Academic Year: 2025-26

Semester: V

Class / Branch/ Div: TEIT C

Subject: ADL Lab

Name of Student: Shreya Sonawale

Student ID:23104134

Roll No.43

Date of Submission:19/09/25

Experiment No: 07

Aim: To understand Static Analysis SAST process and learn to integrate Jenkins SAST to SonarQube/GitLab.

Software Used: ubuntu

Code & Output:

```
Microtower-PC:-$ wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key add
  Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
  apsit@apsit-HP-280-Pro-G6-Microtower-PC:-$ sudo sh -c 'echo deb http:pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d/jenkins.list'
   psit@apsit-HP-280-Pro-G6-Microtower-PC:~S sudo apt update
  Hit:1 https://deb.nodesource.com/node_20.x nodistro InRelease
  Hit:2 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Get:3 http://tn.archive.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu jammy-security InRelease [128 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [54.5 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 DEP-11 Metadata [208 B]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [112 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [112 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [112 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [128 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 DEP-11 Metadata [212 B]
Get:11 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 DEP-11 Metadata [359 kB]
Hit:12 https://packages.microsoft.com/repos/code stable InRelease
Get:13 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 DEP-11 Metadata [208 B]
Hit:14 https://di.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 DEP-11 Metadata [940 B]
Get:16 http://in.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 DEP-11 Metadata [940 B]
  Get:16 http://in.archive.ubuntu.com/ubuntu jammy-backports/main amd64 DEP-11 Metadata [7,084 B]
  Get:17 http://in.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 DEP-11 Metadata [212 B]
Get:18 thtp://in.archive.ubuntu.com/ubuntu jammy-backports/restricted amode DEP-11 Metadata [212 B]
Get:19 http://in.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 DEP-11 Metadata [26.0 kB]
Ign:20 https://pkg.jenkins.io/debian-stable binary/ InRelease
Hit:21 https://pkg.jenkins.io/debian-stable binary/ Release
Fetched 1,870 kB in 12s (87.2 kB/s)
Panding nackaga litts | Deno
   leading package lists... Done
 Building dependency tree... Done
 Reading state information... Done
20 packages can be upgraded. Run 'apt list --upgradable' to see them.
N: Skipping acquire of configured file 'main/binary-i386/Packages' as repository 'https://deb.nodesource.com/node_20.x nodistro InRelease' doesn't support architecture
     http://pkg.jenkins.io/debian-stable/binary/Release.gpg: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8)
```

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```
apsit@psit=HP-280-Pro-Gd-Microtower-PC:-$ sudo apt install jenkins
Reading package lists... Done
Building dependency tree... Done
Beading state information... Done
Beading state information... Done
Jenkins is already the newest version (2.516.3).
0 upgraded, 0 nexly installed, 0 to renove and 20 not upgraded.

apsit@psit=HP-280-Pro-Gd-Microtower-PC:-$ sudo systemctl start jenkins
apsit@psit-HP-280-Pro-Gd-Microtower-PC:-$ sudo systemctl status jenkins

plenkins is already the newest version (2.516.3).
0 pontanes in a street of loaded (/lib/system/system/jenkins.service; enabled; vendor preset: enabled)
Active: active (running) since Fri 2025-09-26 12:37:48 IST; 6min ago
Main PDI: 1090 (java)
Tasks: 59 (linti: 9222)
Memory: 401.8M

CPU: 22.8925
CGroup: /system.silice/jenkins.service
-jav /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: at hudson.nodel.UpdateSite.updateDirectlyMow(UpdateSite.java:235)
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: at hudson.PluginManager.checkUpdateSserver(PluginManager.java:2150)
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: at hudson.outll.ketrier.start(Retrier.java:02)
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: at hudson.outll.ketrier.start(Retrier.java:02)
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: at hudson.outll.ketrier.start(Retrier.java:02)
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: at jenkins.DailyCheck.excute(DailyCheck.java:93)
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: at jenkins.DailyCheck.excute(DailyCheck.java:93)
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: at java.base/java.lang.hrread.run(Thread.java:840)
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: 2025-09-26 07:07:54.495+0000 [id-71]
NFO hudson.utll.Retriersstart: Calling the listeme
Sep 26 12:37:54 apsit-HP-280-Pro-Gd-Microtower-PC jenkins[1990]: 2025-09-2
```

