

Exercise 8.1 - Web Server Security

Step 1

```
jordan@ubuntu:~/Downloads$ cd ..
jordan@ubuntu:~$ sudo su
root@ubuntu:/home/jordan# cd /
root@ubuntu:/#
```

I first swapped to the root directory of my machine to install apache

```
root@ubuntu:/# apache2
[Mon Oct 14 12:29:59.209758 2024] [core:warn] [pid 6889] AH00111: Config variable ${APACHE_RUN_DIR} is not defined
apache2: Syntax error on line 80 of /etc/apache2/apache2.conf: DefaultRuntimeDir must be a valid directory, absolute or relative to ServerRoot
root@ubuntu:/#
```

Apache 2 is now installed on my machine

The screenshot shows a terminal window on the left and a web browser window on the right. The terminal window displays the output of the 'systemctl start apache2' command, which includes a list of modules being enabled (mpm_event, authz_core, authz_host, authn_core, auth_basic, access_compat, authn_file, authz_user, alias, dir, autoindex, env, mime, negotiation, setenvif, filter, deflate, status, reqtimeout, charset, localized-error-pages, other-vhosts-access-log, security, serve-cgi-bin) and the successful start of the Apache2 service. The web browser window shows the 'Apache2 Default Page' on 'localhost'. The page features the Ubuntu logo, the text 'It works!', and a 'Configuration Overview' section that explains the default configuration and provides a list of configuration files to be modified.

```
Enabling module mpm_event.
Enabling module authz_core.
Enabling module authz_host.
Enabling module authn_core.
Enabling module auth_basic.
Enabling module access_compat.
Enabling module authn_file.
Enabling module authz_user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service.
Processing triggers for ufw (0.36.1-4ubuntu0.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3) ...
root@ubuntu:/# apache2
[Mon Oct 14 12:29:59.209758 2024] [core:warn] [pid 6889] AH00111: Config variable ${APACHE_RUN_DIR} is not defined
apache2: Syntax error on line 80 of /etc/apache2/apache2.conf: DefaultRuntimeDir must be a valid directory, absolute or relative to ServerRoot
root@ubuntu:/# systemctl start apache2
root@ubuntu:/#
```

Apache2 Default Page

Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

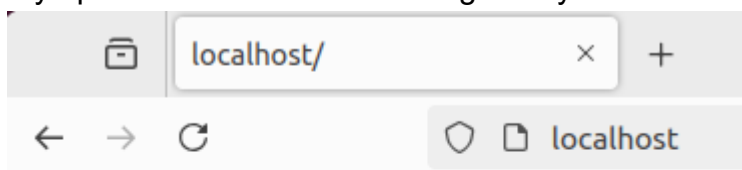
Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in [usr/share/doc/apache2/README.Debian.gz](#)**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
|   |-- ports.conf
|-- mods-enabled
|   |-- *.load
|   |-- *.conf
|-- conf-enabled
|   |-- *.conf
|-- sites-enabled
|   |-- *.conf
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain particular configuration snippets which manage modules, global configuration fragments, or virtual host

My apache server is now running on my localhost



Jordan 10/14/2024

Echoing to the index.html file displays my name and date onto the web server

Step 2

```
root@ubuntu:/# a2enmod ssl
Considering dependency setenvif for ssl:
Module setenvif already enabled
Considering dependency mime for ssl:
Module mime already enabled
Considering dependency socache_shmcb for ssl:
Enabling module socache_shmcb.
Enabling module ssl.
See /usr/share/doc/apache2/README.Debian.gz on how to configure SSL and create self-signed certificates.
To activate the new configuration, you need to run:
    systemctl restart apache2
root@ubuntu:/# a2ensite default-ssl
Enabling site default-ssl.
To activate the new configuration, you need to run:
    systemctl reload apache2
root@ubuntu:/# systemctl restart apache2
root@ubuntu:/#
```

I enabled SSL and default SSL site with apache and restarted my server

[illegible]

```
bin    cdrom  etc     lib
boot  dev       home   lib
root@ubuntu:/#
```

I created a private certificate authority and can see the root-cakey and root-ca.crt files are now created

[illegible]

I created a private key and CSR and now see server.cr and server.key

```
root@ubuntu:/# openssl x509 -req -CA root-ca.crt -CAkey root-ca.key -in server.csr -out server.crt -days 365 -CAcreateserial -extf
ile <(printf "subjectAltName = DNS:localhost\nauthorityKeyIdentifier = keyid,issuer\nbasicConstraints = CA:FALSE\nkeyUsage = digit
alSignature, keyEncipherment\nextendedKeyUsage=serverAuth")
Certificate request self-signature ok
subject=C = US, ST = Denial, L = Earth, O = Dis, CN = anything_but_whitespace
root@ubuntu:/# ls
bin  cdrom  etc  lib  lib64  lost+found  mnt  proc  root-ca.crt  run  server.crt  server.key  srv  sys  usr
boot  dev  home  lib32  libx32  media  opt  root  root-ca.key  sbin  server.csr  snap  swapfile  tmp  var
root@ubuntu:/#
```

