Abinet Kenore
CS390P
Fall 2018
HW4

Abstraction/Executive Summary

This assignment was all about how to break into the vulnerable web applications using a Web Goat from OWASP.

In order to break the sites we need three things.

1. Docker
2. OWASPZAP
3. WebGoat vulnerable site via Firefox.

Steps I took: hence I don't have all of the above in my machine I have to install all of them.
First I installed docker in my machine using Homebrew.

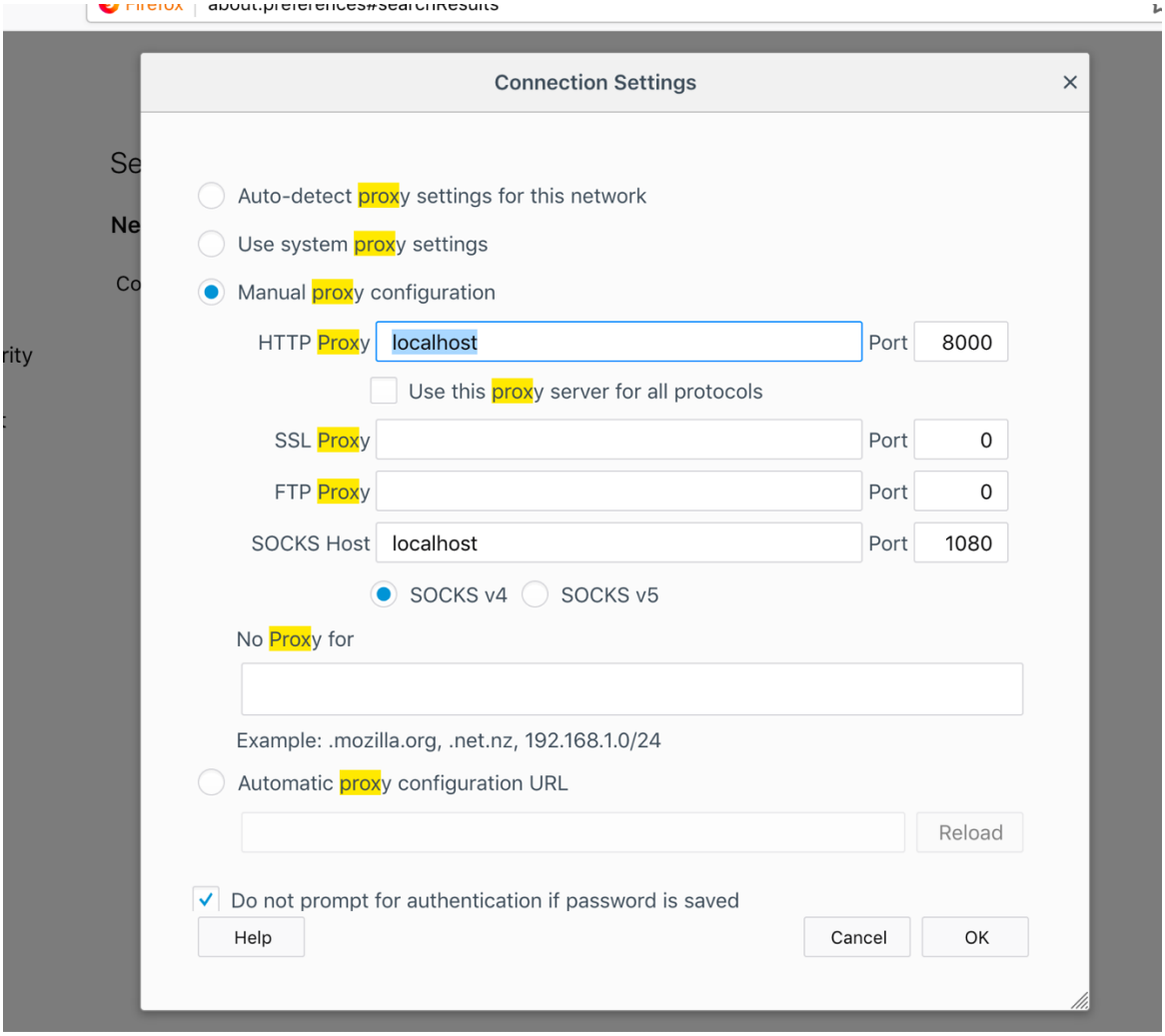
```
To have launchd start docker-machine now and restart at login:
  brew services start docker-machine
Or, if you don't want/need a background service you can just run:
  docker-machine start
==> Summary
🍺  /usr/local/Cellar/docker-machine/0.15.0: 11 files, 32.2MB
In order to verify whether Docker is installed
in you machine you can run the ff commands

Abinets-MacBook-Pro:~ abiken$  docker --version
Docker version 18.03.0-ce, build 0520e24
Abinets-MacBook-Pro:~ abiken$ docker-compose --version
docker-compose version 1.20.1, build 5d8c71b
Abinets-MacBook-Pro:~ abiken$ docker-machine --version
docker-machine version 0.15.0, build b48dc28
Abinets-MacBook-Pro:~ abiken$
```

