

# Quiz 10: Security and Session Management

**Due** Nov 21 at 11:59pm

**Points** 10

**Questions** 10

**Available** Nov 17 at 5pm - Nov 21 at 11:59pm

**Time Limit** 15 Minutes

## Instructions

This quiz covers lecture 13 (Web Security). Please take the quiz only after watching the lecture videos - the total running time is about 40 minutes for the videos.

This quiz was locked Nov 21 at 11:59pm.

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	15 minutes	9 out of 10

Score for this quiz: **9** out of 10

Submitted Nov 20 at 3:04pm

This attempt took 15 minutes.

**Correct!**

### Question 1

1 / 1 pts

Which of the following is the **most accurate** description of a web session?

- ☐ A piece of unique string shared between the server and the client
- ☒ A shared state between the server and the client
- ☐ A term used to describe a client-server pair
- ☐ A piece of information about the client stored in the server

### Question 2

1 / 1 pts

Which of the following is **NOT** a reason for maintaining a web session?

☐ The server wants to keep track of the client application state

Correct!

☒ The client wants privacy

☐ HTTP is stateless

☐ The server wants to identify a client

### Question 3

1 / 1 pts

Which of the following is the **most accurate** description of a web cookie?

☐ It is a piece of data generated by the server in order to control the client's actions

☐ It is a secret token included in HTTP messages, used to authenticate the client

Correct!

☒ It is a piece of data passed between the server and a client to keep track of some shared state

☐ It is a lightweight cache to store some metadata about each HTTP message

### Question 4

1 / 1 pts

Which of the following is **NOT** true about a web cookie?

**Correct!**

- ☐ The client can modify a cookie using the DOM API
- ☐ The browser automatically includes cookies for some HTTP requests
- ☒ Only the server has permissions to set the value of a cookie
- ☐ A cookie is included as HTTP headers

### Question 5

1 / 1 pts

Essentially, Cross-Site Scripting (XSS) Attack is \_\_\_\_\_

**Correct!**

- ☐ modifying the JavaScript code of a vulnerable application
- ☒ executing a foreign piece of code within the context of a legitimate application
- ☐ stealing the cookie from an unsuspecting application user
- ☐ sending a maliciously crafted URL to an innocent person to click

### Question 6

1 / 1 pts

A web application is potentially vulnerable to Cross-Site Scripting attack if...

- ☐ it uses cookies to maintain session data
- ☐ the web server serves static HTML files
- ☐ the web server is hosted on a public domain

Correct!



it accepts input from a user and renders it in the client-side app HTML

### Question 7

1 / 1 pts

Which of the following is **NOT** true about a Cross-Site Scripting attack?

Correct!



It can be mounted by crafting a fake application that looks like the real one



It can be mounted on multiple people simultaneously



It can be mounted simply by sending a maliciously-crafted URL



It can be mounted in a stealthy way without any visual cues

### Question 8

1 / 1 pts

Essentially, Cross-Site Request Forgery is \_\_\_\_\_



luring a victim by sending a phishing email



stealing the cookie from an unsuspecting application user

Correct!



crafting a request to be sent from the victim's session



sending a malicious <form> element

### Question 9

1 / 1 pts

A web application is potentially vulnerable to Cross-Site Request Forgery attack if...

☐ the client application renders the HTML dynamically

Correct!

☒ it allows clients to submit requests that alter some state on the server-side

☐ the web server does not maintain any state

☐ the web server simply serves static HTML files

### Question 10

0 / 1 pts

Which of the following is **NOT** true about a Cross-site request forgery?

Incorrect Answer

☐ The attacker must have access to the compromised web application server

Correctly Answered

☒ The attacker does not need direct access to the victim's cookies

The attacker does not even need to see the victim's cookies. The point of the CSRF attack is to make the clients themselves -- using their own cookies -- perform the action that the attacker wants, without the client being aware of what is happening.

☐ A victim can be attacked through a single hyperlink

☐ It can result in real loss of capital

Quiz Score: **9** out of 10