acunetix

OWASP TOP 10 2017

Compliance Report

02 December 2020

Generated by Acunetix

Description

The primary aim of the OWASP Top 10 is to educate developers, designers, architects, managers, and organizations about the consequences of the most important web application security weaknesses. The Top 10 provides basic techniques to protect against these high risk problem areas - and also provides guidance on where to go from here.

Disclaimer

This document or any of its content cannot account for, or be included in any form of legal advice. The outcome of a vulnerability scan (or security evaluation) should be utilized to ensure that diligent measures are taken to lower the risk of potential exploits carried out to compromise data.

Legal advice must be supplied according to its legal context. All laws and the environments in which they are applied, are constantly changed and revised. Therefore no information provided in this document may ever be used as an alternative to a qualified legal body or representative.

A portion of this report is taken from OWASP's Top Ten 2017 Project document, that can be found at http://www.owasp.org.

Scan

URL	teache-me-front.herokuapp.com
Scan date	02/12/2020, 17:01:51
Duration	8 minutes, 19 seconds
Profile	Full Scan

Compliance at a Glance

This section of the report is a summary and lists the number of alerts found according to individual compliance categories.

- Injection(A1)
No alerts in this category

- Broken Authentication(A2)
Total number of alerts in this category: 2

- Sensitive Data Exposure(A3)
Total number of alerts in this category: 8

- XML External Entity (XXE)(A4)
No alerts in this category

- Broken Access Control(A5)
Total number of alerts in this category: 3

- Security Misconfiguration(A6)
Total number of alerts in this category: 6

- Cross Site Scripting (XSS)(A7)
No alerts in this category

- Insecure Deserialization(A8)
No alerts in this category

- Using Components with Known Vulnerabilities(A9)
Total number of alerts in this category: 6

- Insufficient Logging and Monitoring(A10)
No alerts in this category

Compliance According to Categories: A Detailed Report

This section is a detailed report that explains each vulnerability found according to individual compliance categories.

(A1)Injection

Injection flaws, such as SQL, NoSQL, OS, and LDAP injection, occur when untrusted data is sent an interpreter as part of a command or query. The attacker’s hostile data can trick the interpreter into executing unintended commands or accessing data without proper authorization.

No alerts in this category.

(A2)Broken Authentication

Application functions related to authentication and session management are often implemented incorrectly, allowing attackers to compromise passwords, keys, or session tokens, or to exploit other implementation flaws to assume other users' identities.

Total number of alerts in this category: 2

Alerts in this category

Login page password-guessing attack

A common threat web developers face is a password-guessing attack known as a brute force attack. A brute-force attack is an attempt to discover a password by systematically trying every possible combination of letters, numbers, and symbols until you discover the one correct combination that works.

This login page doesn't have any protection against password-guessing attacks (brute force attacks). It's recommended to implement some type of account lockout after a defined number of incorrect password attempts. Consult Web references for more information about fixing this problem.

CVSS2	Base Score: 5.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined

CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/authenticate.html**
Affected parameter	

Login page password-guessing attack

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CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/signup.html**
Affected parameter	

(A3)Sensitive Data Exposure

Many web applications and APIs do not properly protect sensitive data, such as financial, healthcare and PII. Attackers may steal or modify such weakly protected data to conduct credit card fraud, identity theft, or other crimes. Sensitive data may be compromised without extra protection, such as encryption at rest or in transit, and requires pecial precautions when exchanged with the browser.

Total number of alerts in this category: 8

Alerts in this category

TLS 1.0 enabled

The web server supports encryption through TLS 1.0. TLS 1.0 is not considered to be "strong cryptography" as defined and required by the PCI Data Security Standard 3.2(.1) when used to protect sensitive information transferred to or from web sites. According to PCI, "30 June 2018 is the deadline for disabling SSL/early TLS and implementing a more secure encryption protocol – TLS 1.1 or higher (TLS v1.2 is strongly encouraged) in order to meet the PCI Data Security Standard (PCI DSS) for safeguarding payment data.

CVSS2	Base Score: 4.3 Access Vector: Network_accessible Access Complexity: Medium Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CVSS3	Base Score: 3.1 Attack Vector: Network Attack Complexity: High Privileges Required: None User Interaction: Required Scope: Unchanged Confidentiality Impact: Low Integrity Impact: None Availability Impact: None
CWE	CWE-16
Affected item	**Web Server**
Affected parameter	

Clickjacking: X-Frame-Options header missing

Clickjacking (User Interface redress attack, UI redress attack, UI redressing) is a malicious technique of tricking a Web user into clicking on something different from what the user perceives they are clicking on, thus potentially revealing confidential information or taking control of their computer while clicking on seemingly innocuous web pages.

