single correct solution; learning is collaborative, hands-on, and focused on you.

We invite you to explore the code that powers the software you use every day, while developing skills that go beyond the technical: logical thinking, problem-solving, and self-directed learning. Programming isn't about memorizing rules; it's about creatively assembling blocks to solve problems in your own unique way.

During this experience, you'll tackle key topics in cybersecurity:

- Terminal navigation: Learn to operate and navigate a system using basic commands.

- OSINT (Open Source Intelligence): Discover how to gather public information to identify potential threats.

- Web security: Understand common vulnerabilities in websites and how they are exploited.

- Cryptography: Familiarize yourself with the fundamentals of data and communication protection.

Peer learning and evaluation will play a central role in your journey. You'll exchange ideas, discuss solutions, and gain new perspectives by collaborating with your peers. This will not only enrich your learning experience but also help you build connections and develop critical skills for tackling future challenges.

Remember, this experience is as unique as you are: each participant will follow their own path, validate different projects, and face unique challenges. What truly matters is what you learn, from both your successes and your mistakes.

Good luck! We hope you enjoy this journey into the world of cybersecurity and collaborative learning.

Chapter II

Introduction

You've probably seen in many "hacker" movies characters typing frantically on a black screen, pounding the keyboard, and saying "I'm in." While this isn't exactly how things work in real life, mastering the command line is an essential skill for navigating a system quickly and understanding how it operates under the hood. Additionally, learning to use the terminal will give you a solid foundation for solving problems, automating tasks, and tackling technical challenges, like the ones you'll encounter in the upcoming exercises.

What you will learn in this first project:

- Introduction to the terminal and the command line.

- Basic commands to navigate, modify, and create files in the system.

- Simple programs to automate tasks in your terminal.

Chapter III

General instructions

Unless explicitly specified, the following rules will apply on every cell of this Discovery Piscine.

- This subject is the one and only trustable source. Don't trust any rumor.

- The assignments in a subject must be done in the given order. Later assignments won't be rated unless all the previous ones are perfectly executed.

- Be careful about the access rights of your files and folders.

- Your assignments will be evaluated by your Piscine peers.

- All shell assignments must run using `/bin/bash`.

- You must read the examples thoroughly. They can reveal requirements that are not obvious in the assignment's description.

- You have a question? Ask your neighbor on the left. Otherwise, try your luck with your neighbor on the right.

- Every technical answer you might need is available in the `man` or on the Internet.

- Remember to read the documentation and to use Slack!

- By Thor, by Odin! Use your brain!!!

Chapter IV

Exercice 00

	Exercise 00
	The basics
Turn-in directory : *ex00/*	
Files to turn in : `message.sh`	
Allowed functions : `None`	

- Open the terminal on your computer. You should see a black screen waiting for you to give it an instruction.

- Run the command `pwd`. What do you see? Discuss it with your peers.

- Now, run the command `ls`.

- Create a folder called `ex00` and navigate into it.

- Download the file `ressources.XX.tgz` from the intranet and decompress it using the command `tar`.

- Move the `message.sh` file to the `ex00` folder you just created.

> The terminal is a way to communicate with the computer; you can
> view folders, create and modify files, and much more. To complete
> this exercise, you will need to use the commands mkdir, cd, and mv;
> otherwise, it does not make sense :D

Chapter V

Submission and peer-evaluation

- To evaluate this project, the first thing you need to do is register. Check that you are registered for this project on the intranet.

- From the intranet, indicate that you have completed the project. Then, choose a time slot for the evaluation.

- During the evaluation, it will be checked whether you have understood what the terminal is and the basic commands.

- You must ensure that the file `message.sh` is located in your `ex00` folder.

> Please note that during the evaluation, what we want to verify
> is that you have understood the excercise. You should be able to
> explain it and justify the decisions you made.