I created TLS self signed certificate and now see server.crt

```
root@ubuntu:/# cp server.crt /etc/ssl/certs/ssl-cert-snakeoil.pem
root@ubuntu:/# cp server.key /etc/ssl/private/ssl-cert-snakeoil.key
root@ubuntu:/# systemctl restart apache2
root@ubuntu:/#
```

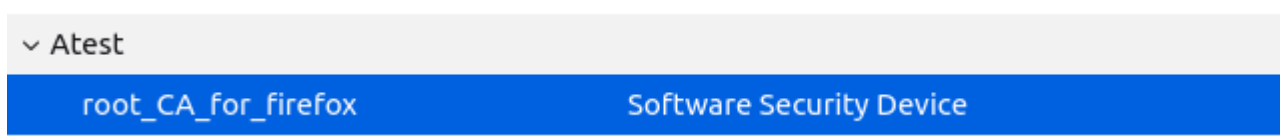
I replaced the default certificate and key for my site



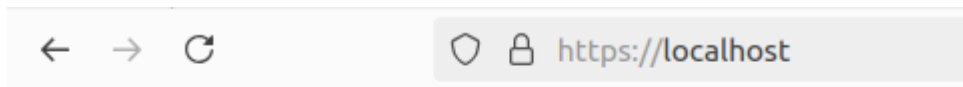
We now get the security risk warning

```
root@ubuntu:/home/jordan/ca# certutil -A -n "My Root CA" -t "C,," -i root-ca.crt -d sql:/home/jordan/snap/firefox/common/.mozilla/
firefox/fq1kgbkr.default/
root@ubuntu:/home/jordan/ca#
```

The instructions never mentioned anything about problems with importing certs with ubuntu firefox but after an hour of troubleshooting I used certutil to directly import the certificate through the terminal.



Now we can finally see the certificate in the cert manager



Jordan 10/14/2024

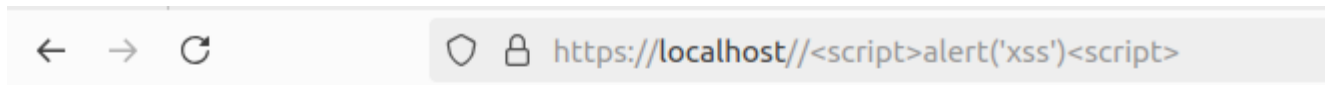
We are able to access the server without warning

Step 3

```
Selecting previously unselected package modsecurity-crs.
Preparing to unpack .../modsecurity-crs_3.3.2-1_all.deb ...
Unpacking modsecurity-crs (3.3.2-1) ...
Setting up modsecurity-crs (3.3.2-1) ...
Setting up liblua5.1-0:amd64 (5.1.5-8.1build4) ...
Setting up libapache2-mod-security2 (2.9.5-1) ...
apache2_invoke: Enable module security2
Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
root@ubuntu:/# apt install libapache2-mod-security2 -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
libapache2-mod-security2 is already the newest version (2.9.5-1).
The following packages were automatically installed and are no longer required:
  gyp libc-ares2 libjs-events libjs-highlight.js libjs-inherits libjs-is-typedarray libjs-psl libjs-source-map libjs-sprintf-js
  libjs-typedarray-to-buffer libnode-dev libnode72 libssl-dev libuv1-dev node-abbrev node-ansi-regex node-ansi-styles
  node-ansistyles node-are-we-there-yet node-arrify node-asap node-asyncify node-balanced-match node-brace-expansion node-chownr
  node-clean-yaml-object node-color-convert node-color-name node-commander node-core-util-is node-decompress-response
  node-delayed-stream node-delegates node-depd node-diff node-encoding node-end-of-stream node-err-code
  node-escape-string-regexp node-fancy-log node-foreground-child node-fs.realpath node-function-bind node-get-stream node-glob
  node-growl node-has-flag node-has-unicode node-hosted-git-info node-iconv-lite node-iferr node-imurmurhash node-indent-string
  node-inflight node-inherits node-ini node-ip node-ip-regex node-is-buffer node-is-plain-obj node-is-typedarray node-isarray
  node-isexe node-json-parse-better-errors node-jsonparse node-kind-of node-lodash-packages node-lowercase-keys node-lru-cache
  node-mimic-response node-minimatch node-minimist node-minipass node-mute-stream node-negotiator node-npm-bundled node-once
  node-osenv node-p-cancelable node-p-map node-path-is-absolute node-process-nexttick-args node-promise-inflight
  node-promise-retry node-promzard node-pump node-quick-lru node-read node-readable-stream node-resolve node-retry
  node-safe-buffer node-set-blocking node-signal-exit node-slash node-slice-ansi node-source-map node-spdex-correct
  node-spdex-exceptions node-spdex-expression-parse node-spdex-license-ids node-sprintf-js node-stealthy-require
  node-string-decoder node-supports-color node-text-table node-time-stamp node-tmatch node-typedarray-to-buffer
  node-universalify node-util-deprecate node-validate-npm-package-license node-webidl-conversions node-whatwg-fetch node-wrapappy
  node-yallist nodejs-doc
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 85 not upgraded.
root@ubuntu:/# mv /etc/modsecurity/modsecurity.conf-recommended /etc/modsecurity/modsecurity.conf
root@ubuntu:/# sed -i 's/SecRuleEngine DetectionOnly/SecRuleEngine On/g' /etc/modsecurity/modsecurity.conf
root@ubuntu:/# systemctl restart apache2
root@ubuntu:/#
```

Installed modsecurity and setup the config file and updated the config file to turn modsecurity blocking mode on

Step 4



Forbidden

You don't have permission to access this resource.

