Top 50 J2EE interview questions

1) What is J2EE?

J2EE means Java 2 Enterprise Edition. The functionality of J2EE is developing multitier webbased applications .The J2EE platform is consists of a set of services, application programming interfaces (APIs), and protocols.

2) What are the four components of J2EE application?

- Application clients components.
- Servlet and JSP technology are web components.
- Business components (JavaBeans).
- Resource adapter components

3) What are types of J2EE clients?

- Applets
- Application clients
- Java Web Start-enabled clients, by Java Web Start technology.
- · Wireless clients, based on MIDP technology.

4) What are considered as a web component?

Java Servlet and Java Server Pages technology components are web components. Servlets are Java programming language that dynamically receive requests and make responses. JSP pages execute as servlets but allow a more natural approach to creating static content.

5) What is JSF?

JavaServer Faces (JSF) is a user interface (UI) designing framework for Java web applications. JSF provide a set of reusable UI components, standard for web applications. JSF is based on MVC design pattern. It automatically saves the form data to server and populates the form date when display at client side.

6) Define Hash table

HashTable is just like Hash Map, Collection having key(Unique), value pairs. Hashtable is a collection Synchronozed object .It does not allow duplicate values but it allows null values.

7) What is Hibernate?

Hibernate is a open source object-relational mapping and query service. In hibernate we can

write HQL instead of SQL which save developers to spend more time on writing the native SQL. Hibernate has more powerful association, inheritance, polymorphism, composition, and collections. It is a beautiful approach for persisting into database using the java objects. Hibernate also allows you to express queries using java-based criteria.

8) What is the limitation of hibernate?

- Slower in executing the queries than queries are used directly.
- Only query language support for composite keys.
- No shared references to value types.

9) What are the advantage of hibernate.

- Hibernate is portable i mean database independent, Vendor independence.
- Standard ORM also supports JPA
- Mapping of Domain object to relational database.
- Hibernate is better then plain JDBC.
- JPA provider in JPA based applications.

10) What is ORM?



ORM stands for Object-Relational mapping. The objects in a Java class which is mapped in to the tables of a relational database using the metadata that describes the mapping between the objects and the database. It works by transforming the data from one representation to another.

11) Difference between save and saveorupdate

save() - This method in hibernate is used to stores an object into the database. It insert an entry if the record doesn't exist, otherwise not.

saveorupdate () -This method in the hibernate is used for updating the object using identifier. If the identifier is missing this method calls save(). If the identifier exists, it will call update method.

12) Difference between load and get method?

load() can't find the object from cache or database, an exception is thrown and the load() method never returns null.

get() method returns null if the object can't be found. The load() method may return a proxy instead of a real persistent instance get() never returns a proxy.

13) How to invoke stored procedure in hibernate?

{ ? = call thisISTheProcedure() }

14) What are the benefits of ORM?

- Productivity
- Maintainability
- Performance
- Vendor independence

15) What the Core interfaces are of hibernate framework?

- Session Interface
- SessionFactory Interface
- Configuration Interface
- Transaction Interface
- Query and Criteria Interface

16) What is the file extension used for hibernate mapping file?

The name of the file should be like this: filename.hbm.xml

17) What is the file name of hibernate configuration file?

The name of the file should be like this: hibernate.cfg.xml

18) How hibernate is database independent explain?

Only changing the property [crayon-53e4b739e460b970600484/]

full database can be replaced.

19) How to add hibernate mapping file in hibernate configuration file?

Ву

20) Define connection pooling?

Connection pooling is a mechanism reuse the connection. which contains the number of already

created object connection. So whenever there is a necessary for object, this mechanism is used to directly get objects without creating it.

21) What is the hibernate proxy?

An object proxy is just a way to avoid retrieving an object until you need it. Hibernate 2 does not proxy objects by default.

22) What do you create a SessionFactory?

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23) What is HQL?

HQL stands for Hibernate Query Language. Hibernate allows to the user to express queries in its own portable SQL extension and this is called as HQL. It also allows the user to express in native SQL.

24) What are the Collection types in Hibernate?

Set, List, Array, Map, Bag

25) What is a thin client?

A thin client is a program interface to the application that does not have any operations like query of databases, execute complex business rules, or connect to legacy applications.

26) Differentiate between .ear, .jar and .war files.

.jar files: These files are with the .jar extenstion. The .jar files contains the libraries, resources and accessories files like property files.

.war files: These files are with the .war extension. The .war file contains jsp, html, javascript and other files for necessary for the development of web applications.

.ear files: The .ear file contains the EJB modules of the application.

27) What are the JSP tag?

In JSP tags can be divided into 4 different types.

- Directives
- Declarations
- Scriplets
- Expressions

28) How to access web.xml init parameters from jsp page?

For example, if you have: Id this is the value You can access this parameter Id:

29) What are JSP Directives?

