

1) What is jdbc?

Java data base connectivity, which is used to connect application and database

2) What are jdbc connectivity steps

- * import packages
- * load and register drivers
- * create connection
- * create statement
- * update statement
- * execute query
- * close connections, stmt

3) What is driver? Types of drivers.

→ It is a sw component, acts as bridge b/w app & database

Types :

- 1) JDBC-ODBC
- 2) Native-API
- 3) NW protocol
- 4) Thin driver

4) Types of stmts?

1. Statement
2. prepared "
3. callable "

5) What are result set operations?

first() - Moves cursor to first row

next() - " Next

last() - " last

previous() - " previous

absolute() - "

before first() - "

after last() - "

6) What is the difference b/w statement & prepared stmt?

→ In stmt there is no parameters

→ In prepared stmt, ? ? parameter is used.

→ In stmt we always write executeUpdate stmt.

→ But in prepared stmt, we just write only once.

7) What is driver? which is best driver? why?

→ Driver is a sw component, acts as bridge b/w app & database.

Thin driver is best driver, because it is directly connected to database. There is no middleware.

8) J2EE architecture Types?

1. client tier

2. web tier

3. Business logic tier

4. Server tier / EIS tier

Enterprise Information System.

9) What is http protocols?

Http - Hypertext text transfer protocol

Used to communicate / transfer data between client & server

web page client $\xrightarrow{\text{http}}$ Server web server

Use:

To handle request & response of the client server program.

10) What is HTTP methods?

get() — get the data from server

Post() — giving the information / data to server

PUT() — change entire data at server side

Patch() — used to change specific data at server side

delete() — delete the data at server side

Status codes:

100 - To continue the data

200 - ok, success

400 - Bad request / client error

401 - unauthorized

404 - Not found

500 - Server error

300 - Resend the information.

11) Wh
C
R
U
D-
12) Wha
→ Ser
→ JS
13) Wha
*
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14) Wha
EJB
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data
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16) Wha
* Contain
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applic
→ con

stmt?

11) What is CRUD application?

- C - create (insert)
- R - read (select)
- U - update (update)
- D - delete (delete)

& database
connected to

12) What are components in web container?

- Servlets
- JSP

13) What are real-time web containers?

- * Apache Tomcat
- * Eclipse Jetty
- * GlassFish
- * WildFly

topick,
()

14) What is EJB? What is role of EJB in business logic Tier?

EJB - Enterprise Java Beans.

role of EJB is to perform, calculations, transactions processing, data security, communication.

nt & server

15) What is web-architecture models?

- * Single-page
 - * Micro server
 - * Serverless
 - * Monolithic
 - * client-server model
 - * N-tier architecture (N = no. of)
- } mainly we concentrate on these 4

rogram.

16) What is J2EE containers.

- * Contains contains components (like Servlets, JSP, JSF, EJB)
- * It handles communication b/w client & server
- * And also it ~~is~~ acts as interface b/w components & services of applications.