Second I installed OWASP ZAP the OWASP Zed Attack Proxy Project website and I followed the download instruction. I also downloaded Firefox as well.

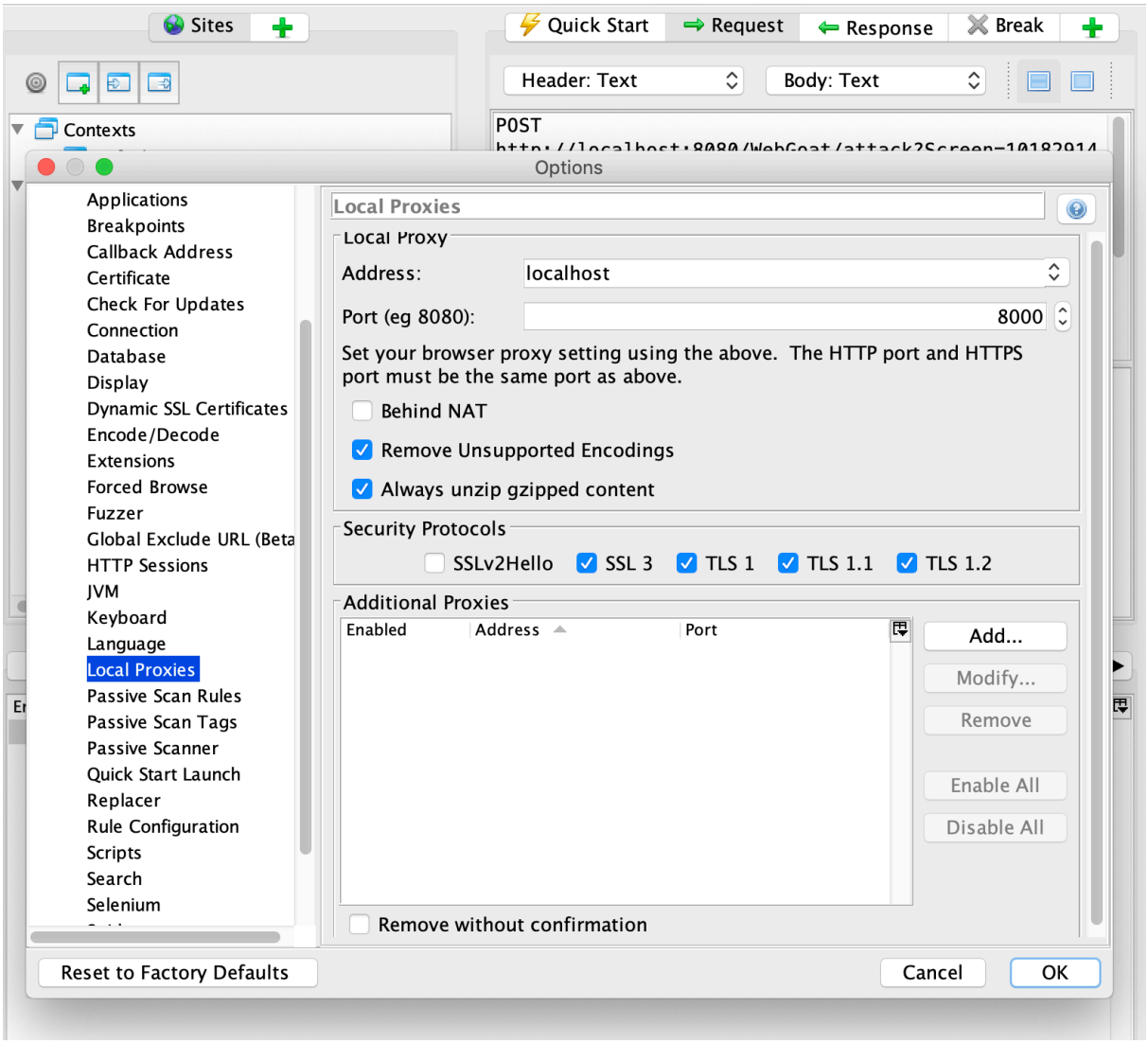
Method

To run webgoat, I needed a container in which it would be put and thus why docker was needed to be installed first. Then