Apache/2.4.52 (Ubuntu) Server at localhost Port 443

Testing xss we see that the request was blocked by the page

8.2 - Secure Coding

Step 1

```
(jordan@kali)-[~]
$ git clone https://github.com/appsecco/dvna
Cloning into 'dvna' ...
remote: Enumerating objects: 645, done.
remote: Total 645 (delta 0), reused 0 (delta 0), pack-reused 645 (from 1)
Receiving objects: 100% (645/645), 3.18 MiB | 6.63 MiB/s, done.
Resolving deltas: 100% (281/281), done.

(jordan@kali)-[~]
$
```

I cloned the dvna repo

Enable Snyk Code

To analyze your code for vulnerabilities we temporarily clone the repository or upload your code.
Cloned or uploaded code is cached according to our [data retention policy](#).

With the Snyk Free Plan, Snyk Code offers unlimited scans for open source projects, and limited tests for 1st-party code. [More details on plans](#)

☒ Enabled

After being enabled, you must import / re-import projects to scan them.

Step 2

After setting up synk, synk code was already enabled

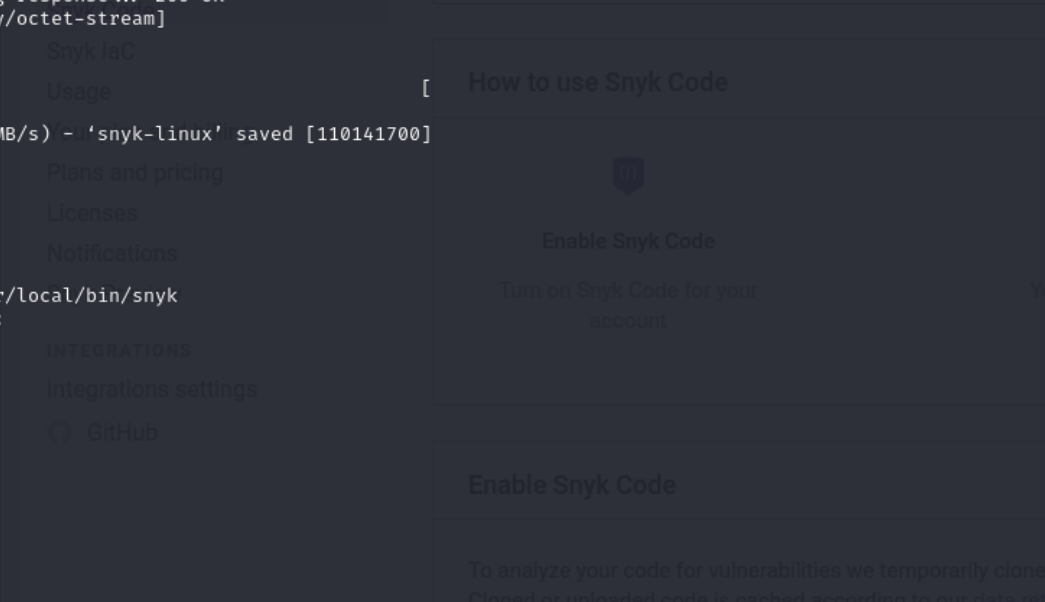
```
(jordan@kali)-[~]
$ wget https://static.snyk.io/cli/latest/snyk-linux
--2024-10-14 14:28:47-- https://static.snyk.io/cli/latest/snyk-linux
Resolving static.snyk.io (static.snyk.io)... 23.38.224.207, 2600:1406:2e00:78d::ecd, 2600:1406:2e00:7a0::ecd
Connecting to static.snyk.io (static.snyk.io)|23.38.224.207|:443 ... connected.
HTTP request sent, awaiting response... 200 OK
Length: unspecified [binary/octet-stream]
Saving to: 'snyk-linux'

snyk-linux
2024-10-14 14:28:58 (9.27 MB/s) - 'snyk-linux' saved [110141700]

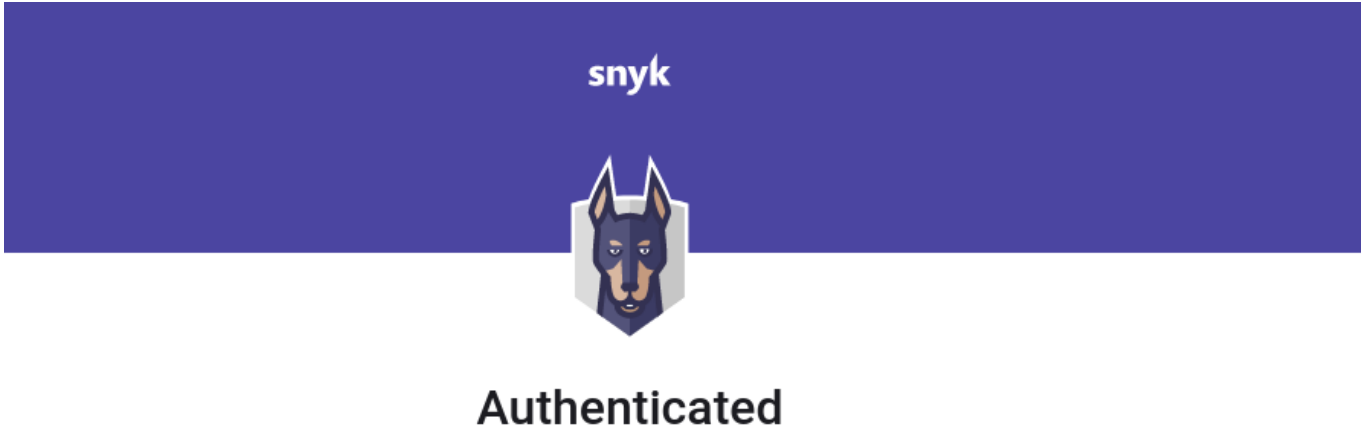
(jordan@kali)-[~]
$ chmod +x snyk-linux

(jordan@kali)-[~]
$ sudo mv snyk-linux /usr/local/bin/snyk
[sudo] password for jordan:

(jordan@kali)-[~]
$
```