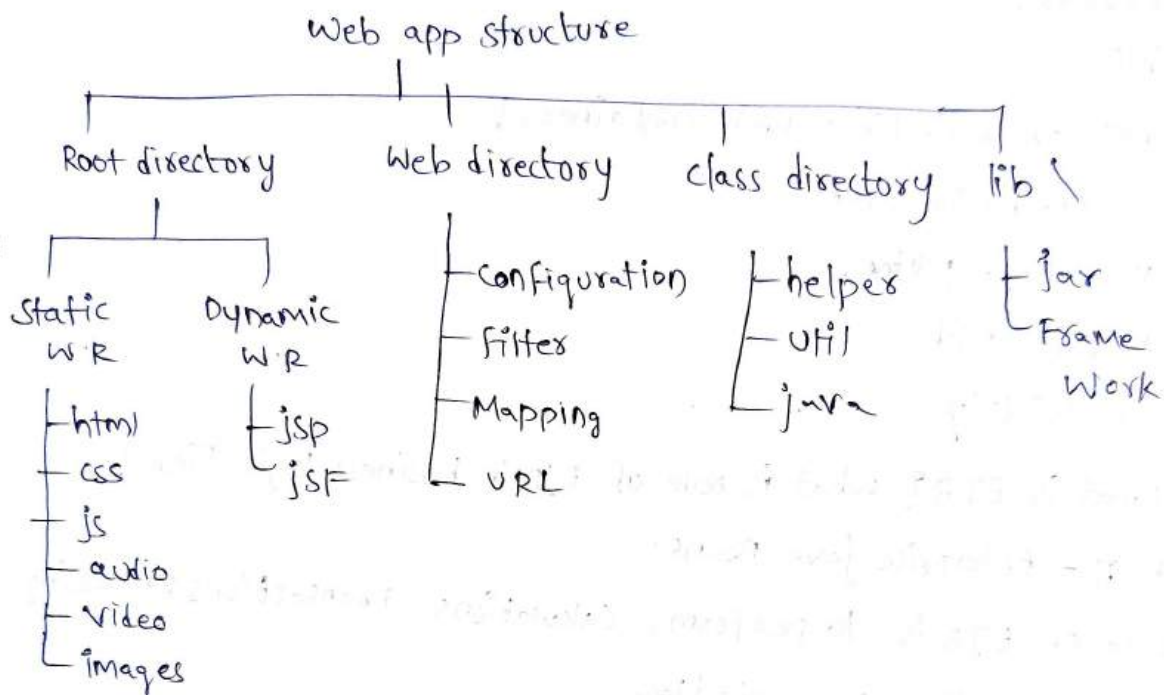
mation.

→ components acts as interface b/w application & user

17) Types of J2EE Containers

1. Web container
2. Business logic container
3. Application container
4. Applet container

18) Web application structure



19) What are status codes in HTTP protocol
Already written in question no 10

20) What is servlet config object?

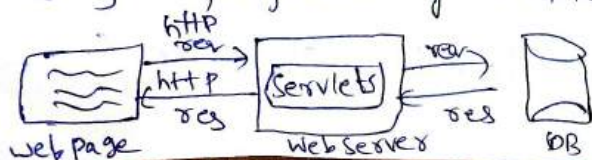
Servlet config object is used to pass initialization parameters to a servlet.

* It is created by web container for each servlet and provides configuration information from the web.xml file.

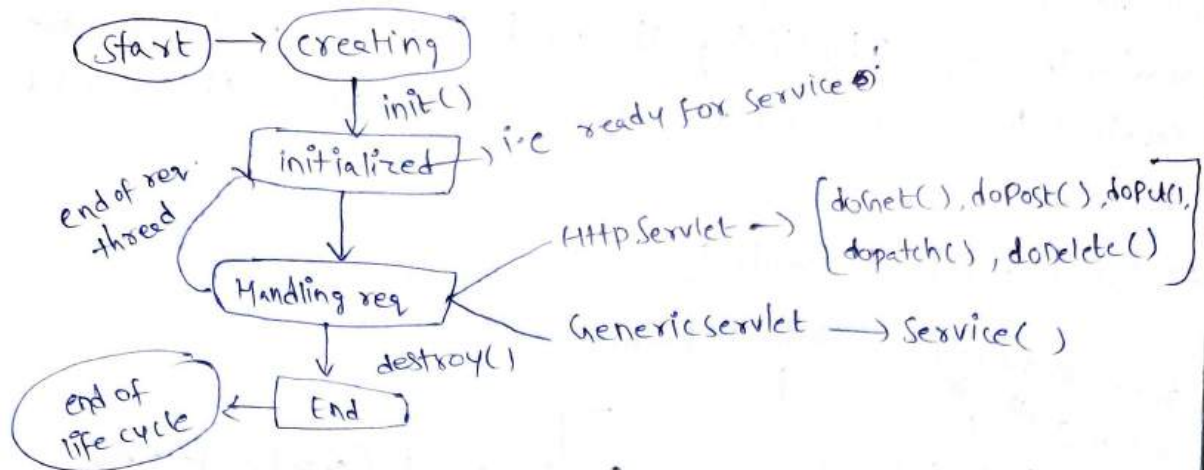
21) What is Servlet?

