

Correct! DNS translates human-readable domain names into IP addresses, allowing you to access websites by their names.

3. You're planning to create a website and need to choose between HTTP and HTTPS. Which aspect distinguishes HTTPS from HTTP when it comes to data security?

- HTTPS has faster performance.
- HTTPS requires fewer resources.
- HTTPS uses no certificates.
- HTTPS encrypts data.

Correct

Correct! HTTPS encrypts data during transmission using SSL/TLS, ensuring data security and confidentiality.

1 / 1 point

4. Imagine you run a popular e-commerce website, and due to a sudden increase in traffic during a sale event, your servers are struggling to handle the load. What technique would you consider using to efficiently distribute the incoming requests and maintain performance?

- Reducing website features
- Horizontal scaling

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- Python
- JavaScript
- Java
- Ruby

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Correct! Python is commonly used with frameworks like Django and Flask to build web applications.

1 / 1 point

8. You're working on improving a mobile app's accessibility. Which step would you take to address the challenge of improving accessibility?

- Making the app available in multiple languages
- Adding more images to the app
- Increasing the app's font size
- Ensuring the app's user interface follows guidelines

Correct

Correct! Ensuring the app's user interface adheres to accessibility guidelines would address the challenge.

1 / 1 point

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9. You're developing a web application and want to enable dynamic content updates without having to refresh the entire page. Which technique allows for real-time communication with the server and dynamic content updates?

- Using XML for data exchange
- Making AJAX requests and using APIs
- Utilizing HTML5's IndexedDB for local data storage
- Implementing Web SQL Database for structured data storage

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Correct! AJAX requests and APIs enable real-time communication with the server and dynamic content updates without requiring a full page refresh.

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10. You're tasked with developing a new web application and want to focus solely on building and deploying the application without worrying about managing the underlying infrastructure. Which cloud service model should you choose?

- IaaS (Infrastructure-as-a-Service)
- PaaS (Platform-as-a-Service)
- SaaS (Software-as-a-Service)
- All three service models (IaaS, PaaS, SaaS)

 **Correct**

Correct! PaaS offers a platform for developing, testing, and deploying applications while the underlying infrastructure is managed by the provider. This allows you to focus on application development without worrying about infrastructure management.

1 / 1 point