Installed synk linux binary and configured it to use



Your account has been authenticated. Snyk is now ready to be used.

After running snyk auth, I was able to authenticate into synk

Step 3


```

(jordan@kali)-[~]
$ snyk test https://github.com/appsecco/dvna

```

Testing https://github.com/appsecco/dvna...

- x Low severity vulnerability found in tar
 Description: Regular Expression Denial of Service (ReDoS)
 Info: <https://security.snyk.io/vuln/SNYK-JS-TAR-1536758>
 Introduced through: bcrypt@1.0.3
 From: bcrypt@1.0.3 > node-pre-gyp@0.6.36 > tar@2.2.2
 From: bcrypt@1.0.3 > node-pre-gyp@0.6.36 > tar-pack@3.4.1 > tar@2.2.2
- x Medium severity vulnerability found in validator
 Description: Regular Expression Denial of Service (ReDoS)
 Info: <https://security.snyk.io/vuln/SNYK-JS-VALIDATOR-1090599>
 Introduced through: sequelize@4.44.4
 From: sequelize@4.44.4 > validator@10.11.0
- x Medium severity vulnerability found in validator
 Description: Regular Expression Denial of Service (ReDoS)
 Info: <https://security.snyk.io/vuln/SNYK-JS-VALIDATOR-1090601>
 Introduced through: sequelize@4.44.4
 From: sequelize@4.44.4 > validator@10.11.0
- x Medium severity vulnerability found in validator
 Description: Regular Expression Denial of Service (ReDoS)
 Info: <https://security.snyk.io/vuln/SNYK-JS-VALIDATOR-1090602>
 Introduced through: sequelize@4.44.4
 From: sequelize@4.44.4 > validator@10.11.0
- x Medium severity vulnerability found in tough-cookie
 Description: Prototype Pollution
 Info: <https://security.snyk.io/vuln/SNYK-JS-TOUGHCOOKIE-5672873>
 Introduced through: bcrypt@1.0.3
 From: bcrypt@1.0.3 > node-pre-gyp@0.6.36 > request@2.88.2 > tough-cookie@2.5.0
- x Medium severity vulnerability found in tar
 Description: Uncontrolled Resource Consumption ('Resource Exhaustion')
 Info: <https://security.snyk.io/vuln/SNYK-JS-TAR-6476909>
 Introduced through: bcrypt@1.0.3
 From: bcrypt@1.0.3 > node-pre-gyp@0.6.36 > tar@2.2.2
 From: bcrypt@1.0.3 > node-pre-gyp@0.6.36 > tar-pack@3.4.1 > tar@2.2.2
- x Medium severity vulnerability found in sequelize
 Description: Information Exposure
 Info: <https://security.snyk.io/vuln/SNYK-JS-SEQUELIZE-3324089>
 Introduced through: sequelize@4.44.4
 From: sequelize@4.44.4
- x Medium severity vulnerability found in sequelize
 Description: Access of Resource Using Incompatible Type ('Type Confusion')
 Info: <https://security.snyk.io/vuln/SNYK-JS-SEQUELIZE-3324090>
 Introduced through: sequelize@4.44.4

After running snyk test a large amount of security risks were found

```
x High severity vulnerability found in mathjs
Description: Arbitrary Code Execution
Info: https://security.snyk.io/vuln/npm:mathjs:20171118
Introduced through: mathjs@3.10.1
From: mathjs@3.10.1
```

Let's take a look at this mathjs vulnerability

It is an Arbitrary Coded Execution vulnerability with a 7.3 CVSS rating so it is pretty high.

