

## Quiz 10

1. How ajax solves the issue of click-wait-refresh problem of traditional web applications.

Page is responsive or active until the request - response process is done. User interact and cannot feel the work that is done by server.

second it solves it asynchronously that solves the problem with wait refreshing, because just a small part of source are not available until the request is done, and when response is received the partial part of page is refreshed.

2. When AJAX is used for server call, who is the actual caller to server?

XMLHttpRequest makes all the connections with the server part, and also it receives the response and render them to client browser.

3. What does first A in AJAX stand for? Why is it called so?

A asynchronous that means the order of request can differs by order of responses.

4. What is JSON? What advantages it provides over XML?

JSON(javascript object notation) is a standard for representing objects in string format, the advantages are clarity of reading, easy to implement, easy to parse.

5. What is same origin policy? Why is it required?

Is referring on security of web page, then the page is redirecting to another source the browser restrict to use the owner page with the same domain, application protocol and port.

6. What are two main features of ajax?

The asynchronous technology and the rendering page partially

7. Explain step by step execution of following code with relevant event-loop diagram.

## QUIZ 11

1. How servlets make your web application dynamic?

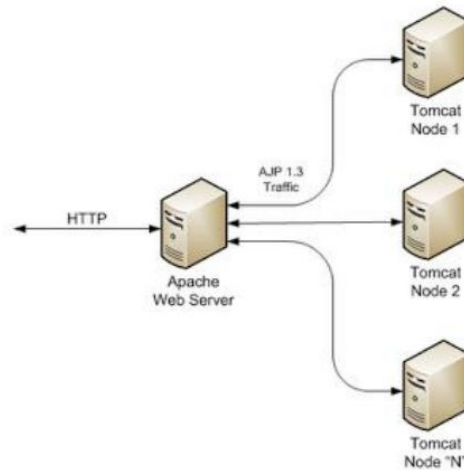
## **Servlets: Add Dynamism**

- A Servlet is server-side java code (class) that can handle http requests and return dynamic content in http response.
- Servlets are managed by a servlet engine or container.
  - Each request that comes in results in the spawning of a new thread that runs a servlet (eliminating the cost of creating a new process every time).

2. How web servers differ from servlet containers?

## Web server vs web container

- Most commercial web applications use Apache web server
  - proven architecture and free license.
- Tomcat can act as simple servlet web container
  - for production environments it may lack features like load-balancing, redundancy, etc.
- Glassfish, WildFly are like Tomcat, but is JavaEE container



3. How service method works with doGet and doPost methods while serving a request?

- Create server class and extends the method, the servlet methods from the superclass manage the request

4. Is it possible to use both annotation and xml configuration in a web application?

- It's possible but if we have both for the same configuration ..

5. What are context init parameters and servlet init parameters

# Context Init parameters

- Context *initialization parameters* usually shortened to *init parameters*.
  - Can be put to any number of uses, from defining connection to database, to providing support email address.
  - You declare context init parameters using <context-param> tag with in the web.xml (no annotation alternative, you have to use DD)

```
<context-param>
  <param-name>support-email</param-name>
  <param-value>cstech.mum.edu</param-value>
</context-param>
```

```
ServletContext sc = this.getServletContext();
sc.getInitParameter("support-email");
```

6. If 1000 users are simultaneously making requests to your ser, how many instances of servlets will be created?

1 instance, but depending of number of request create multiples threads

7. How do you create a new instance of a servlet class?

8. Apart from doGet and doPost you can also override init and destroy methods. When would you want to override those methods?

- Offert object constructions, we need handle like create database connection

9. Which of the following statements are true?

- a. Local variables are thread-safe //true
- b. Instance variables are thread-safe //false
- c. Class variables are thread-safe //false
- d. Nothing is thread-safe in multi-threading environment //false , local variables are thread safe

## QUIZ 2

1. How is session and cookie related? Where are each stored?

- First request create session on memory object
- In the client save this id in the cookie
- For another request the client pass the cookie

2. Compare request parameters with request scope attributes.

Only request attributes thread safe

Parameters are in the url

### TRUE OR FALSE

1. Session cookies are temporary cookies and get destroyed once one closes the browser.

**True**, by default it's a temporal cookie

2. Since, session cookies get destroyed once the browser is closed, client cannot access session anymore.

**True**, no because the id is gone

3. If your answers are true for both of above questions, you agree session is not alive on server once user closes the browser.

**False**,

4. Request scope attributes get lost after forwarding from one servlet to next, so attribute should be saved on session scope.

**False**, its forwarding still we have the same request object

5. Request scope is sufficient to store state information between redirects.

**False**,

6. Session scope is thread safe.

**False**

7. Cookies may cause harm to your machine, like viruses and malwares do.

**False**, its only text file

8. A filter can act on a request only before the destination servlet serves it.

**False**, because can in both waits

9. A listener is mapped to either url or a servlet.

**False**, its not a filter is a listener

### QUIZ 13

1. Which of the following statements are true about this expression `#{a.b}`

a. If a is referring to an object, b is its private field.

**false**

b. If a is referring to an object, b is its public field.

**False, its field, only the public methods**

c. If a is referring to a map, b represents key of the map.

**True**

d. If a is referring to an object, b is referring to its property.

**true**

2. Which of the following statements are true about JSP and Servlet

a. Every JSP ends up as a Servlet

**True**

b. Every thread has its own copy variables declared in jsp using declaration syntax.

**False, we can declare instance variables**

c. Every thread has its own copy of variables declared in jsp inside scriptlet.

**True**

3. What does MVC represents in JSP model 2 architecture?

Model: java bind, its the attribute (its the data)

View. jsp

4. What is a page scope in JSP? Can you think of good use case for using this scope?

- Ajax its a good use