# **In-class practice 2**

Graded

Student

HARRY KIM

**Total Points** 

100 / 100 pts

#### Question 1

# Submit your answers as a PDF file

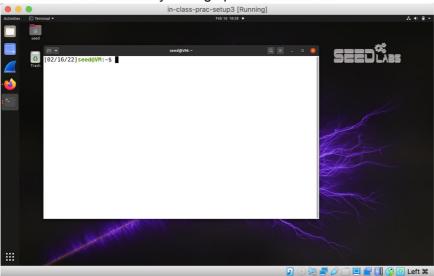
100 / 100 pts

- → + 20 pts Successfully set up the VM
- → + 20 pts Successfully set up the first attack scenario
- - + 15 pts Sufficient efforts are demonstrated to tackle the first attack but no successful results are presented
  - + 10 pts Some efforts are demonstrated to tackle the first attack, but the efforts only make partial sense
- → + 20 pts Successfully complete the second attack scenario
  - + 15 pts Sufficient efforts are demonstrated to tackle the second attack but no successful results are presented
  - + 10 pts Some efforts are demonstrated to tackle the second attack, but the efforts only make partial sense

# Making it clear: Sevin Park and Harry Kim worked together on this practice.

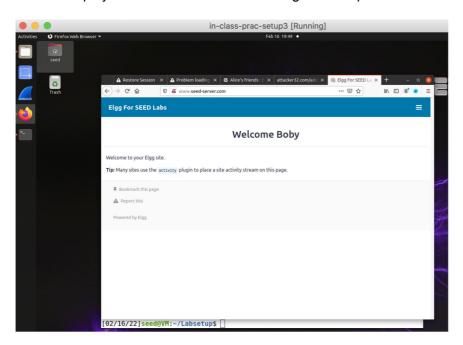
# In-class practice 2

Screenshot of successfully setting up virtual machine:



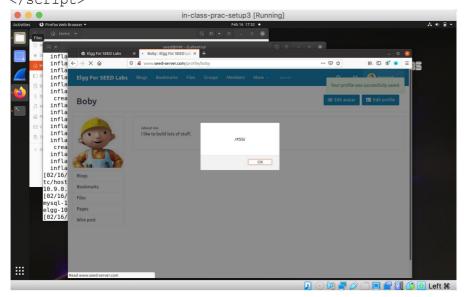
# **Discover XSS vulnerabilities**

Task 1: Display an Alert Window when visiting a user's profile



# Added the following to edit html of Bob's profile:

<script> alert('/XSS/') </script>



#### Discover CSRF vulnerabilities

## Task 1: CSRF Attack using GET Request

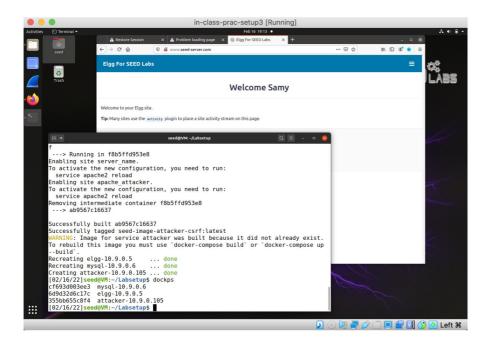
Successfully set up web security environment with commands:

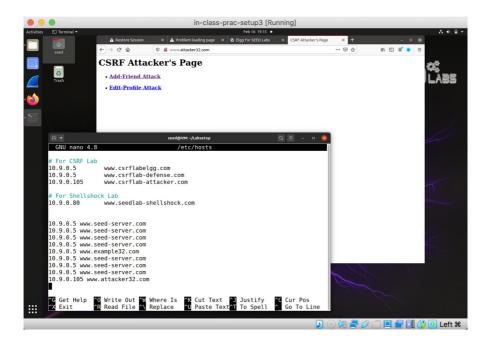
```
[02/16/22]seed@VM:~/Labsetup$ echo 10.9.0.5 www.seed-server.com | sudo tee -a /e
tc/hosts
10.9.0.5 www.seed-server.com
[02/16/22]seed@VM:~/Labsetup$ echo 10.9.0.105 www.attacker32.com | sudo tee -a /
etc/hosts
10.9.0.105 www.attacker32.com
[02/16/22]seed@VM:~/Labsetup$ docker-compose up -d
[02/16/22]seed@VM:~/Labsetup$ dockps
cf693d003ee3 mysql-10.9.0.6
6d9d32d6c17c elgg-10.9.0.5
355bb655c8f4 attacker-10.9.0.105
[02/16/22]seed@VM:~/Labsetup$ sudo nano /etc/hosts
```

The command "sudo nano /etc/hosts" is for going into the file and checking if the IP address of the attacker website is correct. We verified that it's 10.9.0.105.

Then these next commands were used to edit the addfriend.html file so that once Alice clicks on the link, Samy is immediately added as Alice's friend.

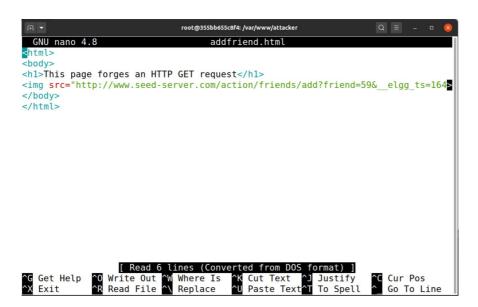
```
[02/16/22]seed@VM:~/Labsetup$ docksh 355bb655c8f4 root@355bb655c8f4:/# cd /var/www/attacker/ root@355bb655c8f4:/var/www/attacker# nano addfriend.html
```

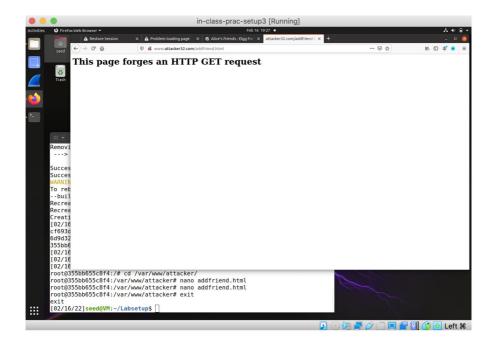


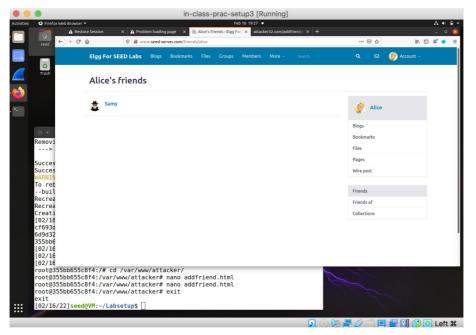


# Before:

## After:







The vulnerabilities we found and how we exploited those vulnerabilities:

## For XSS task 1:

The vulnerability was how we were able to edit html code when we choose to edit the profile.

We exploited it by using javascript code to make an alert pop up.

## For CSRF task 1:

Inside Alice's account, we inspected the element that allowed Alice to add friends. There was a link that enabled Alice to add a friend, so that link was the vulnerability.

To exploit that vulnerability, we copied that link and pasted it into our addfriend.html file so that once Alice clicks on our link, Samy is immediately added as Alice's friend.