PRAKTIKUM 2

FortifyTech

Anda adalah seorang ahli keamanan yang ditugaskan oleh perusahaan konsultan keamanan CyberShield untuk melakukan penetration testing terhadap infrastruktur perusahaan FortifyTech. FortifyTech adalah startup perusahaan teknologi dan mereka telah menyewa layanan CyberShield untuk mengevaluasi keamanan sistem mereka.

Temukan kerentanan pada perusahaan FortifyTech dengan menerapkan prinsip Ethical Hacking dan buatlah laporan pada setiap kerentanan yang telah anda temukan, dengan begitu celah kerentanan tersebut dengan cepat bisa diproses oleh mereka.

Scope:

- 10.15.42.36
- 10.15.42.7

Notes:

Pengerjaan hanya bisa menggunakan jaringan ITS (gunakan vpn ITS atau wifi ITS).

Rules:

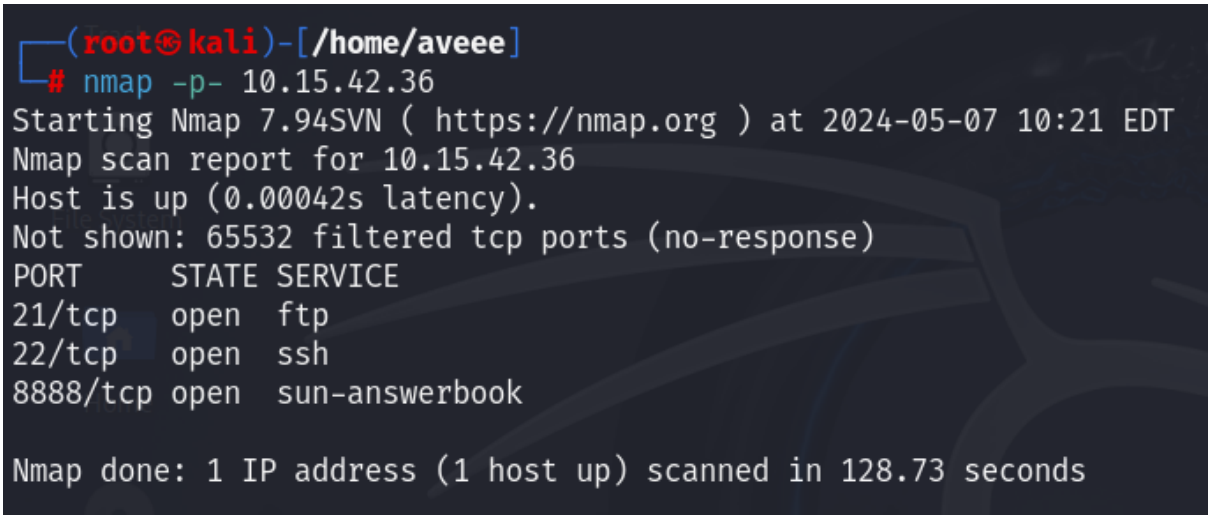
Hindari hal - hal yang melanggar etika atau Anda akan dimarahi (~~diberi nilai 0~~) oleh Project Manager 😀.