docker run -p 8080:8080 webgoat/webgoat-7.1

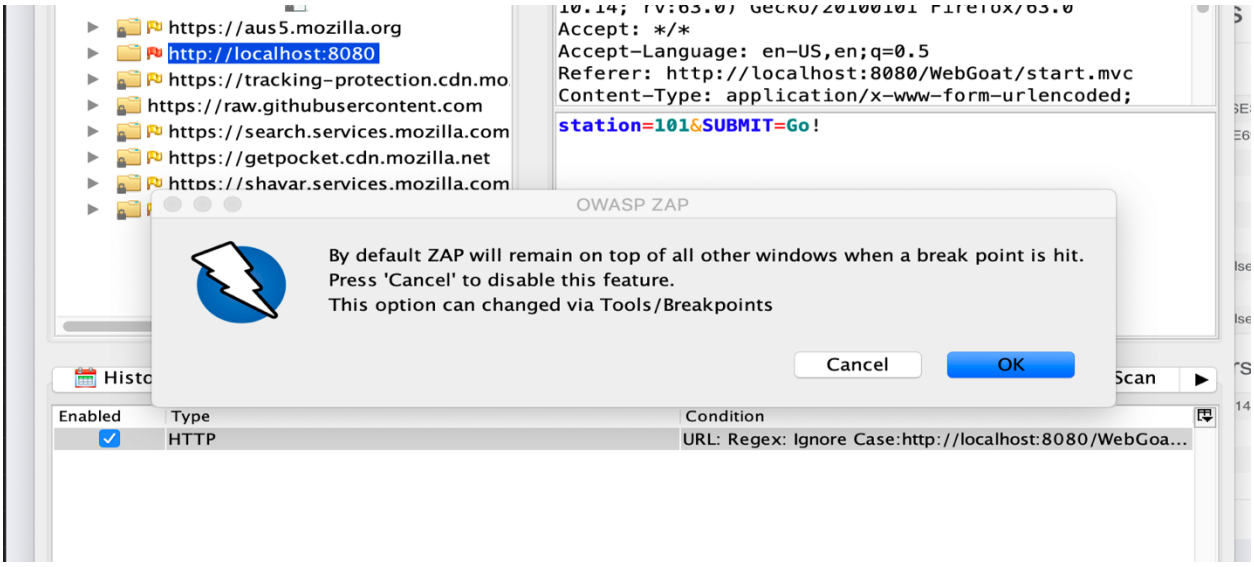
Then after I opened up fire fox configured the proxy as instructed in the PowerPoint from class Lecture



After I configured up the proxy, I fired up zap configured the proxies too. The following screenshot shows what it looks like when you fire up zap.