Mathijjs is a math library for javascript and node.js. It is an easy fix and can be fixed by simply upgrading mathjs to 3.17.0 or higher. Affected versions of the package are vulnerable to arbitrary code execution by the typed-function. A user can execute arbitrary code in the JS engine by creating a typed function with JS code in the name.

Step 4

```
jordan@kali:~/dvna
$ snyk code test

Testing /home/jordan/dvna ...

x [Low] Sensitive Cookie in HTTPS Session Without 'Secure' Attribute
Path: server.js, line 27
Info: Cookie has the Secure attribute set to false. Set it to true to protect the cookie from man-in-the-middle attacks.

x [Low] Use of Password Hash With Insufficient Computational Effort
Path: core/authHandler.js, line 49
Info: MD5 hash (used in md5) is insecure. Consider changing it to a secure hashing algorithm.

x [Low] Use of Password Hash With Insufficient Computational Effort
Path: core/authHandler.js, line 78
Info: MD5 hash (used in md5) is insecure. Consider changing it to a secure hashing algorithm.

x [Low] Improper Type Validation
Path: core/appHandler.js, line 150
Info: The type of this object, coming from body and the value of its length property can be controlled by the user. An attacker may craft the properties of the object to crash the application or bypass its logic. Consider c
e type of the object.

x [Low] Improper Type Validation
Path: core/appHandler.js, line 151
Info: The type of this object, coming from body and the value of its length property can be controlled by the user. An attacker may craft the properties of the object to crash the application or bypass its logic. Consider c
e type of the object.

x [Medium] Information Exposure
Path: server.js, line 11
Info: Disable X-Powered-By header for your Express app (consider using Helmet middleware), because it exposes information about the used framework to potential attackers.

x [Medium] Open Redirect
Path: core/appHandler.js, line 188
Info: Unsantitized input from an HTTP parameter flows into redirect, where it is used as a URL to redirect the user. This may result in an Open Redirect vulnerability.

x [Medium] Cross-Site Request Forgery (CSRF)
Path: server.js, line 11
Info: CSRF protection is disabled for your Express app. This allows the attackers to execute requests on a user's behalf.

x [Medium] Cross-site Scripting (XSS)
Path: views/app/adminusers.ejs, line 40
Info: Unsantitized input from data from a remote resource flows into innerHTML, where it is used to dynamically construct the HTML page on client side. This may result in a DOM Based Cross-Site Scripting attack (DOMXSS).

x [Medium] Cross-site Scripting (XSS)
Path: views/app/adminusers.ejs, line 41
Info: Unsantitized input from data from a remote resource flows into innerHTML, where it is used to dynamically construct the HTML page on client side. This may result in a DOM Based Cross-Site Scripting attack (DOMXSS).

x [Medium] Cross-site Scripting (XSS)
Path: views/app/adminusers.ejs, line 42
```

running another snyk scan in the dvna directory we see many vulnerabilities again

```
x [High] SQL Injection
Path: core/appHandler.js, line 11
Info: Unsantitized input from the HTTP request body flows into query, where it is used in an SQL query. This may result in an SQL Injection vulnerability.
```

Let's take a look at this one. SQL injection is an attack where an adversary can type into an input box and escape the input box by inputting a SQL closing/opening char to input a SQL query. This app is vulnerable because it does not sanitize the input from the http request body meaning queries can be made by anyone maliciously. SQLi can be detected by using prepared statements or parameterized queries to prevent malicious input from being executed as SQL

8.3 - DAST Scan

Step 1


```
(jordan@kali)-[~/dvna]
$ docker

Usage:  docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Common Commands:
run      Create and run a new container from an image
exec     Execute a command in a running container
ps       List containers
build    Build an image from a Dockerfile
pull     Download an image from a registry
push     Upload an image to a registry
images   List images
login    Log in to a registry
logout   Log out from a registry
search   Search Docker Hub for images
version  Show the Docker version information
info     Display system-wide information
```

Docker is already installed on my machine

```
(jordan@kali)-[~/dvna]
$ sudo usermod -aG docker jordan
```

I added jordan to the docker group so they can use docker commands

Step 2

```
(jordan@kali)-[~]
$ docker run --name dvna -p 9090:9090 -d appsecco/dvna:sqlite
Unable to find image 'appsecco/dvna:sqlite' locally
sqlite: Pulling from appsecco/dvna
57936531d1ee: Pull complete
b186cf19f9ed: Pull complete
eadbf8312262: Pull complete
cf528b18b6ce: Pull complete
075c4f074e90: Pull complete
d0562d9451f1: Pull complete
48671e1607ad: Pull complete
4879e9b180ec: Pull complete
4bcad28e8244: Pull complete
```

IK first ran the dvna docker container and forwarded it to port 9090

Login

Login

Password

[Register a new account](#)[Forgot password](#)