The server didn't return an **X-Frame-Options** header which means that this website could be at risk of a clickjacking attack. The X-Frame-Options HTTP response header can be used to indicate whether or not a browser should be allowed to render a page inside a frame or iframe. Sites can use this to avoid clickjacking attacks, by ensuring that their content is not embedded into other sites.

CVSS2	Base Score: 4.3 Access Vector: Network_accessible Access Complexity: Medium Authentication: None Confidentiality Impact: None Integrity Impact: Partial Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CWE	CWE-693
Affected item	**Web Server**
Affected parameter	

Login page password-guessing attack

A common threat web developers face is a password-guessing attack known as a brute force attack. A brute-force attack is an attempt to discover a password by systematically trying every possible combination of letters, numbers, and symbols until you discover the one correct combination that works.

This login page doesn't have any protection against password-guessing attacks (brute force attacks). It's recommended to implement some type of account lockout after a defined number of incorrect password attempts. Consult Web references for more information about fixing this problem.

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CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/authenticate.html**
Affected parameter	

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CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/signup.html**
Affected parameter	

Possible sensitive files

A possible sensitive file has been found. This file is not directly linked from the website. This check looks for common sensitive resources like password files, configuration files, log files, include files, statistics data, database dumps. Each one of these files could help an attacker to learn more about his target.

CVSS2	Base Score: 5.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CVSS3	Base Score: 7.5 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: High Integrity Impact: None Availability Impact: None
CWE	CWE-200
Affected item	**/debug.log**
Affected parameter	

Content Security Policy (CSP) not implemented

Content Security Policy (CSP) is an added layer of security that helps to detect and mitigate certain types of attacks, including Cross Site Scripting (XSS) and data injection attacks.

Content Security Policy (CSP) can be implemented by adding a **Content-Security-Policy** header. The value of this header is a string containing the policy directives describing your Content Security Policy. To implement CSP, you should define lists of allowed origins for the all of the types of resources that your site utilizes. For example, if you have a simple site that needs to load scripts, stylesheets, and images hosted locally, as well as from the jQuery library from their CDN, the CSP header could look like the following:

```
Content-Security-Policy:
    default-src 'self';
    script-src 'self' https://code.jquery.com;
```

It was detected that your web application doesn't implement Content Security Policy (CSP) as the CSP header is missing from the response. It's recommended to implement Content Security Policy (CSP) into your web application.

CVSS2	Base Score: 0.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: None Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CWE	CWE-16
Affected item	**/authenticate.html**
Affected parameter	

Subresource Integrity (SRI) not implemented

Subresource Integrity (SRI) is a security feature that enables browsers to verify that third-party resources they fetch (for example, from a CDN) are delivered without unexpected manipulation. It works by allowing developers to provide a cryptographic hash that a fetched file must match.

Third-party resources (such as scripts and stylesheets) can be manipulated. An attacker that has access or has hacked the hosting CDN can manipulate or replace the files. SRI allows developers to specify a base64-encoded cryptographic hash of the resource to be loaded. The integrity attribute containing the hash is then added to the <script> HTML element tag. The integrity string consists of a base64-encoded hash, followed by a prefix that depends on the hash algorithm. This prefix can either be sha265, sha384 or sha512.

The script loaded from the external URL specified in the Details section doesn't implement Subresource Integrity (SRI). It's recommended to implement Subresource Integrity (SRI) for all the scripts loaded from external hosts.

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CWE	CWE-16
Affected item	**/authenticate.html**
Affected parameter	

TLS 1.1 enabled

The web server supports encryption through TLS 1.1. When aiming for Payment Card Industry (PCI) Data Security Standard (DSS) compliance, it is recommended (although at the time or writing not required) to use TLS 1.2 or higher instead. According to PCI, "30 June 2018 is the deadline for disabling SSL/early TLS and implementing a more secure encryption protocol – TLS 1.1 or higher (TLS v1.2 is strongly encouraged) in order to meet the PCI Data Security Standard (PCI DSS) for safeguarding payment data.

CWE	CWE-16
Affected item	**Web Server**
Affected parameter	

(A4)XML External Entity (XXE)

Many older or poorly configured XML processors evaluate external entity references within XML documents. External entities can be used to disclose internal files using the file URI handler, internal file shares, internal port scanning, remote code execution, and denial of service attacks.

