

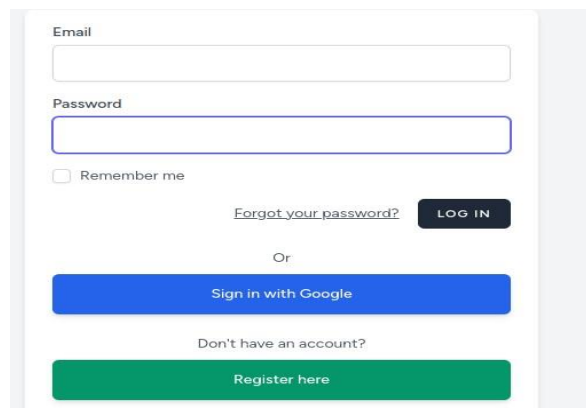
Name: Naveen Kumar Reddy Bhavanam

Student id :11823630

Vulnerability Assessment of Secure E-commerce Project

Preparation:

<https://mysqlproject.com/>



The image shows a login and registration form for the website mysqlproject.com. The form is centered on a light gray background. It features two input fields: 'Email' and 'Password'. Below the password field is a checkbox labeled 'Remember me'. To the right of the password field is a link 'Forgot your password?' and a dark blue 'LOG IN' button. Below these is a blue button labeled 'Sign in with Google'. At the bottom, there is a green button labeled 'Register here' and a link 'Don't have an account?' above it.

Subscription management:

Users with an interest in accessing these services can pay within the application using secure Stripe, or they can select one of two possible subscription types: monthly or annual.

User profile management:

MysqlProject

HomeProfileLogout

User Profile

B

Name: bala_22

Email: pasabalabala22@gmail.com

Joined: 06 Nov, 2024

Plan: Free tier

Name

bala_22

Email

pasabalabala22@gmail.com

Update Profile

Deliverables:

Owasp zap

HistorySearchAlertsOutputSpiderActive Scan

Alerts (2)

Hidden File Found (4)

GET: http://mysqlproject.com/_dars

GET: http://mysqlproject.com/bzr

GET: http://mysqlproject.com/hg

GET: http://mysqlproject.com/BtkKeeper

User Agent Fuzzer (12)

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

GET: http://mysqlproject.com/

Hidden File Found

URL: http://mysqlproject.com/hg

Risk: Medium

Confidence: Low

Parameter:

Attack:

Evidence: HTTP/1.1 200 OK

CWE ID: 538

WASC ID: 13

Source: Active (40035 - Hidden File Finder)

Input Vector:

Description:
A sensitive file was identified as accessible or available. This may leak administrative, configuration, or credential information which can be leveraged by a malicious individual to further attack the system or conduct social engineering efforts.

Other Info:

Solution:
Consider whether or not the component is actually required in production, if it isn't then disable it. If it is then ensure access to it requires appropriate authentication and authorization, or limit exposure to internal systems or specific source IPs, etc.

Reference:
<https://blog.hboeck.de/archives/892-Introducing-Snallygaster-a-Tool-to-Scan-for-Secrets-on-Web-Servers.html>


Alert Tags:

Key

Value

Alerts 0 1 0 1 Main Proxy: localhost:8080 Current Scans 0 0 0 0 0 0 0 0 0 0

Security Headers:



Security Headers
by Probely, a **snrk** Business


[Home](#) [About](#) [API](#)

Scan your site now

Scan

☐ Hide results ☒ Follow redirects

Security Report Summary



Site:

https://mysqlproject.com/login

IP Address:

51.255.149.48

Report Time:

01 Dec 2024 19:20:30 UTC

Headers:

✖ Strict-Transport-Security

✖ Content-Security-Policy

✖ X-Frame-Options

✖ X-Content-Type-Options

✖ Referrer-Policy

✖ Permissions-Policy

Advanced:

Ouch, you should work on your security posture immediately.

