

# Web Infrastructure - End of Module Quiz

- Due Apr 16 at 11:35am
- Points 60
- Questions 60
- Available Apr 16 at 10:06am - Apr 16 at 11:35am 1 hour and 29 minutes
- Time Limit 75 Minutes
- Allowed Attempts 2

## Instructions

Welcome to the Web Infrastructure End of Module Quiz! This quiz comprehensively evaluates your understanding of all concepts covered throughout the module, including those from your Intranet assignment. Remember, the goal is to assess your learning and ensure you take valuable knowledge from this course. Here are some important instructions for the quiz:

1. Please refrain from using the Internet or online tools during the quiz; they won't provide answers and will only waste your time.
2. You have only two attempts at this quiz within the allotted time.
3. Complete the quiz within the allotted time of 60 minutes.
4. Questions and answers are shuffled, providing a unique experience for each participant.
5. Once you move to the next question, you cannot change your answer to the previous question.
6. Correct answers will be available at noon.
7. You must turn on your video while taking the Quiz.
8. Feel free to choose any option if you're unsure of an answer or believe it's not provided.

Best of luck with the quiz!

Take the Quiz Again

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	41 minutes	51 out of 60

⚠️ Answers will be shown after your last attempt

Score for this attempt: 51 out of 60

Submitted Apr 16 at 11:12am

This attempt took 41 minutes.



Question 1

1 / 1 pts

Which HTTP method do we use to make an HTTP request to update an existing resource?

☐ DELETE

☐ UPDATE

☐ POST

☒ PUT



IncorrectQuestion 2

0 / 1 pts

```
import requests
```

```
api_url = "https://jsonplaceholder.typicode.com/todos/1"
```

```
response = requests.get(api_url)
```



The data returned by the API, The Content-Type of the response found in the headers, The HTTP status code of the response

☐ None of the options

☐ The list of all available API endpoints in the API

☒ The HTTP status code of the response



Question 3

1 / 1 pts

Which of the following HTTP method should be read only in nature

☒ GET

☐ PUT

☐ DELETE

☐ POST



Question 4

1 / 1 pts

How do you access data from a REST API?

☐ By downloading the entire database from the web service

☐ By sending an email request to the web service administrator

☒ By sending an HTTP request to a specific URL and processing the response

☐ By using FTP to access the server files directly



Question 5

1 / 1 pts

Which of the following HTTP Status codes means NOT MODIFIED, used to reduce network bandwidth usage in case of conditional GET requests?

☒ 304

Explanation : HTTP Status Code 304 means NOT MODIFIED, used to reduce network bandwidth usage in case of conditional GET requests.

☐ 201

☐ 200

☐ 202



#### Question 6

1 / 1 pts

Which of the following is NOT a constraint of RESTful architecture?

☐ Cacheable

☐ Client-Server

☐ Stateless

☒ Service Orchestration



#### Question 7

1 / 1 pts

In REST API design, what is idempotency?

☒ The property that a method can be called multiple times without different outcomes

Idempotency is a key concept in REST API design. It means that an operation can be performed multiple times without changing the result beyond the initial application.

☐ The capability of an API to update data

☐ The ability of an API to handle multiple requests in parallel

☐ The feature of an API that allows it to delete resources



#### Question 8

1 / 1 pts

What does the abbreviation *REST* stand for?

☒ Representational state transfer

☐ Represent state transfer

- ☐ Representational stateless Transfer Protocol
- ☐ It's not an abbreviation



### Question 9

1 / 1 pts

Which HTTP method do we use to make an HTTP request to create a new resource?

- ☐ PUT
- ☐ CREATE
- ☐ GET
- ☒ POST



### Question 10

1 / 1 pts

Your API resource does not allow deletion, and a client application attempted to delete the resource. What HTTP response code should you return?

- ☐ 400 - Bad Request
- ☐ 409 - Conflict
- ☒ 405 - Method Not Allowed
- ☐ 406 - Not Acceptable



### Question 11

1 / 1 pts

What is the difference between PUT and PATCH methods in REST API?

- ☒ PUT updates the entire resource, while PATCH updates only specific fields of a resource
- ☐ PUT requires authentication, while PATCH does not
- ☐ PUT is idempotent, while PATCH is not
- ☐ PUT is used for creating resources, while PATCH is used for updating resources



### Question 12

1 / 1 pts

API testing must be treated as \_\_\_\_\_?

- ☐ white box testing
- ☒ black box testing

- ☐ red team testing
- ☐ blue box testing



### Question 13

1 / 1 pts

Which of the following HTTP Status codes means CONFLICT, states conflict situation while executing the method for example, adding duplicate entry?

- ☐ 404
- ☐ 401
- ☒ 409
- ☐ 402



### Question 14

1 / 1 pts

Which HTTP verb is used in a CORS preflight request

- ☐ POST
- ☐ GET
- ☒ OPTIONS

Preflight request

It is an HTTP request of the **OPTIONS method**, sent before the request itself, in order to determine if it is safe to send it. It is only after the server has sent a positive response that the actual HTTP request is sent.