IP 10.15.42.36

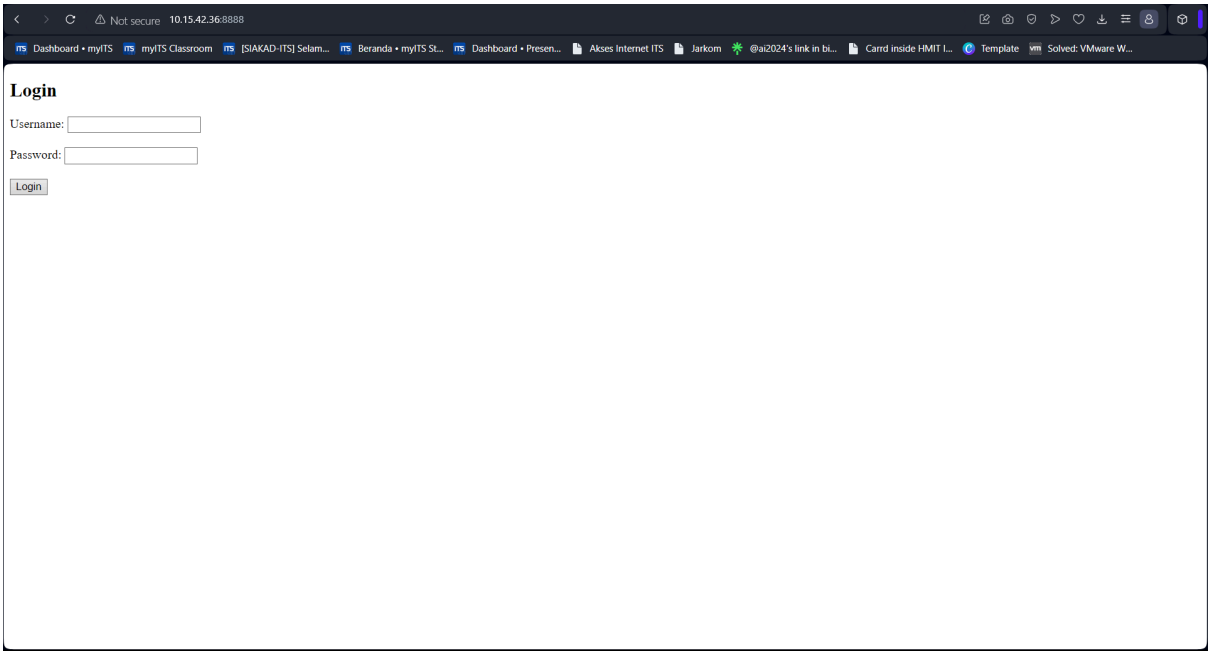
1. **Reconnaisance**

- **Nmap**

Dengan menggunakan **nmap -p- 10.15.42.36**, didapatkan beberapa open port seperti pada gambar berikut.



Kemudian saat dilakukan percobaan pada open portnya didapatkan login page sebagai berikut.



Memanfaatkan adanya info tcp dengan mengeksekusi command ftp 10.15.42.36. Kemudian terdapat backup.sql di dalamnya ketika sudah tersambung.

```
┌──(root㉿kali)-[/home/aveee]
└─# ftp 10.15.42.36
Connected to 10.15.42.36.
220 FTP Server
Name (10.15.42.36:aveee):
530 This FTP server is anonymous only.
ftp: Login failed
ftp> close
221 Goodbye.
ftp> ftp 10.15.42.36
Connected to 10.15.42.36.
220 FTP Server
Name (10.15.42.36:aveee): anonymous
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Entering Extended Passive Mode (|||65511|)
150 Here comes the directory listing.
-rwxrwxr-x    1 ftp      ftp          1997 May 04 15:40 backup.sql
226 Directory send OK.
ftp> mget *
mget backup.sql [anpqy?]? y
229 Entering Extended Passive Mode (|||65503|)
150 Opening BINARY mode data connection for backup.sql (1997 bytes).
100% |*****************************************************************************|  1997       20.24 KiB/s    00:00 ETA
226 Transfer complete.
1997 bytes received in 00:00 (9.91 KiB/s)
ftp> exit
221 Goodbye.
```

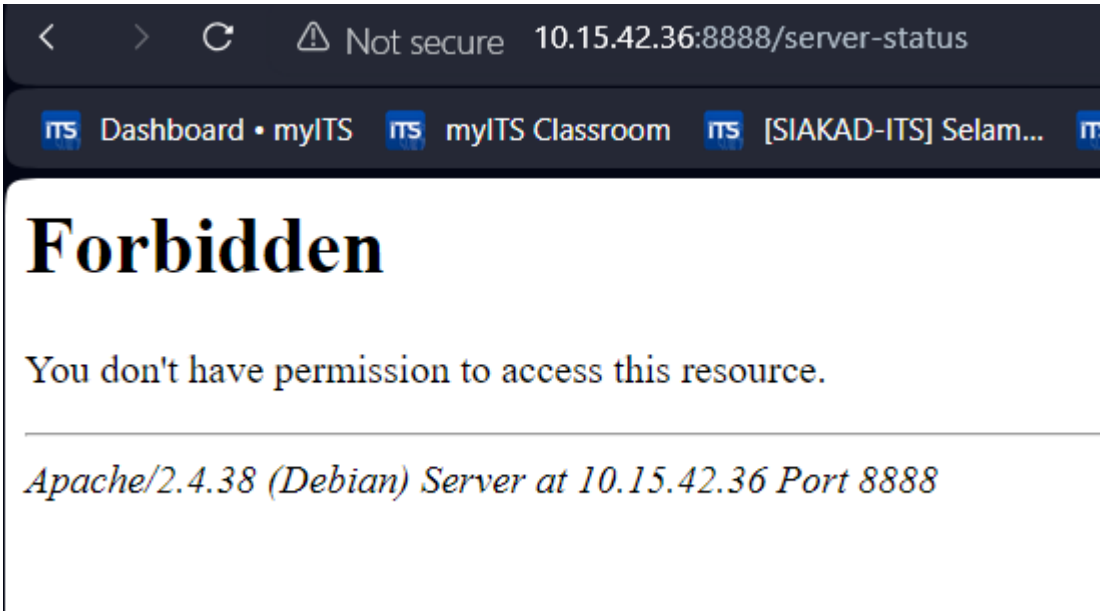
Setelah didownload, didapatkan beberapa informasi berikut di dalam backup.sql.

```
┌──(root㉿kali)-[/home/aveee]
└─# cat backup.sql
-- MySQL dump 10.13  Distrib 8.0.36, for Linux (x86_64)
--
-- Host: localhost    Database: db
-- ------------------------------------------------------
-- Server version       8.0.36-0ubuntu0.22.04.1

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!50503 SET NAMES utf8mb4 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;

--
-- Table structure for table `users`
--

DROP TABLE IF EXISTS `users`;
/*!40101 SET @saved_cs_client     = @@character_set_client */;
/*!50503 SET character_set_client = utf8mb4 */;
CREATE TABLE `users` (
  `id` int NOT NULL,
  `username` varchar(255) DEFAULT NULL,
  `password` varchar(255) DEFAULT NULL,
  PRIMARY KEY (`id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
/*!40101 SET character_set_client = @saved_cs_client */;

--
-- Dumping data for table `users`
--

LOCK TABLES `users` WRITE;
/*!40000 ALTER TABLE `users` DISABLE KEYS */;
INSERT INTO `users` VALUES (1,'admin','$2y$10$RwYNURXBmyscv9UyfuRDleF8ML0tjn.Ft5lUKwTWiavJOJhM56d0K');
/*!40000 ALTER TABLE `users` ENABLE KEYS */;
UNLOCK TABLES;
/*!40103 SET TIME_ZONE=@OLD_TIME_ZONE */;
```