♥ Damn Vulnerable NodeJS Application

The page looks to be a simple login page

```
(jordan@kali)-[~]
$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:c3:3e:30 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.37/24 brd 192.168.1.255 scope global dynamic noprefixroute eth0
        valid_lft 86187sec preferred_lft 86187sec
    inet6 fe80::a00:27ff:fec3:3e30/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
3: docker0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether 02:42:d0:02:fc:46 brd ff:ff:ff:ff:ff:ff
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
        valid_lft forever preferred_lft forever
    inet6 fe80::42:d0ff:fe02:fc46/64 scope link proto kernel_ll
        valid_lft forever preferred_lft forever
5: vethcf9e0a5aif4: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master docker0 state UP group default
    link/ether 56:24:80:53:05:a1 brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet6 fe80::5424:80ff:fe53:5a1/64 scope link proto kernel_ll
        valid_lft forever preferred_lft forever
```

```
(jordan@kali)-[~]
$
```

My eth0 ip is 192.168.1.37

```

[jordan@kali:~]$ docker run --user $(id -u) --rm -v $(pwd):/dastardly -e DASTARDLY_TARGET_URL=http://192.168.1.37:9090/ -e DASTARDLY_OUTPUT_FILE=/dastardly/dastardly-report.xml public.ecr.aws/portswigger/dastardly:latest
Unable to find image 'public.ecr.aws/portswigger/dastardly:latest' locally
latest: Pulling from portswigger/dastardly
5dcd924910be: Pull complete
eb7adb7470c6: Pull complete
76046a519ec5: Pull complete
58c254582221: Pull complete
f5dc8de50809: Pull complete
aaab8eb8b035: Pull complete
5b86a0188786: Pull complete
b8d797cb2b6f: Pull complete
4f4fb70eef4a: Pull complete
5dcd964b8fb4: Pull complete
57899c1a1ef: Pull complete
e213e3ba65b8: Pull complete
72a49882d998: Pull complete
dd9f51ef9d1b: Pull complete
87b5b88586f2: Pull complete
Digest: sha256:5d7d8d1eb7cbce91e57a73ff0ed5aaff7a548355edff3b0ea16fbfb
Status: Downloaded newer image for public.ecr.aws/portswigger/dastardly:latest

```

[illegible]