- ☐ PUT



### Question 15

1 / 1 pts

What is the HTTP Code Related to Internal Server Error?

- ☒ 500
- ☐ 502
- ☐ 504
- ☐ 501



## Question 16

1 / 1 pts

What protection does a JSON Web Token (JWT) offer to mitigate tampering with its contents?

- ☐ transport over SSL
- ☐ encoded payload
- ☒ a signature
- ☐ encrypted payload



## Question 17

1 / 1 pts

Which REST constraint specifies that knowledge and understanding obtained from one component of the API should be generally applicable elsewhere in the API?

- ☐ Client-Server
- ☐ Cacheable
- ☒ Uniform Interface
- ☐ Stateless



## Question 18

1 / 1 pts

What does a **201** status code indicates when you receive it as a response to a **POST** request?

- ☐ The server encountered an error processing the request.
- ☐ The request was successful, but no new resource was created.
- ☐ The request failed due to a client-side error.
- ☒ The request was successful, and a new resource was created.



## Question 19

1 / 1 pts

What is the purpose of the "Authorization" header in a REST API request?

- ☐ It specifies the format of the request payload
- ☒ It provides authentication credentials for accessing protected resources
- ☐ It determines the cache control policy for the request
- ☐ It provides additional metadata about the request



## Question 20

1 / 1 pts

What is the modern specification for describing an API

- ☐ WSDL
- ☐ OAuth
- ☒ OpenAPI (Swagger)
- ☐ WADL



## Question 21

1 / 1 pts

Which one of the following protocol can be used for login to a shell on a remote host except SSH?

- ☐ ) none of the mentioned
- ☐ telnet
- ☐ rlogin
- ☒ both telnet and rlogin



## Question 22

1 / 1 pts

SSH-2 does not contain \_\_\_\_\_

- ☐ user authentication layer
- ☒ physical layer

Explanation: SSH2 is a more secure, portable and efficient version of SSH that includes SFTP, which is functionally similar to FTP, but is SSH2 encrypted.

- ☐ connection layer
- ☐ transport layer



## IncorrectQuestion 23

0 / 1 pts

What is the recommended cryptographic algorithm for the Secure Shell Transport Layer?

- ☐ aes 128
- ☐ Twofish 128
- ☒ aes 192

☐ blowfish



### Question 24

1 / 1 pts

SSH uses \_\_\_\_\_ to authenticate the remote computer

- ☐ Private-Key Cryptography
- ☐ Any of Public-Key or Private-Key
- ☐ Both Public-Key & Private-Key
- ☒ Public-Key Cryptography



### Question 25

1 / 1 pts

Secure shell (SSH) network protocol is used for \_\_\_\_\_

- ☒ all of the mentioned
- ☐ secure data communication
- ☐ remote command-line login
- ☐ remote command execution



### Question 26

1 / 1 pts

Which one of the following authentication methods is used by SSH?

- ☐ public-key
- ☒ all of the mentioned
- ☐ host based
- ☐ password



### Question 27

1 / 1 pts

SSH can be used in only \_\_\_\_\_

- ☐ Windows
- ☒ Both Unix-like and Windows System
- ☐ Unix-like Operating System



☐ None of the mentioned



### Question 28

1 / 1 pts

Which standard TCP port is assigned for contacting SSH servers

- ☐ port 23
- ☐ port 21
- ☒ port 22
- ☐ port 24



### IncorrectQuestion 29

0 / 1 pts

Which one of the following features was present in SSH protocol, version 1?

- ☒ password changing
- ☐ periodic replacement of session keys
- ☐ support for public-key certificates
- ☐ none of the mentioned



### Question 30

1 / 1 pts

SCP protocol is evolved from \_\_\_\_\_ over SSH.

- ☐ MGCP protocol
- ☐ GCP protocol
- ☐ DHCP protocol
- ☒ RCP protocol

Explanation: RCP is the abbreviation for Rate Control Protocol, is a congestion control algorithm for fast user response times.



### Question 31

1 / 1 pts

Which of the following is the official website of Nginx?

- ☐ Nginx
- ☐ Nginx.com
- ☐ Ngnix.in
- ☒ nginx.org



### Question 32

1 / 1 pts

What is the command to stop the Nginx server

```
sudo systemctl stop nginx
```



### IncorrectQuestion 33

0 / 1 pts

which one is the incorrect difference between Nginx and Apache

- ☐ All of them are incorrect
- ☒ Apache is powerful but Nginx not
- ☐ Nginx is best for memory usage
- ☐ Nginx is popular for its speed but Apache is slower than this



### Question 34

1 / 1 pts

What services are not a provided by Webservers?

- ☒ Resource Sharing
- ☐ Running Gateway Programs
- ☐ Server Side Scripting
- ☐ Serving Web Pages



### Question 35

1 / 1 pts

The character-based naming system by which servers are identified is known as \_\_\_\_\_

- ☐ DHCP

☐ TCP

☐ IP

☒ DNS



### Question 36

1 / 1 pts

Which one of these is not a server?

☒ Client servers

☐ Application Servers

☐ FTP servers

☐ Backup Servers



### Question 37

1 / 1 pts

Which services are not provided by a Server?