- 1.page Directives
- 2. include Directives:
- 3. taglib Directives

30) What is the EAR file?

An EAR file is a JAR file with an .ear extension. A J2EE application with all of its modules is delivered in EAR file.

31) What will happen when you compile and run the following code? [crayon-53e4b739e462a208831238/]

32) What is Struts?

Struts framework is a Model-View-Controller(MVC) architecture for designing large scale applications. Which is combines of Java Servlets, JSP, Custom tags, and message. Struts helps you to create an extensible development environment for your application, based on published standards and proven design patterns. Model in many applications represent the internal state of the system as a set of one or more JavaBeans. The *View* is most often constructed using JavaServer Pages (JSP) technology. The Controller is focused on receiving requests from the client and producing the next phase of the user interface to an appropriate View component. The primary component of the Controller in the framework is a servlet of class ActionServlet. This servlet is configured by defining a set of ActionMappings.

33. What is Action Errors?

ActionErrors object that encapsulates any validation errors that have been found. If no errors are found, return null or an ActionErrors object with no recorded error messages. The default implementation attempts to forward to the HTTP version of this method. Holding request parameters mapping and request and returns set of validation errors, if validation failed; an empty set or null

34) What is ActionForm?

ActionForm is a Java bean that associates one or more ActionMappings. A java bean become FormBean when extend org.apache.struts.action.ActionForm class. ActionForm object is automatically populated on the server side which data has been entered by the client from UI. ActionForm maintains the session state for web application.

35) What is action mapping??

In action mapping we specify action class for particular url ie path and diffrent target view ie forwards on to which request response will be forwarded. The **ActionMapping** represents the information that the **ActionServlet** knows about the mapping of a particular request to an instance of a particular **Action** class. The *mapping* is passed to the *execute()* method of the **Action** class, enabling access to this information directly.

36) What is the MVC on struts.

MVC stands Model-View-Controller.

Model: Model in many applications represent the internal state of the system as a set of one or more JavaBeans.

View: The *View* is most often constructed using JavaServer Pages (JSP) technology.

Controller: The Controller is focused on receiving requests from the client and producing the next phase of the user interface to an appropriate View component. The primary component of the Controller in the framework is a servlet of class ActionServlet. This servlet is configured by defining a set of ActionMappings.

37) What are different modules in spring?

There are seven core modules in spring

- The Core container module
- O/R mapping module (Object/Relational)
- DAO module
- Application context module
- Aspect Oriented Programming
- Web module
- MVC module

38) What is Bean Factory, have you used XMLBean factory?

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39) What is Spring?

Spring is a light weight open source framework for the development of enterprise application that resolves the complexity of enterprise application development also providing a cohesive framework for J2EE application development. Which is primarily based on IOC (inversion of control) or DI (dependency injection) design pattern.

40) Functionality of ActionServlet and RequestProcessor?

Receiving the HttpServletRequest

- Populating JavaBean from the request parameters
- Displaying response on the web page Issues
- · Content type issues handling
- Provide extension points

41) ActionServlet, RequestProcessor and Action classes are the components of

Controller

42) What is default scope in Spring?

Singleton.

43) What are advantages of Spring usage?

- Pojo based programming enables reuse component.
- Improve productivity and subsequently reduce development cost.
- Dependency Injection can be used to improve testability.
- Spring required enterprise services without a need of expensive application server.
- It reduces coupling in code and improves maintainability.

44) What are the Benefits Spring Framework?

- Light weight container
- Spring can effectively organize your middle tier objects
- Initialization of properties is easy ? no need to read from properties file
- application code is much easier to unit test
- Objects are created Lazily, Singleton configuration
- Spring's configuration management services can be used in any architectural layer, in whatever runtime environment

45) Lifecycle interfaces in spring?

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46) How to Create Object without using the keyword "new" in java?

Without new the Factory mehtods are used to create objects for a class. For example Calender c=Calender.getInstance();

here Calender is a class and the method getInstance() is a Factory method which can create object for Calender class.

47) What is servlet?

Servlets is a server side components that provide a powerful mechanism for developing server side programs. Servlets is a server as well as platform-independent and Servlets are designed for a various protocols. Most commonly used HTTP protocols. Servlets uses the classes in the java packages javax.servlet, javax.servlet.http.HttpServletRequest,

javax.servlet.http.HttpServletResponse, javax.servlet.http.HttpSession;. All servlets must implement the Servlet interface, which defines life-cycle methods.

48) Servlet is pure java object or not?

Yes, pure java object.

49) What are the phases of the servlet life cycle?

The life cycle of a servlet consists of the following phases:

- Servlet class loading
- Servlet instantiation
- the init method
- Request handling (call the service method)
- Removal from service (call the destroy method)

50) What must be implemented by all Servlets?

The Servlet Interface must be implemented by all servlets.

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