It is server side technology, used to create dynamic web pages. web component in the web container

→ It is java programming to extend the capability of server



22) Servlet life cycle with phases and methods.



23) Types of Servlets ?

1. HttpServlet → Handles only http protocol
2. GenericServlet → Handles any type of protocols.

24) What is Servlet Features ?

- * Platform independent → Works on any system (os) with java
- * Secure → supports secure connections and user login
- * Efficient → Servlets handle many requests at once using threads
- * Reusable → one servlet can be used by many clients at the same time
- * Robust → They are managed by the server which reduces memory and crash issues.

25) What is Servlet Configuration ?

- Servlet configuration means initialization of data provided to a servlet through the servlet config object
- It is unique for each servlet
- Defined inside the `<servlet>` tag of web.xml
- Helps to initialize the servlet with custom data like dbname, username etc.

26) What is deployment descriptor ?

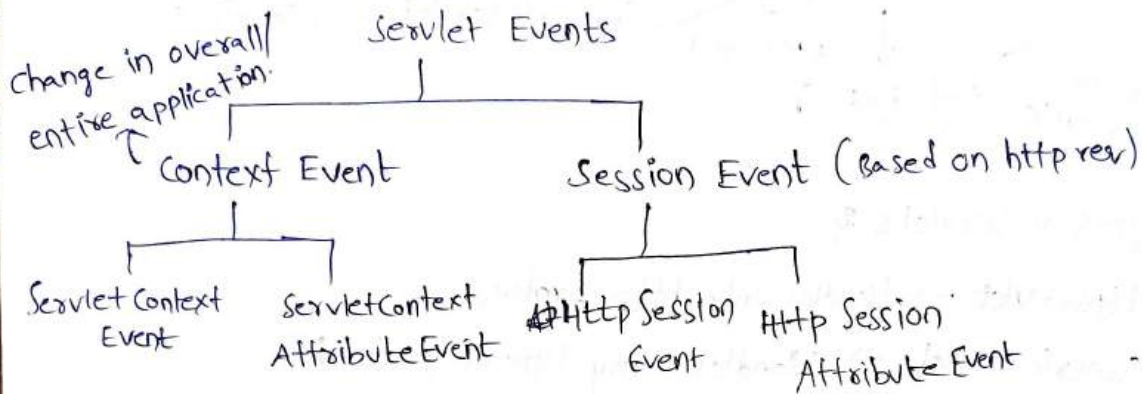
- It is an XML file named web.xml that describes how a web application should be deployed and configured on server.
- located in web-inf folder of a web application.

27) What is Session Tracking & cookies:

Session Tracking: Identifying the product over a period of time

Cookies: Temporary template, used to store unique Id generated by server.

28) Types of Servlet events:



29) Servlet advantages & Disadvantages?

Advantages:

- * Handles any types of protocols
- * Execution is faster compared to jsp
- * Fast & efficient
- * Portable
- * Secure
- * Reusable

Disadvantages:

- * Complex
- * Debugging is difficult
- * Testing is difficult
- * Maintenance is difficult
- * Accessing is also difficult

30) What is JSP?

* It is also server side Technology used to create dynamic web pages.

* It is also one of the web component in the web container.



→ Java code is directly embedded in HTML is known as JSP

31) What are

1. Translation Jsp file
2. Compilation Generated jsp
3. Initialization
4. Req process
5. Destruction

32) JSP Architecture

In

33) Types of JSP

- Expression
- Scriptlet
- Directives
- Declaration

34) What is S

It is a collection of Pages without

* Types

Core T

Format

SQL T

XML

Function

35) What is

i. An exception during exec

36) What is e

→ It is p

31) What are the working steps for JSP lifecycle?

