User want to access the website :

- ☐ The user enters www.foobar.com in their browser, triggering a DNS request.
- ☐ The DNS server resolves www.foobar.com to 8.8.8.8 using the A record.
- ☐ The browser sends an HTTP request to 8.8.8.8, which reaches the server.
- ☐ The Nginx web server on the server receives the request and forwards it to the application server.
- ☐ The application server processes the request using the application files.
- ☐ The application server interacts with the MySQL database to retrieve or store data.
- ☐ The response is sent back through Nginx to the user's browser, displaying the requested webpage.

Specifics about the infrastructure:

- ☐ What is a server:
  - ☐ A server is a computer that provides services or resources to other computers over a network.
- ☐ What is the role of the domain name:
  - ☐ A domain name translates human-readable addresses into IP addresses for locating servers.
- ☐ What type of DNS record www is in www.foobar.com:
  - ☐ The www in www.foobar.com is typically a CNAME record that maps to a canonical domain name.
- ☐ What is the role of the web server:
  - ☐ A web server handles HTTP requests and delivers static content or routes requests to application servers.
- ☐ What is the role of the application server:
  - ☐ An application server processes server-side logic and interacts with databases to generate dynamic content.
- ☐ What is the role of the database:
  - ☐ A database stores and manages data used by the application and accessed via the application server.
- ☐ What is the server using to communicate with the computer of the user requesting the website:
  - ☐ The server communicates with the user's computer using the HTTP or HTTPS protocol.

Issues with the infrastructure:

- ☐ SPOF:
  - ☐ SPOF (Single Point of Failure) is a component whose failure can cause the entire system to become unavailable.
- ☐ Downtime when maintenance needed (like deploying new code web server needs to be restarted):
  - ☐ Downtime during maintenance occurs when restarting a web server is necessary, leading to temporary unavailability.
- ☐ Cannot scale if too much incoming traffic:

- [ ] Inability to scale means the system cannot handle increased traffic effectively, causing potential slowdowns or outages.