**Chapter: 1(The Anatomy of a JavaServer Page)**

**MCQ**

Q: What is the standard is EL?

(a)Example Language

(b) Expression Language

(c) Examination Language

(d) Extra Language

Ans: b.

Q: Servlet are inherit classes?

(a)javax.servlet.servlet interface (b) java.servlet.servlet interface

(c) javax.servlet interface (d) javax.sever.servlet interface

Ans: a

Q: What is the text-based content?

(a)HTML

(b) WML

(c)XML

(d) HTTP

Ans: a,b,c

Q: What is not advantage of servlet technology?

(a)Simplicity (b) Extensibility (c) Difficult (d) Efficiency

Ans: c

Q: How many phases the JSP page split into?

A.Three , B.Four, C.Five , D.Eight

Ans:B

Q: The life cycle of a jsp page can be split into four phase .they are-

A. Translation, Initialization, Execution, Finalization.

B. Execution, Finalization, Reusability, Readability

C. Reusability, Readability, Translation, initialization.

D. Finalization, Execution, Initialization. Translation.

Ans:A

Q: After the page’s implementation servlet has been created it, it will be compiled into a class file by-

A.JSP engine B.Servlet C.jspInit() D.jspService().

Ans:A

Q: JSP pages must be -

A.Multithreaded B.Single threaded C.None D.Both

Ans:A

Q: What is the common name of taglibrary:

Ans: taglib

Q: How types of forms in most containers allow web applications to be deployed?

Ans: 2 types

Q: What location defines the web application structure inside your web applications to locate deployment description, HTML and JSP pages?

Ans: Exact location

Q: What is the reference implementation of Servlet 2.5 and JSP 2.1 specification for the Apache Jakarta project?

Ans: Tomcat 5

Q: Which directory contains all the necessary scripts required to start the container?

Ans: bin directory

Q: Which directory contains all the XML-based configuration files used by Tomcat?

Ans: conf directory

Q.The sole purpose of JSP technology is to produce-   
Ans:dynamic, web-based content.  
Q.The 3types of jsp elements are-  
Ans: Scripiting, directive and action elements.  
Q.Any non-JSP code is called-  
Ans: Templete Text.  
Q.Whice of the f ollowing JSP comment-  
Ans:<%-- and --%>.  
QThe JSp decleration delimiters is-  
Ans: <% and %>  
Q. Small block of source code contained within the <% and %> delimiters that can be used to provide programming style language functionality around a page content is called-  
Ans : Scriptlets.  
Q. How many types of JSP implicit object-  
Ans: Nine types.  
Q. The most notable implicit object is-  
Ans: Request Object.  
Q: Request object is an instance of the\_\_\_\_\_\_\_\_\_ interface.  
Ans: javax.servlet.http.ServletRequest.  
Q. the exception object will represent a runtime error that occurred during request process which is an instance of—  
Ans:java.lang.Throwable.  
Q.JSP provides two new features that further facilitate scriptless jsp code they are-  
Ans: JSTL, Expression Language(El).  
Q: Which object provides access to all the available information about the user request?  
Ans: Request object.  
Q: Which method is used in HttpServletRequest parameter?  
Ans: service ().  
Q: The simple JSP page extracts a request parameter that is called \_\_\_\_\_\_\_?  
Ans: userName.  
Q: Which object represents the current response to be returned to the user?  
Ans: Response object.  
Q: The response object is an instance of the \_\_\_\_\_\_\_\_\_\_\_ interface?  
Ans: javax.servlet.http.HttpSerletResponse.  
Q: Which parameter is received by the service () method of a servlet ?  
Ans: HttpServletResponse.  
Q: Out object represents an instance of \_\_\_\_\_\_\_\_\_ class?  
Ans: javax.servlet.jsp.JspWriter .  
Q: All methods provided by\_\_\_\_\_\_\_\_ ?  
Ans: JspWriter .  
Q:\_\_\_\_\_\_\_ can be used explicitly ?  
Ans: HttpSession .  
Q: Which object simply provides the JSP developer with access to the ServletConfig object?  
Ans: cofig object.  
Q: Application object provides which interface of the web application?  
Ans: javax.servlet.ServletContext .  
Q: Which object is used by web container?  
Ans: ServletContext .  
Q: The page object is rarely used in \_\_\_\_\_\_\_\_\_?  
Ans: scripting elements.  
Q: Which object is slightly different in its functionality?  
Ans: page Context.  
Q: Which instance provides the JSP developer with access to all the available JSP scopes?  
Ans: page Context.  
 Q: Which variable provides the cross-scope functionality?  
Ans: page Context.  
Q: Which object is available in JSP pages that declare themselves as error pages?  
Ans: exception object.

