1. What is a server; A server is a device or system that provides resources or services to other devices on a network.

2. What is the role of a domain name; A domain name provides readable name for address for a website or other resources that can be easily remembered by users.

3. What type of DNS record www is in www.foobar.com; It is a cname.

4. What is the role of the Web Server; The role of a Web Server is to store, process and display website contents ; deliver web pages to users in HTML and CSS form over the protocol HTTP.

5. What is the role of the application server; The role of the application server is to generate dynamic contents by executing server-side code such as JSP, Ajax, PHP, etc.

6. What is the role of the database; The role of a database is to manage data systematically and efficiently in a well-organized manner which allows data to be easily added, accessed, updated, managed, and deleted.

7. What is the server using to communicate with the computer of the user requesting the website; The server communicates through HTTP protocol.

Issues

A. SPOF (Single Point Of Failure)

There are a lot of single points of failures starting from having one server that contains only one web server, application server, and database. A single point of failure is a part of a system that, if it fails, will stop the entire system from working.

B. Downtime when maintenance is needed (like deploying a new code web server needs to be restarted); The downtime period might be longer than expected because the server is dependent on one code base which at that moment, isn't available. Users will therefore not be able to access the website and its contents which results in a bad user experience and loss of traffic.

C. Cannot scale if too much incoming traffic; The domain name points directly at the server hence doesn't contain a load balancer which allows handling increased loads easier. This poses an issue to the volume of users trying to access the website's content and can lead to poor user experience or rather set a limit to the number of users the website will be able to accommodate.