- Gobuster

```
┌──(root㉿kali)-[/home/aveee]
└─# gobuster dir -u http://10.15.42.36:8888 -w big.txt
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.15.42.36:8888
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                big.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.6
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
===============================================================
/.htpasswd            (Status: 403) [Size: 278]
/.htaccess            (Status: 403) [Size: 278]
/server-status        (Status: 403) [Size: 278]
Progress: 20476 / 20477 (100.00%)
===============================================================
Finished
===============================================================
```

Terdapat endpoint /server-status. Ketika dibuka ternyata diperlukan permission access terlebih dahulu.



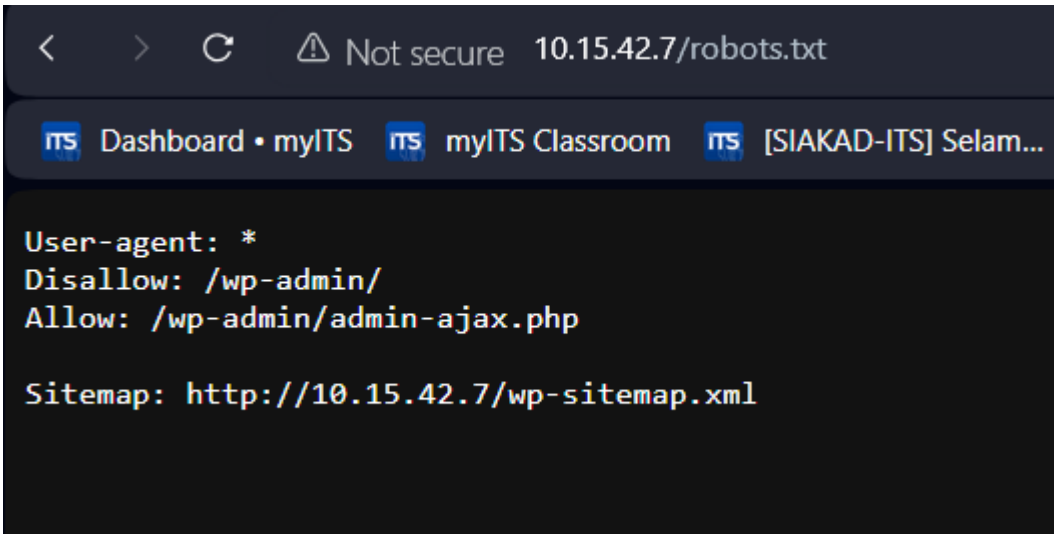
2. Vulnerabilty Assessment

Nikto IP 10.15.42.36:8888

IP 10.15.42.7

1. Reconnaissance

Pada hasil nikto -h 10.15.42.7 pada bagian 2. Vulnerability Assessment, terdapat sebuah endpoint /robots.txt yang dapat diakses.



2. Vulnerability Assessment