Q:Which object itself is an instance of java.lang.Throwable?  
Ans: exception object.  
Q: Exception object represent \_\_\_\_\_\_\_\_ error?  
Q. The Programmatic logic of JSP technology may be classified into the following JSP elements: (Page 17)

Ans: Scripting elements, Directives, Action Elements,

Q:Scripting elements can be classified into following categories: (Page 19)

Ans:

Comments

Declaration

Scriptlets

Expression

Expression language expressions

Ans: run-time error.  
Q: EL expression is used to provide the \_\_\_\_\_\_ test for the action ?  
Ans: Boolean.

Q. What is Template Text?

Ans: any non-jsp code located inside a jsp page

Q. Template Text is---------

Ans: Markup

Q. JSP page won’t compile and run without--------

Ans: CalenderBean

Q. Which is true for jsp code comments?

Ans: < %--%>

Q. Expression language can be-

Ans: Used to help reduce or even eradicate scriptlets

Q. The response object is an instance of the-

Ans: Javax.servlet.http.HttpServletResponse

Q: Which one is used for passing important information to the JSP engine?

Ans: Directive

Q: "Directives generate no output" is it true or false?

Ans: True

Q: All three directive types must be declared between \_\_\_\_\_\_\_\_\_\_\_\_

Ans: <%@ and %>

Q: Generally directives should be placed \_\_\_\_\_\_\_\_\_\_\_\_\_

Ans: At the top of the JSP page.

Q: Although multiple page directives may occur, it should be noted that each attribute can occur only once in the page with the exception of the \_\_\_\_\_ attribute?

Ans: import

Q: What is the only permitted value of language attribute?

Ans: Java

Q: What is the default value of session attribute?

Ans: true

Q: <%@ page isThreadSafe="false" buffer="20kb" %>

What does isThreadSafe="false" mean?

Ans: multiple requests may not access the page simultaneously.

Q: <%@ page isThreadSafe="false" buffer="20kb" %>

What does buffer="20kb" mean?

Ans: The page buffer should not be smaller than 20 KB.

Q: What is the default value of isErrorPage attribute?

Ans: false

Q: When it’s illegal to set autoFlush=true?

Ans: When buffer=none

Q: What is the default value of pageEncoding attribute?

Ans: ISO-8859-1

Q: What is the default value of isELIgnored attribute?

Ans: false

Q: What does the trimDirectiveWhitespaces attribute indicate?

Ans: how whitespaces in template text should be handled

Q: The original JSP page will share its scripting variables and declarations with those inside the included resources, and any duplication of variable or method names will result in a \_\_\_\_\_\_\_\_\_\_\_\_\_ ?

Ans: fatal JSP translation error

Q: What does MIME stands for?

Ans: Multipurpose Internet Mail Extensions

Q: What does TLD stands for?

Ans: tag library descriptor

Q: How many ways are availabe to use the taglib Directive?

Ans: 4

Q: What is the most popular way to use the taglib Directive?

Ans: Relative URI

Q. In JSP how kind of Action Elements?  
Ans: Three Types (Standard, Custom & JSTL).

Q. Which attribute is Mandatory in <jsp:include> Action?  
Ans: Page.

Q. Which of the following are attributes of <jsp:useBean> ?  
Ans: class, type & beanName.

Q. Which of the following are attributes of <jsp:getProperty> ?  
Ans: name & property.

Q. Which of the following are attributes of <jsp:setProperty> ?  
Ans: name, value & property.

Q. What is the correct directory of manually?  
Ans: webapps\test\WEB-INF\classes\com\aspress\projsp\.

Q. Which of the following are attributes of <jsp:forword> ?  
Ans: page.

Q. How many tags provide JSTL?  
Ans: Four (Core, Internationalization (I18n) & formating, XML, SQL).

Q. JSTL Stands for:  
Ans: JavaServer Pages Standard Tag Library.

**Descriptive**

Q: What are the different between Servlet and Jsp Page?