1. Translation phase

JSP file is translated into a java by the jsp engine

2. compilation phase

Generated java file is compiled into a .class file

3. Initialization phase - `JSPInit()`

4. Req processing phase - `JSPService()`

5. Destruction phase - `JSPDestroy()`

32) JSP Architecture?

In question no 30

33) Types of JSP elements?

Expression \rightarrow `<%= %>`

Scriptlet \rightarrow `<% %>`

Directives/Results \rightarrow `<%@ %>`

Declarations \rightarrow `<%! %>`

34) What is standard Tag libraries (JSTL)

It is a collection of useful jsp tags that helps developers write jsp pages without using too much java code inside them

* Types :

Core Tags - c

Format Tags - fmt

SQL Tags - sql

XML Tags - x

Function Tags - fn

35) What is exception?

An exception in jsp is an error or unexpected event that occurs during execution of a jsp page, which disturbs flow of execution.

36) What is exception handling?

\rightarrow It is process of handling exception (process of managing runtime errors that occur during execution)

37) What is difference b/w servlet and JSP.

→ servlet

Handles any types of protocols
code is having large code

↓

Due to large code

Debugging, Testing, Maintainance
are difficult.

→ Execution is fast due to
there are no translation &
compilation phases

JSP

Handles only http protocols

It is having small code

↓

Due to small code

debugging, Testing, Maintainance
are easy.

→ Execution is slow due to
translation & compilation
phases.

38) What is custom Tag?

→ user defined tag

→ Alternative for scriptlet element in JSP elements.

→ Extension of JSP language.

{ Tag Handler class
Tag lib descriptive
Directives.

39) JSP advantages & Disadvantages

Advantages

Testing easy

Maintainance "

Debugging "

Accessibility "

Disadvantages

X execution is very low

X handles only http protocols

40) What is spring MVC?

Spring MVC (Model-view-controller) is a framework provided by

Spring for building web applications in Java

→ It helps separate the Business logic (Model), user interface (View)
and control flow (Controller) of the application.

41) What is Spring MVC module?

→ Spring MVC module is a component of the Spring framework that provides an implementation of the model-view-controller design pattern to build flexible and loosely coupled web applications in Java.

42) What is Bean factory?

→ It is the root interface Spring IOC container that manages the lifecycle and dependencies of beans in a Spring application.

→ Bean factory is the core container of the Spring Framework that is responsible for creating, managing & providing access to beans (objects).

43) Life cycle of Bean factory?

Container started



Bean instantiated



dependencies injected



custom init() method (or)



@postConstruct

Bean is ready (full initialized)



Custom Utility Method



custom destroy() method

or

@preDestroy

44) What is role of model in MVC?

→ It includes description, declarations, data members etc

45) What is role of view in MVC?

for displaying output.

In this we give port number.

46) What is role of controller in MVC?

In this we write execution code, what we want to display in the view, that code we write here

→ Simply controls model and view.

47) What are the methods in Bean factory life cycle?

→ Instantiation [createBean(), docreateBean()]

→ Injection [populateBean(), autowireBean()]

→ Initialization

→ Post-processing

→ Destruction

Destroy Bean() invoke destroy()

initializeBean()
invokeAwareMethods()
invokeInitMethods()
postProcessBeforeInitialization()
postProcessAfterInitialization()

48) What is CRUD in Spring MVC?

C - Create - uses post() - uses save()

R - Read → uses get() - uses findAll(), findBy(), findById()

U - Update - uses put() - update(), modify()

D - Delete → uses delete()

deletefindAll()

deletefindBy()

deletefindById()

49) What is

→ It is a

the dependency

dependencies

50) What

having 4

1. Entry

2. DAO la

3. Service

4. Controller

49) What is dependency injection?

→ It is a design pattern & technique where one object (the dependent object) receives another object (the dependency) that it needs, rather than creating it itself.

50) What is DAO? DAO - Data Access object having 4 layers

1. Entry layer/Model - contains data
2. DAO layer/Repository - store the data using
findAll(), findBy(), findById()
3. Service layer - acts as interface b/w DAO & Controller
4. Controller layer

@controller