

What is a server?

A client sends a request to the server, which performs some action and sends a response back to the client, typically with a result or acknowledgement.

What is the role of the domain name?

Every web site online has an IP address that is its actual internet location, and this number is used to locate the web site within the database.

What type of DNS record www is in www.foobar.com?

www = Record **Foobar** = Domain Name **.com** = TLD (top level domain)

What is the role of the web server?

To processes requests via HTTP, the basic network protocol used to distribute information on the World Wide Web.

What is the role of the application server?

Web Page Generating.

An application server runs behind a web Server (e.g. Apache or Microsoft Internet Information Services (IIS)) and (almost always) in front of an SQL database (e.g. PostgreSQL, MySQL, or Oracle).

For Web applications, these components are usually performed in the same running environment as their web server(s), and their main job is to support the construction of **dynamic pages**.

What is the role of the database?

To store lots of information that has easily accessible access for managing such as deleting adding updating information.

What is the server using to communicate with the computer of the user requesting the website? Web browsers and servers communicate via TCP/IP. Hypertext Transfer Protocol (HTTP) is the standard application protocol on top of TCP/IP supporting web browser requests and server responses.

You must be able to explain what are the issues with this infrastructure:

SPOF: *single point of failure*

Any component of a system that upon failure will cause a malfunction in the entire system.

Downtime when maintenance needed (like deploying new code web server needs to be restarted)? If server is down everything else is down unable to work and be productive.

Cannot scale if too much incoming traffic? Scaling is dependent on the type of systems that is being supported whether a physical or cloud based server. its potential to be enlarged to accommodate that growth