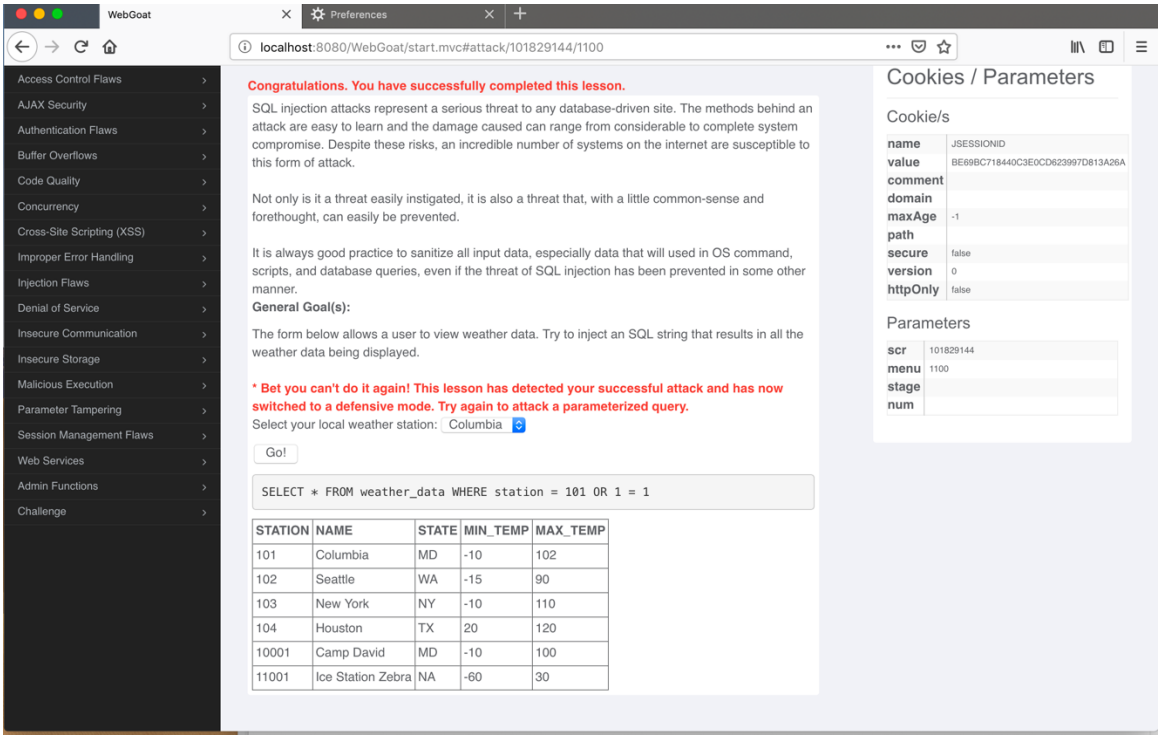


With all configurations done I ran webgoat server and it listened to http://localhost:8080/WebGoat logged in as a guest went to the numeric SQL injection executed the SQL command selecting local weather station as Columbia. Navigated through ZAP got the post broke it and ran it again. And as expected ZAP stopped the submission



Result

As for the result I edited and submitted the SQL command in ZAP and hit play twice, then I got the required results.



The take away from this Homework for me is that how to get around to mess around with the vulnerable sites using necessary tools.

My concern:

If this how easy it is to break into a web sites in realty, then I have to learn a lot as computer programmers in order to keep the sites not breakable easily or the other way around. More needs to be Done to make the world Better.

References

Online

https://docs.docker.com/docker-for-mac/#proxies
https://www.owasp.org/index.php/OWASP_Zed_Attack_Proxy_Project
https://store.docker.com/editions/community/docker-ce-desktop-mac

Dr Beaty's PowerPoints.,