No alerts in this category.

(A5)Broken Access Control

Restrictions on what authenticated users are allowed to do are often not properly enforced. Attackers can exploit these flaws to access unauthorized functionality and/or data, such as access other users' accounts, view sensitive files, modify other users' data, change access rights, etc.

Total number of alerts in this category: 3

Alerts in this category

Clickjacking: X-Frame-Options header missing

Clickjacking (User Interface redress attack, UI redress attack, UI redressing) is a malicious technique of tricking a Web user into clicking on something different from what the user perceives they are clicking on, thus potentially revealing confidential information or taking control of their computer while clicking on seemingly innocuous web pages.

The server didn't return an **X-Frame-Options** header which means that this website could be at risk of a clickjacking attack. The X-Frame-Options HTTP response header can be used to indicate whether or not a browser should be allowed to render a page inside a frame or iframe. Sites can use this to avoid clickjacking attacks, by ensuring that their content is not embedded into other sites.

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CWE	CWE-693
Affected item	**Web Server**
Affected parameter	

Login page password-guessing attack

A common threat web developers face is a password-guessing attack known as a brute force attack. A brute-force attack is an attempt to discover a password by systematically trying every possible combination of letters, numbers, and symbols until you discover the one correct combination that works.

This login page doesn't have any protection against password-guessing attacks (brute force attacks). It's recommended to implement some type of account lockout after a defined number of incorrect password attempts. Consult Web references for more information about fixing this problem.

CVSS2	Base Score: 5.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/authenticate.html**
Affected parameter	

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CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/signup.html**
Affected parameter	

(A6)Security Misconfiguration

Security misconfiguration is the most commonly seen issue. This is commonly a result of insecure default configurations, incomplete or ad hoc configurations, open cloud storage, misconfigured HTTP headers, and verbose error messages containing sensitive information. Not only must all operating systems, frameworks, libraries, and applications be securly configured, but they must be patched and upgraded in a timely fashion.

Total number of alerts in this category: 6

Alerts in this category

TLS 1.0 enabled

The web server supports encryption through TLS 1.0. TLS 1.0 is not considered to be "strong cryptography" as defined and required by the PCI Data Security Standard 3.2(.1) when used to protect sensitive information transferred to or from web sites. According to PCI, "30 June 2018 is the deadline for disabling SSL/early TLS and implementing a more secure encryption protocol – TLS 1.1 or higher (TLS v1.2 is strongly encouraged) in order to meet the PCI Data Security Standard (PCI DSS) for safeguarding payment data.

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CVSS3	Base Score: 3.1 Attack Vector: Network Attack Complexity: High Privileges Required: None User Interaction: Required Scope: Unchanged Confidentiality Impact: Low Integrity Impact: None Availability Impact: None
CWE	CWE-16
Affected item	**Web Server**
Affected parameter	

Login page password-guessing attack

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This login page doesn't have any protection against password-guessing attacks (brute force attacks). It's recommended to implement some type of account lockout after a defined number of incorrect password attempts. Consult Web references for more information about fixing this problem.

CVSS2	Base Score: 5.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/authenticate.html**
Affected parameter	

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CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/signup.html**
Affected parameter	

Content Security Policy (CSP) not implemented

Content Security Policy (CSP) is an added layer of security that helps to detect and mitigate certain types of attacks, including Cross Site Scripting (XSS) and data injection attacks.

Content Security Policy (CSP) can be implemented by adding a **Content-Security-Policy** header. The value of this header is a string containing the policy directives describing your Content Security Policy. To implement CSP, you should define lists of allowed origins for the all of the types of resources that your site utilizes. For example, if you have a simple site that needs to load scripts, stylesheets, and images hosted locally, as well as from the jQuery library from their CDN, the CSP header could look like the following:

```
Content-Security-Policy:
    default-src 'self';
    script-src 'self' https://code.jquery.com;
```

It was detected that your web application doesn't implement Content Security Policy (CSP) as the CSP header is missing from the response. It's recommended to implement Content Security Policy (CSP) into your web application.

