ZAP Scanning Report

Site: http://localhost:8080

Generated on Sun, 24 Mar 2024 18:21:25

ZAP Version: 2.14.0

ZAP is supported by the [Crash Override Open Source Fellowship]()

Summary of Alerts

Risk Level	Number of Alerts
High	0
Medium	1
Low	2
Informational	2

Alerts

Name	Risk Level	Number of Instances
Cross-Domain Misconfiguration	Medium	41
Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s)	Low	41
X-Content-Type-Options Header Missing	Low	41
Authentication Request Identified	Informational	2
Session Management Response Identified	Informational	1

Alert Detail

Medium	Cross-Domain Misconfiguration
Description	Web browser data loading may be possible, due to a Cross Origin Resource Sharing (CORS) misconfiguration on the web server
URL	http://localhost:8080/course/66001b3dac3f08880baf412b
Method	DELETE
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	DELETE
Attack	

Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	DELETE
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	DELETE
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	DELETE
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/user/66001a01ac3f08880baf4120
Method	DELETE
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/booking
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *

Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/booking/66001db1ac3f08880baf4153
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/booking/getBooking/65fe91b7042056bf04dcb66e
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/course/
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/course/66001b3dac3f08880baf412b
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/enrollment/
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser

Other Info	implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/enrollment/viewCourse/65fe91b7042056bf04dcb66e
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/enrollment/viewEnrollment/65facb7b2da33e0979ec12ef
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/resource/
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could

	be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/room/
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/timetable/
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/timetable/getCourse/65facb7b2da33e0979ec12ef
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.

URL	http://localhost:8080/timetable/viewTimetable/65fe91b7042056bf04dcb66e
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/user/
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/user/66001a01ac3f08880baf4120
Method	GET
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/booking
Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/course/assignCourse
Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/enrollment

Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/resource
Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/room
Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/timetable
Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/user
Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/user/forgot
Method	POST

Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/user/login
Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/user/reset/66001a01ac3f08880baf4120
Method	POST
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/booking/66001db1ac3f08880baf4153
Method	PUT
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/course/66001b3dac3f08880baf412b
Method	PUT
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	PUT
Attack	

Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	PUT
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	PUT
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	PUT
Attack	
Evidence	Access-Control-Allow-Origin: *
Other Info	The CORS misconfiguration on the web server permits cross-domain read requests from arbitrary third party domains, using unauthenticated APIs on this domain. Web browser implementations do not permit arbitrary third parties to read the response from authenticated APIs, however. This reduces the risk somewhat. This misconfiguration could be used by an attacker to access data that is available in an unauthenticated manner, but which uses some other form of security, such as IP address white-listing.
Instances	41
Solution	Ensure that sensitive data is not available in an unauthenticated manner (using IP address white-listing, for instance). Configure the "Access-Control-Allow-Origin" HTTP header to a more restrictive set of domains, or remove all CORS headers entirely, to allow the web browser to enforce the Same Origin Policy (SOP) in a more restrictive manner.
Reference	https://vulncat.fortify.com/en/detail?id=desc.config.dotnet.html5_overly_permissive_cors_policy
CWE Id	[264](264)
WASC Id	14
Plugin Id	[10098](10098)

Low	**Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s)**
	The web/application server is leaking information via one or more "X-Powered-By" HTTP response headers. Access to such information may facilitate attackers identifying other

Description	frameworks/components your web application is reliant upon and the vulnerabilities such components may be subject to.
URL	http://localhost:8080/course/66001b3dac3f08880baf412b
Method	DELETE
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	DELETE
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	DELETE
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	DELETE
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	DELETE
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/user/66001a01ac3f08880baf4120
Method	DELETE
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/booking
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	

URL	http://localhost:8080/booking/66001db1ac3f08880baf4153
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/booking/getBooking/65fe91b7042056bf04dcb66e
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/course/
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/course/66001b3dac3f08880baf412b
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/enrollment/
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/enrollment/viewCourse/65fe91b7042056bf04dcb66e
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/enrollment/viewEnrollment/65facb7b2da33e0979ec12ef
Method	GET

Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/resource/
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/room/
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/timetable/
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/timetable/getCourse/65facb7b2da33e0979ec12ef
Method	GET
Attack	

Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/timetable/viewTimetable/65fe91b7042056bf04dcb66e
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/user/
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/user/66001a01ac3f08880baf4120
Method	GET
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/booking
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/course/assignCourse
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/enrollment
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/resource
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other	

Info	
URL	http://localhost:8080/room
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/timetable
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/user
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/user/forgot
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/user/login
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/user/reset/66001a01ac3f08880baf4120
Method	POST
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/booking/66001db1ac3f08880baf4153
Method	PUT
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/course/66001b3dac3f08880baf412b