Installing or running Dastardly affirms your agreement to the Terms of Service <https://portswigger.net/burp/dastardly/eula>

```

2024-10-14 22:51:15 INFO dastardly.StartDastardly - Using Java version 21.0.4
2024-10-14 22:51:15 WARN D.DeprecatedEnvironmentVariableMapper - The environment variable DASTARDLY_OUTPUT_FILE is deprecated - please use BURP_REPORT_FILE_PATH instead. Treating DASTARDLY_OUTPUT_FILE as BURP_REPORT_FILE_PATH.
2024-10-14 22:51:15 WARN D.DeprecatedEnvironmentVariableMapper - The environment variable DASTARDLY_TARGET_URL is deprecated - please use BURP_TARGET_URL instead. Treating DASTARDLY_TARGET_URL as BURP_TARGET_URL.
2024-10-14 22:51:16 PM java.util.Properties$FileOutputStream$PreferencesImpl run
bsee.BurpProcess.scan-scanner-1 [10/14/2024 18:51:16 PM] java.util.Properties$FileOutputStream$PreferencesImpl run
bsee.BurpProcess.scan-scanner-1 [INFO: Created user preferences directory.
2024-10-14 22:51:21 INFO bsee.BurpProcess.scan-scanner-1 2024-10-14 10:51:21: REST API running on [localhost:45799]
2024-10-14 22:51:21 INFO bsee.BurpProcess.scan-scanner-1 [Thread: 392] 2024-10-14 10:51:21:124 40485951389, net.portswigger.zh INFO - connectedSocket, opened new socket: 1348376212
2024-10-14 22:51:21 INFO bsee.BurpProcess.scan-scanner-1 [Thread: 397] 2024-10-14 10:51:22:124 40485951389, net.portswigger.zh INFO - Closing socket due to timeout: 1348376212
2024-10-14 22:51:22 INFO bsee.BurpProcess.scan-scanner-1 [Thread: 397] 2024-10-14 10:51:22:124 40485951606, net.portswigger.zh INFO - Closing socket: 1348376212
2024-10-14 22:51:22 INFO bsee.BurpProcess.scan-scanner-1 [Thread: 397] 2024-10-14 10:51:22:124 40486629091, net.portswigger.zh INFO - Socket closed: 1348376212
2024-10-14 22:51:22 INFO bsee.BurpProcess.scan-scanner-1 2024-10-14 10:51:22: Failed to send HEADY heartbeat to [127.0.0.1:1234/4046656f-3e78-48f0-9837-52b93b9d6df1/api/heartbeat
2024-10-14 22:51:22 INFO bsee.BurpProcess.scan-scanner-1 java.net.SocketTimeoutException: Communication timed out: sent = true, receivedEmptyResponse = true, timedOut = true
2024-10-14 22:51:22 INFO bsee.BurpProcess.scan-scanner-1 at net.portswigger.zh.ZhSocketSource
2024-10-14 22:51:22 INFO bsee.BurpProcess.scan-scanner-1 at net.portswigger.zh.ZhSocketSource$Zu(Unknown Source)
2024-10-14 22:51:22 INFO bsee.BurpProcess.scan-scanner-1

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[illegible]

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2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/javaw.swing.table.AbstractTableModel.fireTableChanged(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zd11.fireTableChanged(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/javaw.swing.table.AbstractTableModel.fireTableRowsUpdated(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zd11.fireTableRowsUpdated(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zdik.fireTableRowsUpdated(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zdis.Zx(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zexl.ZY(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zav.lambda$nodeUpdated$22(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.event.InvocationEvent.dispatch(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventQueue.dispatchEventImpl(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventQueue$4.run(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventQueue$4.run(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/java.security.AccessController.doPrivileged(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventQueue.dispatchEvent(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventDispatchThread.pumpOneEventForFilters(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventDispatchThread.pumpEventsForFilter(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventDispatchThread.pumpEventsForHierarchy(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventDispatchThread.pumpEvents(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/java.awt.EventDispatchThread.run(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - java.lang.IndexOutOfBoundsException: Index 4 out of bounds for length 4
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/jdk.internal.util.Preconditions.outOfBounds(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/jdk.internal.util.Preconditions.outOfBoundsCheckIndex(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/jdk.internal.util.Preconditions.checkIndex(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/java.util.Objects.checkIndex(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/java.util.ArrayList.get(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at com.sun.java.collections.ObservableListWrapper.get(ObservableListWrapper.java:88)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zd11.lambda$getNodeValueAt$5(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zfwu.Zw(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zd11.Zm(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zz7z.Zc(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zvfh.Ze(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zf8m.Zr(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zf8m.compareTo(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/java.util.Arrays.binarySearch0(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.base/java.util.Arrays.binarySearch(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zvfh.ZY(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zvfh.ZJ(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zvfh.rowsUpdated(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zygg.lambda$rowsUpdated$6(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zfwu.Zq(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zygg.rowsUpdated(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/javaw.swing.JTable.notifySorter(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/javaw.swing.JTable.sortedTableChanged(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/javaw.swing.JTable.tableChanged(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/javaw.swing.table.AbstractTableModel.fireTableChanged(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zd11.fireTableChanged(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at java.desktop/javaw.swing.table.AbstractTableModel.fireTableRowsUpdated(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zd11.fireTableRowsUpdated(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zdik.fireTableRowsUpdated(Unknown Source)