```
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ sudo systemctl status jenkins
    jenkins.service - Jenkins Continuous Integration Server
     Dia Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor prese>
                  Active: active (running) since Fri 2025-09-19 13:38:29 IST; 1min 16s ago
            Main PID: 6422 (java)
                    Tasks: 56 (limit: 9222)
                  Memory: 831.6M
                           CPU: 28.442s
                  CGroup: /system.slice/jenkins.service
—6422 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java>
 Sep 19 13:38:29 apsit-HP-280-Pro-G6-Microtower-PC jenkins[6422]: 2025-09-19 08:>
Sep 19 13:38:29 apsit-HP-280-Pro-G6-Microtower-PC jenkins[6422]: 2025-09-19 08:>
 Sep 19 13:38:29 apsit-HP-280-Pro-G6-Microtower-PC jenkins[6422]: 2025-09-19 08:
Sep 19 13:38:29 apsit-HP-280-Pro-Go-Microtower-PC jenkins[6422]: 2025-09-19 08: Sep 19 13:38:29 apsit-HP-280-Pro-G6-Microtower-PC systemd[1]: Started Jenkins C Sep 19 13:38:44 apsit-HP-280-Pro-G6-Microtower-PC jenkins[6422]: 2025-09-19 08: Sep 19 13:38:48 apsit-HP-280-Pro-G6-Microtower-PC jenkins[6422]: 2025-09-19 08: Sep 19 13:38:50 apsit-HP-280-Pro-G6-Microtower-PC jenkins[6422]: 2025-09-19 08: Sep 19 13:38:54 apsit-HP-280-Pro-G6-Microtower-PC jenkins[6422]: 2025-09-19 08: Sep 19 13:38:48 apsit-HP-280-Pro-G6-Microtower
 Sep 19 13:38:54 apsit-HP-280-Pro-G6-Microtower-PC jenkins[6422]: 2025-09-19 08:>
  apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ sudo ufw allow 8080
 Skipping adding existing rule
 Skipping adding existing rule (v6)
```

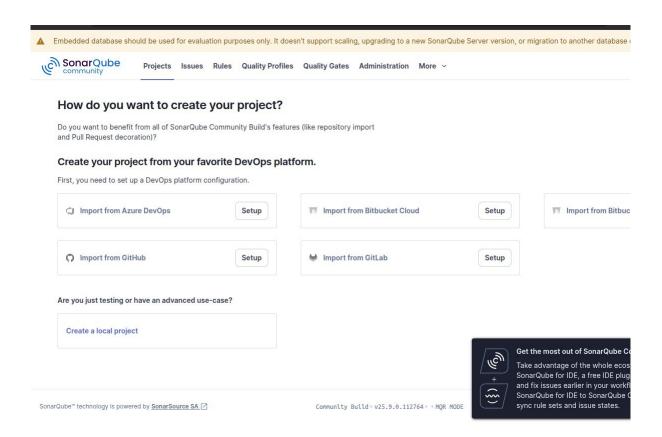
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psit-HP-280-Pro-G6-Microtower-PC:-\$ docker run -d -p 9000:9000 sonarqube
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%ZFvar%ZFrun%ZFdocker.sock/_ping": dial unix
n/docker.sock: connect: permission denied 'docker run --help' for more information psttgapstt-HP-280-Pro-Go-Microtower-PC:-5 % udo nano /var/lib/jenkins/config.xml ssttgapstt-HP-280-Pro-Go-Microtower-PC:-5 sudo systemctl start jenkins ssttgapstt-HP-280-Pro-Go-Microtower-PC:-5 sudo docker run -d -p 9000:9000 sonarqube ef1248dae421f862c7919680df89a0837f7be3705deb8bbcbbb76ad679387a3



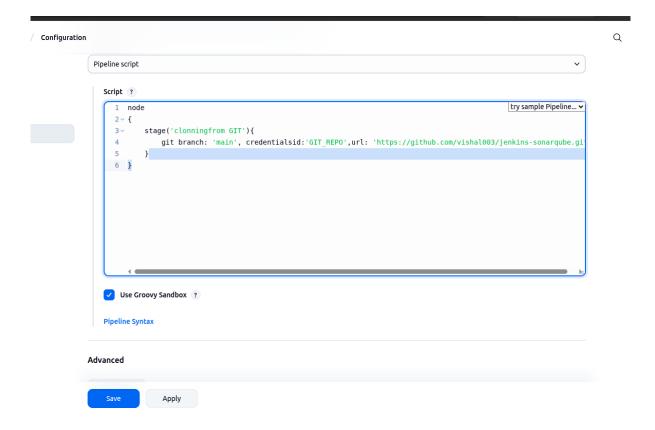


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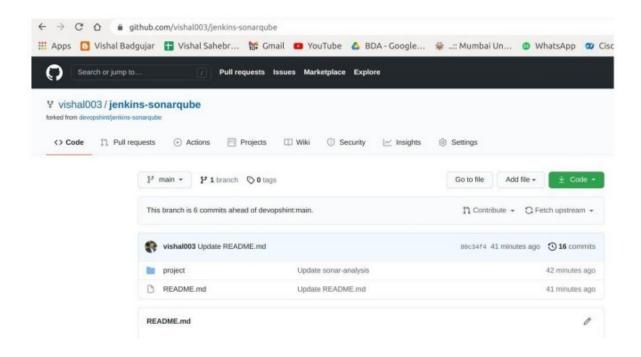


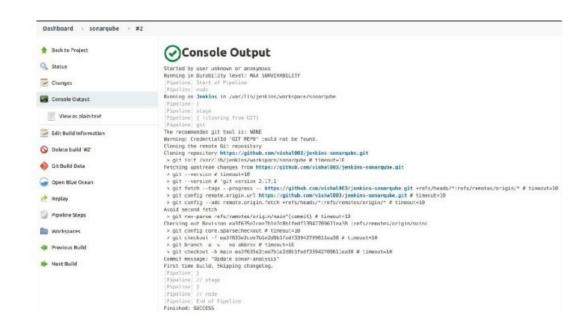
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Conclusion: In this experiment, we learned to find all the relvant information on selected websites using network