CVSS2	Base Score: 0.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: None Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CWE	CWE-16
Affected item	**/authenticate.html**
Affected parameter	

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CWE	CWE-16
Affected item	**/authenticate.html**
Affected parameter	

TLS 1.1 enabled

The web server supports encryption through TLS 1.1. When aiming for Payment Card Industry (PCI) Data Security Standard (DSS) compliance, it is recommended (although at the time or writing not required) to use TLS 1.2 or higher instead. According to PCI, "30 June 2018 is the deadline for disabling SSL/early TLS and implementing a more secure encryption protocol – TLS 1.1 or higher (TLS v1.2 is strongly encouraged) in order to meet the PCI Data Security Standard (PCI DSS) for safeguarding payment data.

CWE	CWE-16
Affected item	**Web Server**
Affected parameter	

(A7)Cross Site Scripting (XSS)

XSS flaws occur whenever an application includes untrusted data in a new web page without proper validation or escaping, or updates an existing web page with user-supplied data using a browser API that can create HTML or JavaScript. XSS allows attackers to execute scripts in the victim's browser which can hijack user sessions, deface web sites, or redirect the user to malicious sites.

No alerts in this category.

(A8)Insecure Deserialization

Insecure deserialization often leads to remote code execution. Even if deserialization flaws do not result in remote code execution, they can be used to perform attacks, including replay attacks, injection attacks, and privilege escalation attacks.

No alerts in this category.

(A9)Using Components with Known Vulnerabilities

Components, such as libraries, frameworks, and other software modules, almost always run with full privileges. If a vulnerable component is exploited, such an attack can facilitate serious data loss or server takeover. Applications using components with known vulnerabilities may undermine application defenses and enable a range of possible attacks and impacts.

Total number of alerts in this category: 6

Alerts in this category

TLS 1.0 enabled

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CVSS3	Base Score: 3.1 Attack Vector: Network Attack Complexity: High Privileges Required: None User Interaction: Required Scope: Unchanged Confidentiality Impact: Low Integrity Impact: None Availability Impact: None
CWE	CWE-16
Affected item	**Web Server**
Affected parameter	

Login page password-guessing attack

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CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Affected item	**/authenticate.html**
Affected parameter	

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CWE	CWE-307
Affected item	**/signup.html**
Affected parameter	

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```

It was detected that your web application doesn't implement Content Security Policy (CSP) as the CSP header is missing from the response. It's recommended to implement Content Security Policy (CSP) into your web application.

CVSS2	Base Score: 0.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: None Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CWE	CWE-16
Affected item	**/authenticate.html**
Affected parameter	

Subresource Integrity (SRI) not implemented

Subresource Integrity (SRI) is a security feature that enables browsers to verify that third-party resources they fetch (for example, from a CDN) are delivered without unexpected manipulation. It works by allowing developers to provide a cryptographic hash that a fetched file must match.

Third-party resources (such as scripts and stylesheets) can be manipulated. An attacker that has access or has hacked the hosting CDN can manipulate or replace the files. SRI allows developers to specify a base64-encoded cryptographic hash of the resource to be loaded. The integrity attribute containing the hash is then added to the <script> HTML element tag. The integrity string consists of a base64-encoded hash, followed by a prefix that depends on the hash algorithm. This prefix can either be sha265, sha384 or sha512.

The script loaded from the external URL specified in the Details section doesn't implement Subresource Integrity (SRI). It's recommended to implement Subresource Integrity (SRI) for all the scripts loaded from external hosts.

CVSS2	Base Score: 0.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: None Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CWE	CWE-16
Affected item	**/authenticate.html**
Affected parameter	

TLS 1.1 enabled

The web server supports encryption through TLS 1.1. When aiming for Payment Card Industry (PCI) Data Security Standard (DSS) compliance, it is recommended (although at the time or writing not required) to use TLS 1.2 or higher instead. According to PCI, "30 June 2018 is the deadline for disabling SSL/early TLS and implementing a more secure encryption protocol – TLS 1.1 or higher (TLS v1.2 is strongly encouraged) in order to meet the PCI Data Security Standard (PCI DSS) for safeguarding payment data.

CWE	CWE-16
Affected item	**Web Server**
Affected parameter	

(A10)Insufficient Logging and Monitoring

Insufficient logging and monitoring, coupled with missing or ineffective integration with incident response, allows attackers to further attack systesm, maintain persistence, pivot to more systems, and tamper, extract, or destroy data. Most breach studies show time to detect a breach is over 200 days, typically detected by external parties rathre than inernal processes or monitoring.

No alerts in this category.

Affected Items: A Detailed Report

This section provides full details of the types of vulnerabilities found according to individual affected items.