2024-10-14 22:51:25 INFO bsee.BurpProcess.scan.scan-1 - at burp.Zdis.Zx(Unknown Source)

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2024-10-14 22:51:26 INFO bsee.BurpProcess.scan.scan-1 - [Thread: 110] 2024-10-14 10:51:26.892 414885742796, net.portswigger.Zdt INFO - connectedSocket, opened new socket: 1931756092
2024-10-14 22:51:26 INFO b.s.LoggingScanProgressCollector - Event log updated:
2024-10-14 22:51:26 INFO b.s.LoggingScanProgressCollector - 2024-10-14 22:51:23 INFORMATION - Crawl started.
2024-10-14 22:51:26 INFO b.s.LoggingScanProgressCollector - 2024-10-14 22:51:24 DEBUG - cdnjs.cloudflare.com is using HTTP/2
2024-10-14 22:51:26 INFO b.s.LoggingScanProgressCollector - 2024-10-14 22:51:24 DEBUG - maxcdn.bootstrapcdn.com is using HTTP/2
2024-10-14 22:51:26 INFO bsee.BurpProcess.scan.scan-1 - Received metric CRAWLING 0 3
2024-10-14 22:51:31 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:31 CRAWLING → crawlUniqueLocationsVisited:6, crawlRequestsMade:59, auditQueueItemsWaiting:0, auditQueueItemsCompleted:0, auditRequestsMade:0, insertionPointCount:0
2024-10-14 22:51:31 INFO bsee.BurpProcess.scan.scan-1 - Received metric CRAWLING 0 6
2024-10-14 22:51:32 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:32 Crawl finished
2024-10-14 22:51:32 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:32 Audit started
2024-10-14 22:51:36 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:36 AUDITING → crawlUniqueLocationsVisited:7, crawlRequestsMade:62, auditQueueItemsWaiting:9, auditQueueItemsCompleted:2, auditRequestsMade:212, insertionPointCount:110
2024-10-14 22:51:36 INFO b.s.LoggingScanProgressCollector - Event log updated:
2024-10-14 22:51:36 INFO b.s.LoggingScanProgressCollector - 2024-10-14 22:51:32 INFORMATION - Crawl finished.
2024-10-14 22:51:36 INFO b.s.LoggingScanProgressCollector - 2024-10-14 22:51:32 INFORMATION - Identifying items to audit.
2024-10-14 22:51:36 INFO b.s.LoggingScanProgressCollector - Issue identified. Path: /login, Issue Type: Vulnerable JavaScript dependency, Severity: LOW
2024-10-14 22:51:36 INFO b.s.LoggingScanProgressCollector - Issue identified. Path: /register, Issue Type: Vulnerable JavaScript dependency, Severity: LOW
2024-10-14 22:51:36 INFO b.s.LoggingScanProgressCollector - Issue identified. Path: /forgotpw, Issue Type: Vulnerable JavaScript dependency, Severity: LOW
2024-10-14 22:51:36 INFO b.s.LoggingScanProgressCollector - Issue identified. Path: /assets/jquery-3.2.1.min.js, Issue Type: Vulnerable JavaScript dependency, Severity: LOW
2024-10-14 22:51:36 INFO bsee.BurpProcess.scan.scan-1 - Received metric AUDITING 212 7
2024-10-14 22:51:41 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:41 AUDITING → crawlUniqueLocationsVisited:7, crawlRequestsMade:62, auditQueueItemsWaiting:3, auditQueueItemsCompleted:8, auditRequestsMade:355, insertionPointCount:110
2024-10-14 22:51:41 INFO bsee.BurpProcess.scan.scan-1 - Received metric AUDITING 355 7
2024-10-14 22:51:46 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:46 AUDITING → crawlUniqueLocationsVisited:7, crawlRequestsMade:62, auditQueueItemsWaiting:1, auditQueueItemsCompleted:10, auditRequestsMade:408, insertionPointCount:110
2024-10-14 22:51:46 INFO bsee.BurpProcess.scan.scan-1 - Received metric AUDITING 408 7
2024-10-14 22:51:47 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:47 Audit finished
2024-10-14 22:51:51 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:51 SUCCEEDED → crawlUniqueLocationsVisited:7, crawlRequestsMade:62, auditQueueItemsWaiting:0, auditQueueItemsCompleted:11, auditRequestsMade:410, insertionPointCount:110
2024-10-14 22:51:51 INFO b.s.LoggingScanProgressCollector - Event log updated:
2024-10-14 22:51:51 INFO b.s.LoggingScanProgressCollector - 2024-10-14 22:51:47 INFORMATION - Audit finished.
2024-10-14 22:51:51 INFO bsee.BurpProcess.scan.scan-1 - Received metric SUCCEEDED 410 7
2024-10-14 22:51:51 INFO b.s.LoggingScanProgressCollector - Scan has completed successfully
2024-10-14 22:51:52 INFO b.s.EventLogPrintingScanProgressCollector - Oct 14 2024 22:51:23 INFORMATION Crawl started.
2024-10-14 22:51:52 INFO b.s.EventLogPrintingScanProgressCollector - Oct 14 2024 22:51:24 DEBUG cdnjs.cloudflare.com is using HTTP/2
2024-10-14 22:51:52 INFO b.s.EventLogPrintingScanProgressCollector - Oct 14 2024 22:51:24 DEBUG maxcdn.bootstrapcdn.com is using HTTP/2
2024-10-14 22:51:52 INFO b.s.EventLogPrintingScanProgressCollector - Oct 14 2024 22:51:32 INFORMATION Crawl finished.
2024-10-14 22:51:52 INFO b.s.EventLogPrintingScanProgressCollector - Oct 14 2024 22:51:32 INFORMATION Identifying items to audit.
2024-10-14 22:51:52 INFO b.s.EventLogPrintingScanProgressCollector - Oct 14 2024 22:51:32 INFORMATION Audit started.
2024-10-14 22:51:52 INFO b.s.EventLogPrintingScanProgressCollector - Oct 14 2024 22:51:47 INFORMATION Audit finished.
2024-10-14 22:51:52 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:52 Burp shutting down due to DELETE request
2024-10-14 22:51:52 INFO bsee.BurpProcess.scan.scan-1 - Deleting temporary files - please wait ... done.
2024-10-14 22:51:55 INFO bsee.BurpProcess.scan.scan-1 - 2024-10-14 10:51:55 Burp shutdown because Project was closed / suite was told to exit
2024-10-14 22:51:56 INFO dastardly.ScanManager - Scan finished, exiting
2024-10-14 22:51:56 ERROR dastardly.ScanFinishedHandler - Failing build as scanner identified issue(s) with severity higher than "INFO":
2024-10-14 22:51:56 ERROR dastardly.ScanFinishedHandler - Path: /register Issue Type: Vulnerable JavaScript dependency Severity: LOW
2024-10-14 22:51:56 ERROR dastardly.ScanFinishedHandler - Path: /forgotpw Issue Type: Vulnerable JavaScript dependency Severity: LOW
2024-10-14 22:51:56 ERROR dastardly.ScanFinishedHandler - Path: /assets/jquery-3.2.1.min.js Issue Type: Vulnerable JavaScript dependency Severity: LOW
2024-10-14 22:51:56 ERROR dastardly.ScanFinishedHandler - Path: /login Issue Type: Vulnerable JavaScript dependency Severity: LOW

```

Looks like the scan found a few LOW findings. Particularly in the /login /register /forgotpw and /assets. There is vulnerable javascript code. This scan cannot go to authenticated pages unless we login.