Ans: Servlet and Jsp page produce their content is fundamentally different:

Servlet embed content into logic.

JSP Page embeds logic into content.

Q: What is the basic advantages servlet technology?

Ans: Simplicity: servlet are esy to write and all the complicated threading and request delegating is managed by the servlet container.

Extensibility: The servlet API is completely protocol independent

Efficiency: unlike CGI Scripts, the execution of a servlet doesn’t require a separate process to be spawned by the web server each time.

Performance: servlet are persistent, and thir life cycle extends beyond that of each HTTP request.

Q: What is template text?

Ans : In Jsp terms, any markup that isn’t a JSP element is known as template text.

Q: Which are the three key factors in JavaServer pages best practice?

Ans: i) Reusability ii) Readability iii) Maintainability

Q: What is tag library?

Ans: A tag library is simply a collection of one or more custom tags that are generally related in some way. A tag library is commonly known as taglib.

Q: What does model 1 architecture have?

Ans:

Q: Why model 1 architecture is a good choice?

Ans: Model 1 architecture is a good choice because it’s quick and simple to put together.

Q: Write down the problems in model 1 architecture?

Ans: The problems are: i) Maintainability ii) Reusability iii) Security

Q: Definition of Model 2 architecture?

Ans: The Model 2 architecture is a server-side implementation of the popular Model-View-Controller (MVC) design pattern.

Q: Write down the advantages of Model 2 architecture?

Ans: Advantages are: i) Maintainability ii) Security iii) Extensibility

Q: How types of forms in most containers allow web applications to be deployed?

Ans: There are two types of forms in which most containers allow web applications to be deployed. Which are?

Expanded directory format: The web application in its predefined structure is simply copied into the container’s deployment directory.

Web Archive file (WAR): The web application in its predefined structure is archived into a compressed WAR before being copied to the container’s deployment directory.

Q: Write down the name of JSP implicit objects.  
Ans : Request, response, out, session, config, application, page, page Context, exception.  
Q: what is template text?  
Ans: Non-JSP code that is located inside JSP page known as template text.  
Q: Which text can take any form as long as its text based?  
Ans: Template text.  
Q: How many types of JSP element?  
Ans: Scripting elements, Directives, Action elements

Q: What do you mean by Template Text? (Page 18)

Q: Describes Scripting elements. (Page 19)

Q: Define JSTI and Expression Language. (Page 21)

Q: What do you mean by the JSP Directives?

Ans: Directives are used for passing important information to the JSP engine. They provide a powerful mechanism for providing page-level information that is typically used during the compilation and translation phases.

Q: Write the types of JSP directives.

Ans: Three types of directives are - page directives, include directives and taglib directives.

Q: Define page directive.

Ans: The page directiveis used to define any page-dependent properties that a JSP page may have, such as library dependencies, buffering, or error-handling requirements. The syntax of a page directive is as follows: <%@ page page\_directive\_attr\_list %>

Q: Define include directive.

Ans: The include directive executes at translation time and enables the contents of a separate resource to be statically merged inside the original page, thus radically affecting the generated servlet. The following is the syntax for the include directive: <%@ include file="relativeURL" %>

Q: Define taglib directive.

Ans: A tag library contains a collection of actions (also known as tags) that can be grouped together to perform some form of logic. They can encapsulate large amounts of programmatic logic into a single line of code. The syntax for the taglib directive is as follows:

<%@ taglib {uri="/tagLibraryURI" | tagdir="/WEB-INF/tags/dirname" prefix="tagPrefix" %>

Q: Write the attributes for the page Directive.

Ans: language, extends, import, session, buffer, autoFlush, isThreadSafe, info, isErrorPage, errorPage, contentType, pageEncoding, isELIgnored, DeferredSyntaxAllowedAsLiteral, trimDirectiveWhitespaces.

Q: Write the attributes for the taglib Directive.

Ans: uri, tagdir, prefix.

Q. Which purpose tag library descriptor (TLD) is used?

Ans: To use a custom tag library, the web container needs to be made aware of specific information about the library itself. A special file called a tag library descriptor is used for this purpose

Q: How many ways are availabe to use the taglib Directive?

Ans: Four ways are availabe to use the taglib Directive: Absolute URI, Relative URI, Packaged JAR, Tag Files