☒ Browsing

☐ Data Sharing

☐ Virus Scanning

☐ Resource Sharing



### Question 38

1 / 1 pts

Programs that request data from servers is called

☐ users

☒ clients

☐ programs

☐ hosts



### Question 39

1 / 1 pts

Web Servers respond to web-related request.

☒ True

☐ False



#### Question 40

1 / 1 pts

Which of the following is not a Web Server

☐ Apache Tomcat

☒ BlueGriffon

☐ Tornado

☐ Jetty



#### IncorrectQuestion 41

0 / 1 pts

What is the name of the guest facilitator that discussed, Firewall, HTTPS, and SSL?

Wakuma Tekalign Debela



#### Question 42

1 / 1 pts

What is the main advantage of using HTTPS over HTTP?

☐ Faster data transmission

☒ Encrypted data transmission

☐ Stronger password policies

☐ Improved server performance



#### Question 43

1 / 1 pts

Which certificate authority is responsible for issuing and validating SSL/TLS certificates for websites?

☒ Certificate Authority (CA)

☐ CA/Browser Forum

☐ IANA

☐ ICANN



#### Question 44

1 / 1 pts

What is the primary purpose of HTTPS in web security?

- ☐ To serve as a backup protocol for HTTP
- ☐ To enable cross-origin resource sharing
- ☐ To secure user authentication
- ☒ To encrypt data transmitted between a web server and a browser



#### Incorrect Question 45

0 / 1 pts

Which encryption method is commonly used in SSL/TLS to secure data transmission?

- ☒ AES
- ☐ SHA-1
- ☐ RSA
- ☐ DES



#### Question 46

1 / 1 pts

What does TLS stand for in the context of web security?

- ☐ The Lasting Security
- ☐ Thorough Layered Security
- ☐ Trusted Link Security
- ☒ Transport Layer Security



#### Question 47

1 / 1 pts

Network layer firewall works as a \_\_\_\_\_

- ☒ Packet filter
- ☐ Virus filter

- ☐ Frame filter
- ☐ Content filter



IncorrectQuestion 48

0 / 1 pts

Which firewall configuration approach involves creating rules based on specific IP addresses and port numbers?

- ☒ Black-listing
- ☐ White-listing
- ☐ Stateful filtering
- ☐ Packet inspection



Question 49

1 / 1 pts

What does the term "DMZ" stand for in the context of firewalls?

- ☐ Direct Monitoring Zone
- ☐ Danger Management Zone
- ☒ Demilitarized Zone
- ☐ Data Management Zone



Question 50

1 / 1 pts

Which type of firewall intercepts communication between the client and server, acting as an intermediary?

- ☒ Proxy firewall
- ☐ Packet-filtering firewall
- ☐ Application-layer firewall
- ☐ Stateful firewall



Question 51

1 / 1 pts

Which type of firewall examines packets and makes decisions based on the state of active connections?

- ☐ Packet-filtering firewall
- ☐ Proxy firewall
- ☐ Application-layer firewall
- ☒ Stateful firewall



IncorrectQuestion 52

0 / 1 pts

A stateful firewall maintains a \_\_\_\_\_, which is a list of active connections.

- ☐ Connection table
- ☐ Bridging table
- ☐ Routing table
- ☒ State table



IncorrectQuestion 53

0 / 1 pts

What tells a firewall how to reassemble a data stream that has been divided into packets?

- ☒ The number in the header's identification field
- ☐ The destination IP address
- ☐ The header checksum field in the packet header
- ☐ The source routing feature



Question 54

1 / 1 pts

Which of the following is / are the types of firewall?

- ☒ Packet Filtering Firewall
- ☐ Dual Host Firewall
- ☐ Screen Host Firewall
- ☐ Dual Homed Gateway Firewall



## Question 55

1 / 1 pts

What is the primary purpose of a firewall in network security?

- ☐ Speed up internet connection
- ☒ Control and filter network traffic
- ☐ Monitor user activity
- ☐ Block all incoming and outgoing traffic



## Question 56

1 / 1 pts

How to check the exposed ports of a container?

- ☐ docker history <container\_id>
- ☐ docker network <container\_id>
- ☒ docker port <container\_id>
- ☐ docker top <container\_id>



## Question 57

1 / 1 pts

What is Docker?

- ☐ Docker is an open platform based on Windows containers for developing, shipping, and running applications.
- ☐ None of the above
- ☐ Docker is a closed platform based on Linux containers for developing, designing and deploying.
- ☒ Docker is an open platform based on Linux containers for developing, shipping, and running applications.



## Question 58

1 / 1 pts

What is the default network used in docker?

- ☐ none
- ☐ host



- ☒ bridge
- ☐ custom



### Question 59

1 / 1 pts

Which sentence best describes Docker

- ☐ All of the above
- ☐ Easy to run, is much more fun
- ☐ Build Once, run twice
- ☒ Build Once, run everywhere



### Question 60

1 / 1 pts

The markup language used to write Docker Configuration files is?

- ☐ JSON
- ☐ XML
- ☒ YAML
- ☐ HTML

Quiz Score: 51 out of 60