Method	PUT
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	PUT
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	PUT
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	PUT
Attack	
Evidence	X-Powered-By: Express
Other Info	
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	PUT
Attack	
Evidence	X-Powered-By: Express
Other Info	
Instances	41
Solution	Ensure that your web server, application server, load balancer, etc. is configured to suppress "X-Powered-By" headers.
Reference	https://owasp.org/www-project-web-security-testing-guide/v42/4-Web_Application_Security_Testing/01-Information_Gathering/08-Fingerprint_Web_Application_Framework https://www.troyhunt.com/2012/02/shhh-dont-let-your-response-headers.html
CWE Id	200
WASC Id	13
Plugin Id	10037

Low	**X-Content-Type-Options Header Missing**
Description	The Anti-MIME-Sniffing header X-Content-Type-Options was not set to 'nosniff'. This allows older versions of Internet Explorer and Chrome to perform MIME-sniffing on the response body, potentially causing the response body to be interpreted and displayed as a content type other than the declared content type. Current (early 2014) and legacy versions of Firefox will use the declared content type (if one is set), rather than performing MIME-sniffing.

URL	http://localhost:8080/course/66001b3dac3f08880baf412b
Method	DELETE
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	DELETE
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	DELETE
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	DELETE
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	DELETE
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/user/66001a01ac3f08880baf4120
Method	DELETE
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/booking

Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/booking/66001db1ac3f08880baf4153
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/course/
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/course/66001b3dac3f08880baf412b
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/enrollment/
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/enrollment/viewCourse/65fe91b7042056bf04dcb66e

Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/enrollment/viewEnrollment/65facb7b2da33e0979ec12ef
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/resource/
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/room/
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/timetable/
Method	GET

Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/timetable/getCourse/65facb7b2da33e0979ec12ef
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/timetable/viewTimetable/65fe91b7042056bf04dcb66e
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/user/
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/user/66001a01ac3f08880baf4120
Method	GET
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/booking
Method	POST

Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/course
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/course/assignCourse
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/enrollment
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/resource
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/room
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/timetable
Method	POST
Attack	

Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/user
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/user/forgot
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/user/login
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/user/reset/66001a01ac3f08880baf4120
Method	POST
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/booking/66001db1ac3f08880baf4153
Method	PUT
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/course/66001b3dac3f08880baf412b
Method	PUT
Attack	

Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/enrollment/66001e66ac3f08880baf415d
Method	PUT
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/resource/66001c3cac3f08880baf413c
Method	PUT
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/room/66001bf0ac3f08880baf4135
Method	PUT
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
URL	http://localhost:8080/timetable/66001cc2ac3f08880baf4146
Method	PUT
Attack	
Evidence	
Other Info	This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type. At "High" threshold this scan rule will not alert on client or server error responses.
Instances	41
Solution	Ensure that the application/web server sets the Content-Type header appropriately, and that it sets the X-Content-Type-Options header to 'nosniff' for all web pages. If possible, ensure that the end user uses a standards-compliant and modern web browser that does not perform MIME-sniffing at all, or that can be directed by the web application /web server to not perform MIME-sniffing.
Reference	https://learn.microsoft.com/en-us/previous-versions/windows/internet-explorer/ie-developer/compatibility/gg622941(v=vs.85) https://owasp.org/www-community/Security_Headers
CWE Id	[693](693)
WASC Id	15
Plugin Id	[10021](10021)

Informational	Authentication Request Identified
Description	The given request has been identified as an authentication request. The 'Other Info' field contains a set of key=value lines which identify any relevant fields. If the request is in a context which has an Authentication Method set to "Auto-Detect" then this rule will change the authentication to match the request identified.
URL	http://localhost:8080/user
Method	POST
Attack	
Evidence	password
Other Info	userParam=email userValue=johnsmith@gmail.com passwordParam=password referer=http://localhost:8080/user
URL	http://localhost:8080/user/login
Method	POST
Attack	
Evidence	password
Other Info	userParam=email userValue=johnsmith@gmail.com passwordParam=password referer=http://localhost:8080/user/login
Instances	2
Solution	This is an informational alert rather than a vulnerability and so there is nothing to fix.
Reference	https://www.zaproxy.org/docs/desktop/addons/authentication-helper/auth-req-id/
CWE Id	
WASC Id	
Plugin Id	[10111](10111)

Informational	Session Management Response Identified
Description	The given response has been identified as containing a session management token. The 'Other Method. If the request is in a context which has a Session Management Method set to "Auto-De
URL	http://localhost:8080/user/login
Method	POST
Attack	
Evidence	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9. eyJ1c2VySWQiOiI2NjAwMWEwMWFjM2YwODg4MGJhZjQxMjAiLCJlbWFpbCI6ImpvaG5zbWl ltDBL2LZE-vhqOYyOqbgEi2fcDxQEZjz6ysR9lZ6MTM
Other Info	json:token
Instances	1
Solution	This is an informational alert rather than a vulnerability and so there is nothing to fix.
Reference	https://www.zaproxy.org/docs/desktop/addons/authentication-helper/session-mgmt-id
CWE Id	
WASC Id	
Plugin Id	[10112](10112)