Web Server

TLS 1.0 enabled

The web server supports encryption through TLS 1.0. TLS 1.0 is not considered to be "strong cryptography" as defined and required by the PCI Data Security Standard 3.2(.1) when used to protect sensitive information transferred to or from web sites. According to PCI, "30 June 2018 is the deadline for disabling SSL/early TLS and implementing a more secure encryption protocol – TLS 1.1 or higher (TLS v1.2 is strongly encouraged) in order to meet the PCI Data Security Standard (PCI DSS) for safeguarding payment data.

This alert belongs to the following categories: A3, A6, A9

CVSS2	Base Score: 4.3 Access Vector: Network_accessible Access Complexity: Medium Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CVSS3	Base Score: 3.1 Attack Vector: Network Attack Complexity: High Privileges Required: None User Interaction: Required Scope: Unchanged Confidentiality Impact: Low Integrity Impact: None Availability Impact: None
CWE	CWE-16
Parameter	
Variants	

Clickjacking: X-Frame-Options header missing

Clickjacking (User Interface redress attack, UI redress attack, UI redressing) is a malicious technique of tricking a Web user into clicking on something different from what the user perceives they are clicking on, thus potentially revealing confidential information or taking control of their computer while clicking on seemingly innocuous web pages.

The server didn't return an **X-Frame-Options** header which means that this website could be at risk of a clickjacking attack. The X-Frame-Options HTTP response header can be used to indicate whether or not a browser should be allowed to render a page inside a frame or iframe. Sites can use this to avoid clickjacking attacks, by ensuring that their content is not embedded into other sites.

This alert belongs to the following categories: A3, A5

CVSS2	Base Score: 4.3 Access Vector: Network_accessible Access Complexity: Medium Authentication: None Confidentiality Impact: None Integrity Impact: Partial Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CWE	CWE-693
Parameter	
Variants	

/authenticate.html

Login page password-guessing attack

A common threat web developers face is a password-guessing attack known as a brute force attack. A brute-force attack is an attempt to discover a password by systematically trying every possible combination of letters, numbers, and symbols until you discover the one correct combination that works.

This login page doesn't have any protection against password-guessing attacks (brute force attacks). It's recommended to implement some type of account lockout after a defined number of incorrect password attempts. Consult Web references for more information about fixing this problem.

This alert belongs to the following categories: A2, A3, A5, A6, A9

CVSS2	Base Score: 5.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined

CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Parameter	
Variants	

/signup.html

Login page password-guessing attack

A common threat web developers face is a password-guessing attack known as a brute force attack. A brute-force attack is an attempt to discover a password by systematically trying every possible combination of letters, numbers, and symbols until you discover the one correct combination that works.

This login page doesn't have any protection against password-guessing attacks (brute force attacks). It's recommended to implement some type of account lockout after a defined number of incorrect password attempts. Consult Web references for more information about fixing this problem.

This alert belongs to the following categories: A2, A3, A5, A6, A9

CVSS2	Base Score: 5.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CVSS3	Base Score: 5.3 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: None Integrity Impact: None Availability Impact: Low
CWE	CWE-307
Parameter	
Variants	

/debug.log

Possible sensitive files

A possible sensitive file has been found. This file is not directly linked from the website. This check looks for common sensitive resources like password files, configuration files, log files, include files, statistics data, database dumps. Each one of these files could help an attacker to learn more about his target.

This alert belongs to the following categories: A3

CVSS2	Base Score: 5.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: Partial Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CVSS3	Base Score: 7.5 Attack Vector: Network Attack Complexity: Low Privileges Required: None User Interaction: None Scope: Unchanged Confidentiality Impact: High Integrity Impact: None Availability Impact: None
CWE	CWE-200
Parameter	
Variants	

/authenticate.html

Content Security Policy (CSP) not implemented

Content Security Policy (CSP) is an added layer of security that helps to detect and mitigate certain types of attacks, including Cross Site Scripting (XSS) and data injection attacks.

Content Security Policy (CSP) can be implemented by adding a **Content-Security-Policy** header. The value of this header is a string containing the policy directives describing your Content Security Policy. To implement CSP, you should define lists of allowed origins for the all of the types of resources that your site utilizes. For example, if you have a simple site that needs to load scripts, stylesheets, and images hosted locally, as well as from the jQuery library from their CDN, the CSP header could look like the following:

```
Content-Security-Policy:
    default-src 'self';
    script-src 'self' https://code.jquery.com;
```

It was detected that your web application doesn't implement Content Security Policy (CSP) as the CSP header is missing from the response. It's recommended to implement Content Security Policy (CSP) into your web application.