Start Now

Missing Headers	
Strict-Transport-Security	HTTP Strict Transport Security is an excellent feature to support on your site and strengthens your implementation of TLS by getting the User Agent to enforce the use of HTTPS. Recommended value "Strict-Transport-Security: max-age=31536000; includeSubDomains".
Content-Security-Policy	Content Security Policy is an effective measure to protect your site from XSS attacks. By whitelisting sources of approved content, you can prevent the browser from loading malicious assets.
X-Frame-Options	X-Frame-Options tells the browser whether you want to allow your site to be framed or not. By preventing a browser from framing your site you can defend against attacks like clickjacking. Recommended value "X-Frame-Options: SAMEORIGIN".
X-Content-Type-Options	X-Content-Type-Options stops a browser from trying to MIME-sniff the content type and forces it to stick with the declared content-type. The only valid value for this header is "X-Content-Type-Options: nosniff".
Referrer-Policy	Referrer-Policy is a new header that allows a site to control how much information the browser includes with navigations away from a document and should be set by all sites.
Permissions-Policy	Permissions-Policy is a new header that allows a site to control which features and APIs can be used in the browser.

Raw Headers	
HTTP/2	200
content-type	text/html; charset=UTF-8
cache-control	no-cache, private
set-cookie	XSRF-TOKEN=eyJpdll6InRUyWhiYUdHdEpVN2E4OHZmWUhibkE9PSIsInZhbHVlIjoIbVprTXNNSnFini5Z21oY1kvd1NGY3RCY21GMGp0cUZlclkyVnB450FRNGt6SmVqQ1Z0bmVT29UrzZtaEYYsnpZK1pSVWFmUUIQT0dIVUkxbjlxUjc5ZFoxUHISbGc4V0MxL1hUS1h1emF5V1hwcktfUkN6c59tVnFyek4xd3oIlCjYVWMI0ljljNWMSMTgyZWE4ZDkxMmI5MDdkNWJhMmI0N2EwYjRlYjZlZWGMGM1M2EwNDYwNzMsZjZlZjU2OWE1MzgxMWJhMGMyIiwidGFnIjoIn0%3D; expires=Sun, 01 Dec 2024 21:20:30 GMT; Max-Age=7200; path=/; samesite=lax; secure
set-cookie	mysqlproject_session=eyJpdll6Ikj1dFFkRHJpZUwzVWVQKzFSTFptUFE9PSIsInZhbHVlIjoITzlhK1V3Wis1OFBiZk4bko2aGfka2V5VGh3YnlhCQ2h5TVp3ZTY2T0s5V0xpeFNPMGdPaW9lVGURINQWnNrTUcwcUeYlZyRy5jhnUEhZVWxiUkpUVTLcldCV0YzMW92aXBZOG5reEkrRGpmV0twbndwdnFFK0jXVTVjcUpQTGsiLCjYVWMI0ljljODYzYjJlNmF0GM5ZDQ0ZWVjZjZlYTU0OGM0MjU3OGNjYjRkMDAyZmQyNzg4ZjJlMWY3MjUxYzI5ZGEzDhhliwidGFnIjoIn0%3D; expires=Sun, 01 Dec 2024 21:20:30 GMT; Max-Age=7200; path=/; httponly ; samesite=lax; secure
content-length	1750
content-encoding	gzip
vary	Accept-Encoding
date	Sun, 01 Dec 2024 19:20:30 GMT
alt-svc	h3=":443"; ma=2592000, h3-29=":443"; ma=2592000, h3-Q050=":443"; ma=2592000, h3-Q046=":443"; ma=2592000, h3-Q043=":443"; ma=2592000, quic=":443"; ma=2592000; v="43,46"


Upcoming Headers	
Cross-Origin-Embedder-Policy	Cross-Origin Embedder Policy allows a site to prevent assets being loaded that do not grant permission to load them via CORS or CORP.
Cross-Origin-Opener-Policy	Cross-Origin Opener Policy allows a site to opt-in to Cross-Origin Isolation in the browser.
Cross-Origin-Resource-Policy	Cross-Origin Resource Policy allows a resource owner to specify who can load the resource.

Additional Information	
set-cookie	There is no Cookie Prefix on this cookie.