This alert belongs to the following categories: A3, A6, A9

CVSS2	Base Score: 0.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: None Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CWE	CWE-16
Parameter	
Variants	

Subresource Integrity (SRI) not implemented

Subresource Integrity (SRI) is a security feature that enables browsers to verify that third-party resources they fetch (for example, from a CDN) are delivered without unexpected manipulation. It works by allowing developers to provide a cryptographic hash that a fetched file must match.

Third-party resources (such as scripts and stylesheets) can be manipulated. An attacker that has access or has hacked the hosting CDN can manipulate or replace the files. SRI allows developers to specify a base64-encoded cryptographic hash of the resource to be loaded. The integrity attribute containing the hash is then added to the <script> HTML element tag. The integrity string consists of a base64-encoded hash, followed by a prefix that depends on the hash algorithm. This prefix can either be sha265, sha384 or sha512.

The script loaded from the external URL specified in the Details section doesn't implement Subresource Integrity (SRI). It's recommended to implement Subresource Integrity (SRI) for all the scripts loaded from external hosts.

This alert belongs to the following categories: A3, A6, A9

CVSS2	Base Score: 0.0 Access Vector: Network_accessible Access Complexity: Low Authentication: None Confidentiality Impact: None Integrity Impact: None Availability Impact: None Exploitability: Not_defined Remediation Level: Not_defined Report Confidence: Not_defined Availability Requirement: Not_defined Collateral Damage Potential: Not_defined Confidentiality Requirement: Not_defined Integrity Requirement: Not_defined Target Distribution: Not_defined
CWE	CWE-16
Parameter	
Variants	

Web Server

TLS 1.1 enabled

The web server supports encryption through TLS 1.1. When aiming for Payment Card Industry (PCI) Data Security Standard (DSS) compliance, it is recommended (although at the time or writing not required) to use TLS 1.2 or higher instead. According to PCI, "30 June 2018 is the deadline for disabling SSL/early TLS and implementing a more secure encryption protocol – TLS 1.1 or higher (TLS v1.2 is strongly encouraged) in order to meet the PCI Data Security Standard (PCI DSS) for safeguarding payment data.

This alert belongs to the following categories: A3, A6, A9

CWE	CWE-16
Parameter	
Variants	

Scanned items (coverage report)

https://teache-me-front.herokuapp.com/
https://teache-me-front.herokuapp.com/authenticate.html
https://teache-me-front.herokuapp.com/createclass.html
https://teache-me-front.herokuapp.com/css/
https://teache-me-front.herokuapp.com/css/buttons.css
https://teache-me-front.herokuapp.com/css/scroll.css
https://teache-me-front.herokuapp.com/css/style.css
https://teache-me-front.herokuapp.com/debug.log
https://teache-me-front.herokuapp.com/fonts/
https://teache-me-front.herokuapp.com/fonts/material-icon/
https://teache-me-front.herokuapp.com/fonts/material-icon/css/
https://teache-me-front.herokuapp.com/fonts/material-icon/css/material-design-iconic-font.min.css
https://teache-me-front.herokuapp.com/fonts/material-icon/fonts/
https://teache-me-front.herokuapp.com/images/
https://teache-me-front.herokuapp.com/index.html
https://teache-me-front.herokuapp.com/js/
https://teache-me-front.herokuapp.com/js/accept.js
https://teache-me-front.herokuapp.com/js/apiclient.js
https://teache-me-front.herokuapp.com/js/chat.js
https://teache-me-front.herokuapp.com/js/create.js
https://teache-me-front.herokuapp.com/js/index.js
https://teache-me-front.herokuapp.com/js/login.js
https://teache-me-front.herokuapp.com/js/search-result.js
https://teache-me-front.herokuapp.com/js/signup.js
https://teache-me-front.herokuapp.com/js/studying-class.js
https://teache-me-front.herokuapp.com/js/teaching-class.js
https://teache-me-front.herokuapp.com/js/validator.js
https://teache-me-front.herokuapp.com/search-result.html
https://teache-me-front.herokuapp.com/signup.html
https://teache-me-front.herokuapp.com/sweetalert2/
https://teache-me-front.herokuapp.com/sweetalert2/dist/
https://teache-me-front.herokuapp.com/sweetalert2/dist/sweetalert2.all.js