HostedScan:

2.2 Target Breakdowns

Details for the potential vulnerabilities found for each target by scan type.



https://mysqlproject.com/

Total Risks

0

0

0

0

0

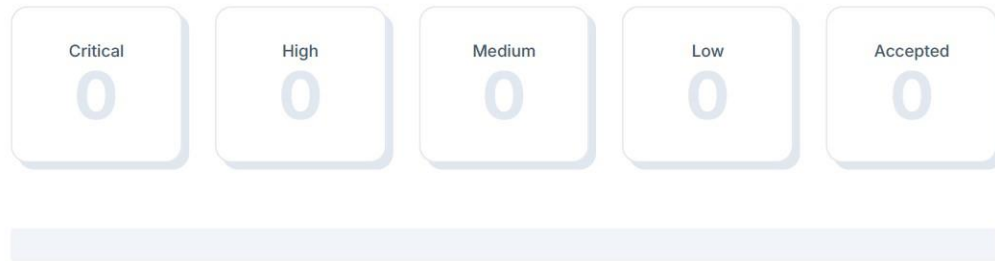
No vulnerabilities found.

3 SSL/TLS Security

The SSLyze security scan tests for misconfigured SSL/TLS certificates, expired certificates, weak ciphers, and SSL/TLS vulnerabilities such as Heartbleed.

3.1 Total Vulnerabilities

Total number of vulnerabilities found by severity.



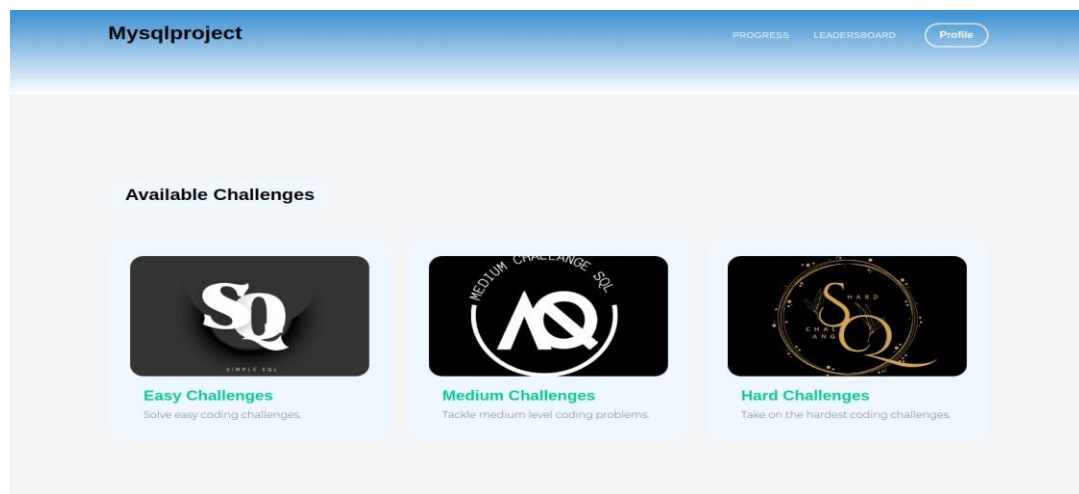
3.2 Vulnerabilities Breakdown

Summary list of all detected vulnerabilities.

Title	Severity	Open	Accepted
No vulnerabilities detected			

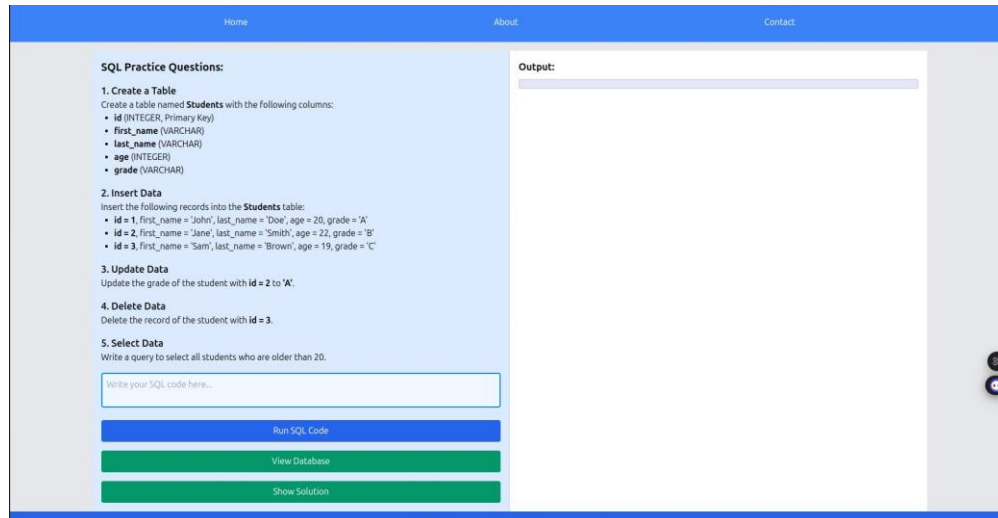
Summary report:

MySQL Project Application is an effective, well-structured web application that has been developed with main purpose of solving problems in various activities. It comes with an interactive view, users can access the system on any device.



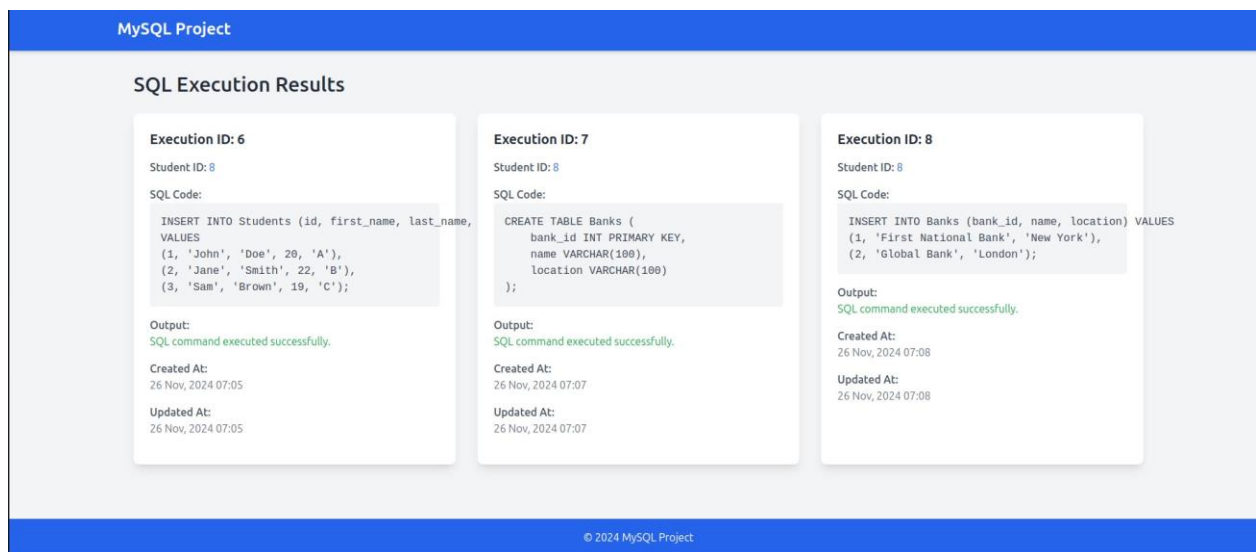
Problem solving environment:

The specificities of the application include a split pane interface on which a user can choose between easy, medium, or hard problems, as well as on which SQL queries are compiled.



Real time feedback:

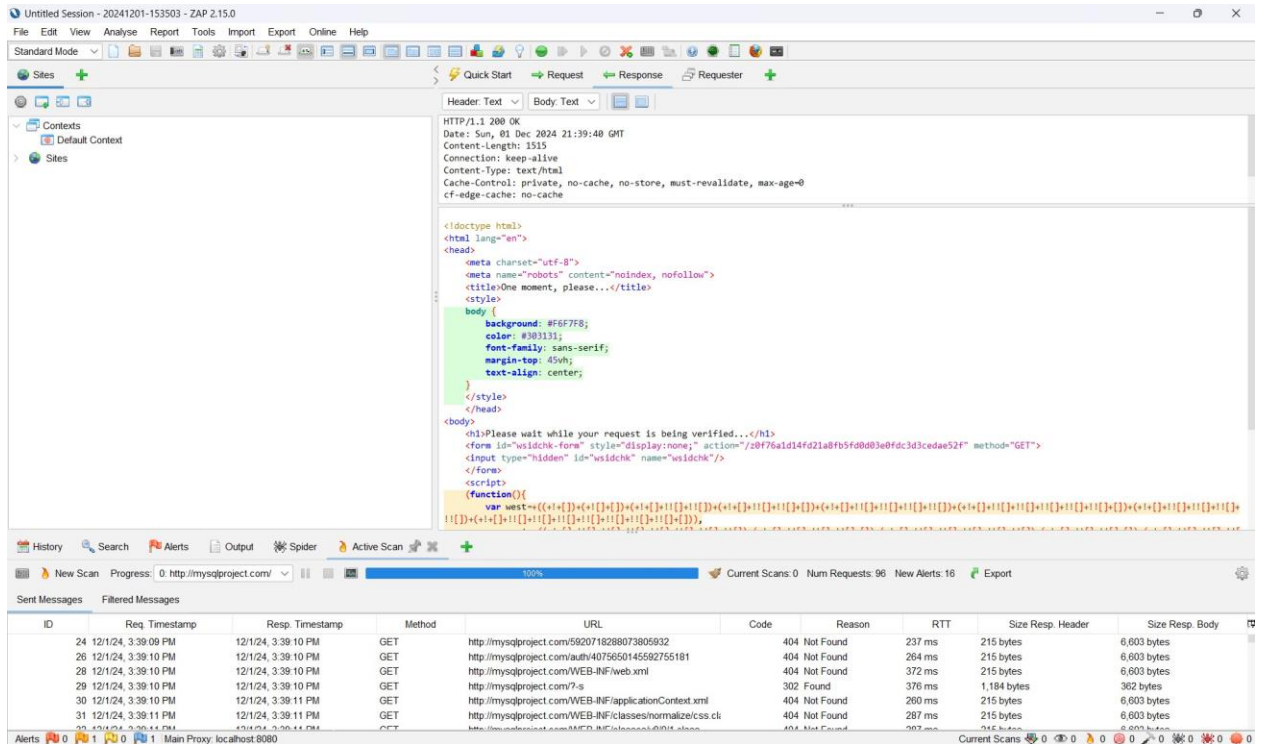
The application has a split pane design to select easy, medium or hard questions and has the system to compile SQL queries.



Tool stages:

Owasp zap

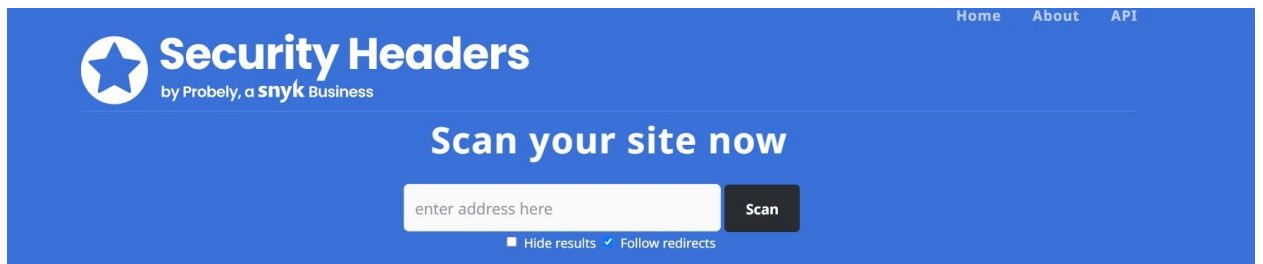
After entering the URL of our website



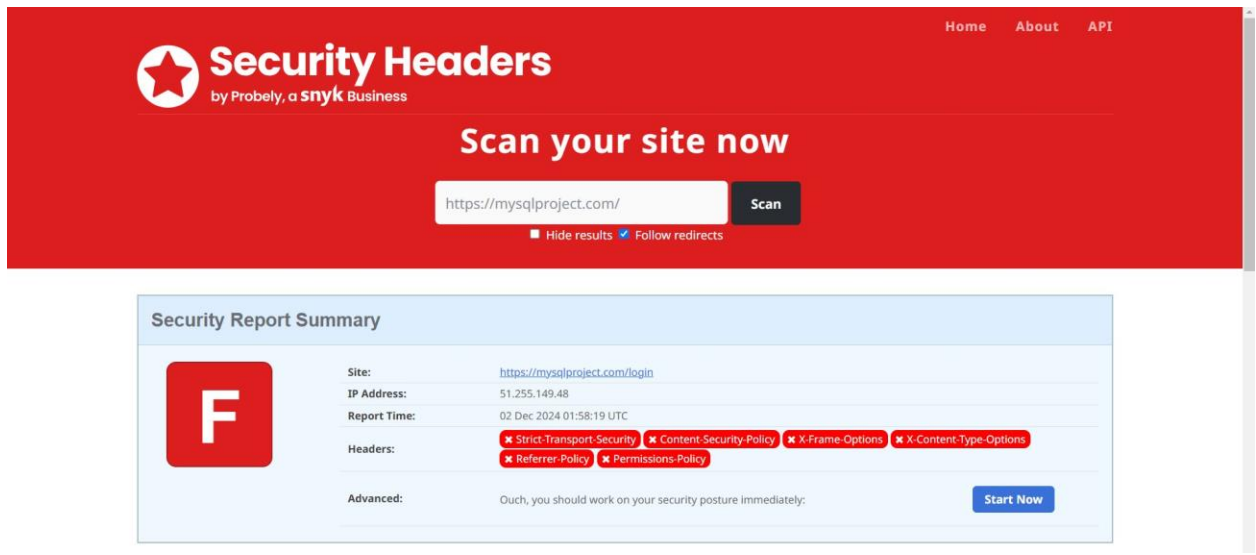
The screenshot shows the OWASP ZAP interface. The top panel displays the request details for a GET request to `http://mysqproject.com/5020716200073005932`. The response is an HTML document with a status of 200 OK. The HTML content includes a meta charset of utf-8, a robots meta tag with content="noindex, nofollow", and a title "One moment, please...". The body contains a form with a hidden input field and a JavaScript function named `var west` that appears to be a security check or anti-bot script.

ID	Req. Timestamp	Resp. Timestamp	Method	URL	Code	Reason	RTT	Size Resp. Header	Size Resp. Body
24	12/1/24, 3:39:09 PM	12/1/24, 3:39:10 PM	GET	http://mysqproject.com/5020716200073005932	404	Not Found	237 ms	215 bytes	6,603 bytes
26	12/1/24, 3:39:10 PM	12/1/24, 3:39:10 PM	GET	http://mysqproject.com/auth/4075650145582755181	404	Not Found	264 ms	215 bytes	6,603 bytes
28	12/1/24, 3:39:10 PM	12/1/24, 3:39:10 PM	GET	http://mysqproject.com/WEB-INF/web.xml	404	Not Found	372 ms	215 bytes	6,603 bytes
29	12/1/24, 3:39:10 PM	12/1/24, 3:39:10 PM	GET	http://mysqproject.com/?s	302	Found	376 ms	1,184 bytes	362 bytes
30	12/1/24, 3:39:10 PM	12/1/24, 3:39:11 PM	GET	http://mysqproject.com/WEB-INF/applicationContext.xml	404	Not Found	260 ms	215 bytes	6,603 bytes
31	12/1/24, 3:39:11 PM	12/1/24, 3:39:11 PM	GET	http://mysqproject.com/WEB-INF/classes/normalize/css.cl	404	Not Found	287 ms	215 bytes	6,603 bytes

Security Headers:

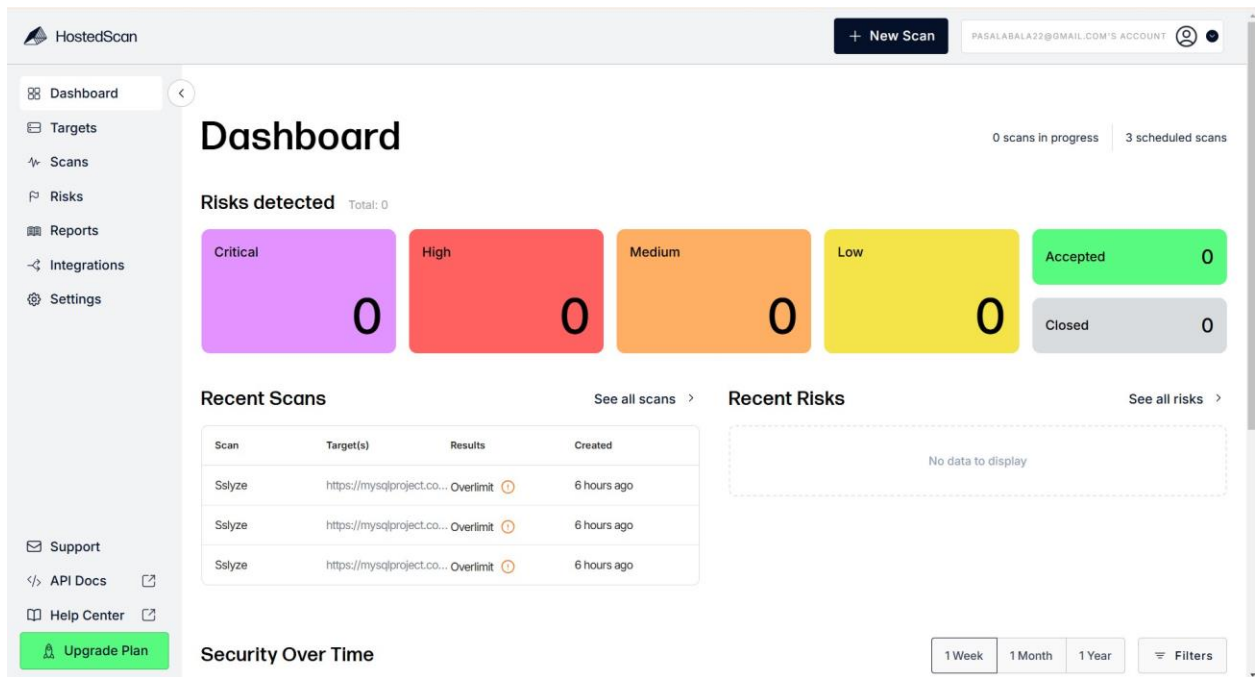


The screenshot shows the Security Headers website, which is a Snyk Business product. The page has a blue header with the Security Headers logo and navigation links for Home, About, and API. The main content area features a large heading "Scan your site now" and a form with a text input field labeled "enter address here" and a "Scan" button. Below the form, there are two checkboxes: "Hide results" (unchecked) and "Follow redirects" (checked).



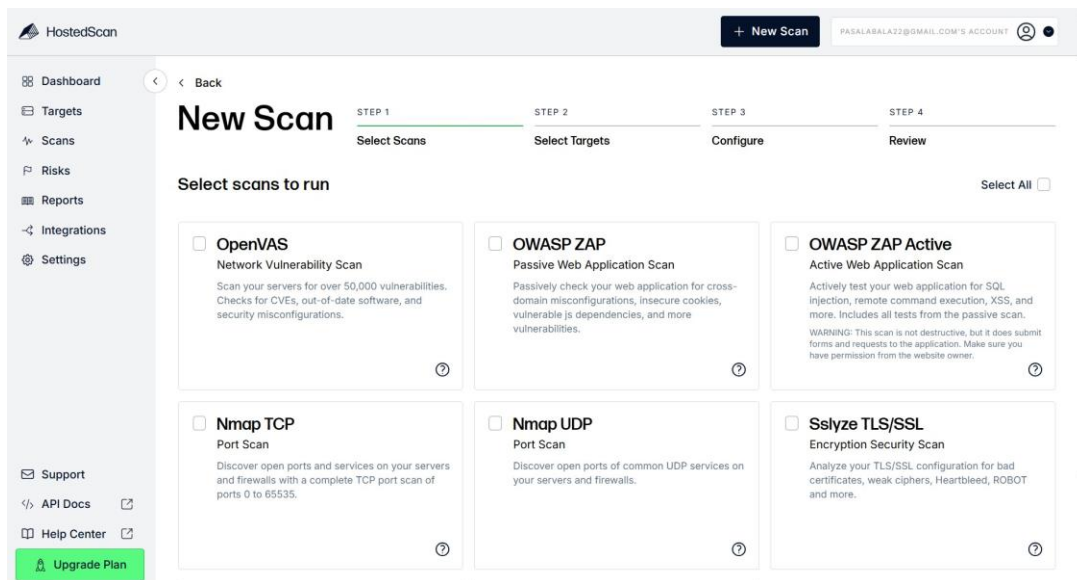
HostedScan:

Initially the hostedscan page

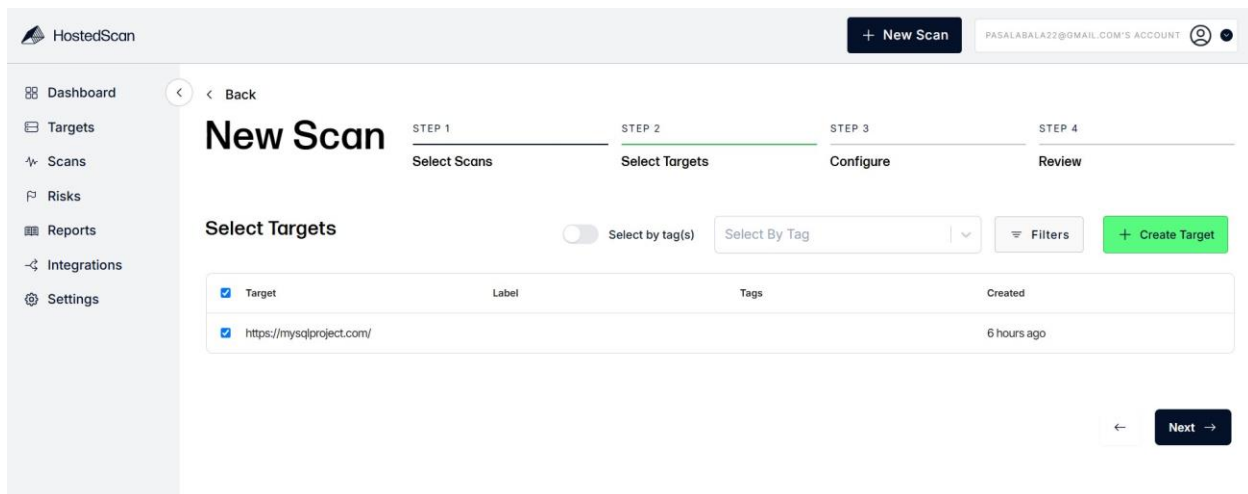


Then click on new scan

You will get page like this



Then select Sslyze TLS/SSL Then it shows like this.



Here select I selected the website and clicked next.

HostedScan

+ New Scan

PASALABALA22@GMAIL.COM'S ACCOUNT

Dashboard < Back

Targets

Scans

Risks

Reports

Integrations

Settings

New Scan

STEP 1 Select Scans

STEP 2 Select Targets

STEP 3 Configure

STEP 4 Review

Configure

Schedule

Run the scan just one time or on a recurring schedule.

☒ One Time

☐ Daily

☐ Weekly

☐ Monthly

Start Time

Choose what date and time to run the scan

☒ Now

☐ At a future time

Email Notification

☒ Email results to all organization members

☐ Do not email results

← Next →

Again, click next

After that, click start scan then I got the result for my website.

Findings:

Owasp zap

- User agent fuzzer
- Hidden File Found

SSH keys

- server.key
- privatekey.key
- myserver.key
- key.pem
- id_rsa
- id_dsa

Configuration files

- composer.json
- composer.lock
- wpeprivate/config.json
- config/databases.yml and some other risks.

Security Headers:

Missing security headers, exposure of sensitive information and insecure cookie configuration has also been highlighted in Image 2 of the text. These are un-set X frame options, X content type options and content security policy which help to limit such vulnerabilities as cross-site scripting.

HostedScan:

From the result no vulnerabilities found in the mysql website.

Recommendations:

Owasp zap

Disable exposed files and directories, control access to crucial directories and folders, review Philips' OAuth settings, test server responses to 'User-Agent' headers, check necessary folders and files, apply proper authorization and authentication, delete leaks, avoid directory listings, apply access controls, and eliminate critical directories as well as sanitize and validate inputs.

Security Headers

It has also suggested that the missing security headers should be implemented in the web applications, the configuration of session cookies.

This should be done to enable the HTTPOnly, Secure, SameSite flags, and to properly set up the CORS- related policies to avoid cross origin threats. One of the things that organisations should consider is to monitor security headers for any threats and possibilities.