

Question

GitHub is a code versioning tool and collaboration platform for software developers.

pool(get,check out) and push(check in)

-

1. Exam for this subject is already scheduled on this date.
 2. Date is already assigned for this subject Exam
-

-

Daily Activity

1. Get Latest code from GitHub
 2. Check FDTs for new Task/Bug/Change Request/Ticket.
 3. Check out required files from GitHub to resolve the bug or work on new task.
 4. Develop code to fix bug or implement new functionality
 5. Develop Unit testcase if required
 6. Unit Test functionality.
 7. Get code review done if required.(ARAXIS tool)
 8. Compare code and remove any hard coding or debug statement before check-in the code.
 9. Send status email to Project Lead.
 10. Fill Time sheet before leaving for the day.
-

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Modules

1. College Management
 2. Student Management
 3. Marksheet Management
 4. User Management
 5. Faculty Management
 6. Course Management
 7. Time Table Management
 8. Role Module
 9. Subject Module
-

-Technologies

Question

1. JDK 1.8
 2. JSP 2.2(2.3 latest version)/Servlet 3.1(4.2) bita version
 3. JDBC 3.0 (4.2 latest version)
 4. MySQL 5.1.6
 5. Java Mail API 1.4.7
 6. Log4j 1.2.17
-

Tools

1. Eclipse Mars 1
 2. SQLYog 9.0
 3. ArgoUML
 4. ER Win
-

Builder Pattern :- Builder Pattern builds complex objects using simple object using step by step approach.

Abstract Factory :- it is pattern work around a super factory which create other factories.

Use Case :- one complete functionality is called UseCase.

Modules :- set of related use case is called Modules.

who create the release note?

Ans) Deloyepment leader.

we are not change db as we use native SQL.

How to start server on tomcat server?

Tomcat +bin+startup.batch

Tomcat +bin+shutdown.batch

-

How to start server on JBoss server?

JBoss +bin+standlone.batch

Ctrl+C and press Y

Question

Tomcat

Tomcat + config + server.xml

```
<Connector port="8080" protocol="HTTP/1.1"
connectionTimeout="20000" redirectPort="8443" />
```

JBoss

JBoss + configuration + standalone.xml

Keep alive timeout

Socket binding portNumber

Copy Write : - ©

Why we create custom exception ?

Ans) to generate self Exception.
it can be understood by developer.

DML - it is used to perform CRUD operation.

DDL :- it is used to perform create table, alter table, drop table.

DCL :- it is used to rollback and commit.

Actor is responsible to perform action.

BUILD

QUESTIONS-----

01) what is ORS ?

Ans) ORS is an online Web Application that manages the student and marksheets records.

02) dependencies in pom.xml?

Question

Ans) JavaMail 1.4.7
 Servlet 3.1.0
 Log4J 1.2.17
 MySql 5.1.6
 c3p0 0.9.5-pre8

03) types of validation in the project?

Ans) There are two types of validations in our Projects.

Validations

1.ServerSideValidations

1.1.InputValidations

1.Decarative

2.Programative Validations

1.2.Business Validations(Check from Database)

2.ClientSide Validations

Use JavaScript

04) how you can apply the client side validation?

Ans) JavaScript

SS

05) write the modeules yout have worked on in the projet?

1.UserBean.java

2.UserModel.java

3.UserView.jsp

4.UserCtl.java

5.UserListCtl.java

6.UserListView.jsp

7.MyProfileCtl.java

8.MyProfileView.jsp

Question

9.ChangePasswordCtl.java

10.ChangePasswordView.jsp

11.ForgotPasswordCtl.java

12.ForgotPasswordView.jsp

13.UserRegistrationCtl.java

14.UserRegistrationView.java

-

Q) Write the component of ForgetPassword ?

UserBean.java

UserModel.java

ForgetPasswordView.jsp

ForgetPasswordCtl.java

06) what is pom.xml?

Ans) It is a Xml file that contains information about the project and contains configuration details used by maven to build the project.

07) what is web.xml?

Ans) it is Xml file that contains application configurations and it is also called Deployment Descriptor.

08) error message flow?

09) success messages flow?

10) how you are performing bussiness validation?

firstly we have propagated exception on model and we have catched and Set on ctl and get on view.

Question

11) what is bussiness validation?

Checks the business conditions that may need database communication.

12) which tag u have to displaying image on page?

14) what are the utility classes you have in your project?

Nine utility classes we have used in our project.

1. DataUtililty.java :-

Data Utility class is used to format data from one format to another.

2. DataValidator.java :-

DataValidator class is used to validate input data.

3. HtmlUtility.java :-

HtmlUtility class is used to produce html content like DropDownList etc.

4. ServletUtility.java :

This class provides utility operation for Servlet container like forward, redirect, handle generic exception, manage success and error message,

manage default Bean and List, manage pagination parameters

5. EmailMessage.java:-

EmailMessage contains email message.

6. EmailUtility.java :-

Email Utility provides Email Services

1.sentMail();

7. EmailBuilder.java :-

EmailBuilder Class that build Application Email messages

Three method

1.getUserRegistrationMessage();

2.getForgotPasswordMessage();

3.getChangePasswordMessage();

Question

8. JDBCDataSource.java :-

it is a DATA CONNECTION POOL.

9. PropertyReader.java :-

Read the property values from application properties file using Resource Bundle

31. What is all utility classes.?

Ans) Utility classes is used to reusability and reuseable services.

16) how u r sending email?

By using some custom class first name EmailMessage, EmailUtility, EmailBuilder.

17) what are the classes you have used to sending emails?

We have used six classes for sending email those are used in Email utility Class which are following :

- 1.Message
 - 2.Transport
 - 3.PassportAuthentication
 - 4.MimeMessage
 - 5.Session
 - 6.InternetAddress
-

18) where you have placed sendMail() in your project?

EmailUtility

19) Write the method signature of all method of one module ?

Ans)

```
public Integer nextPK(){ }
public long add(FacultyBean bean){ }
public FacultyBean findByPk(long pk){ }
public FacultyBean findByEmail(String email){ }
```

Question

```
public void Delete(FacultyBean bean){ }  
public void Update(FacultyBean bean){ }  
public List search(FacultyBean bean){ }  
public List search(FacultyBena bean,int pageNo,int  
pageSize){ }  
public List list(){ }  
public List list(int pageNo,int pageSize){ }
```

Q.20) Command Design Pattern :
follow on controller.

Q.21) How can you achieve data abstraction ?

Ans) Data Abstraction is process of hiding the implementation details and showing only the functionality.

2. Data Abstraction in java is achieved by using interface and abstract class.

Q.22) How can you achieve full abstraction in your application ?

Ans) by using interface.

Q.23) What is Abstract Class ?

Ans) Abstract class is used when parent need to provide default behavior along with abstract method.It enforces child classes to impletment specialized behavior of abstract methods. It can never be instantiated.

Q.24) What is Business Primarey key?

Ans) It contains Business information and it is related with database records.

Q.25) What is Non Business Primary Key ?

Ans) It does not contain business information and it is not related with database.

Question

Referential Integrity

Ans) it ensure that relationship between two tables remains synchronized during update or Delete operations.

=====

1. What is FrontController?

Ans) Main Controller performs session checking and logging operations before calling any application controller. It prevents any user to access application without login.

when it is apply ?

To perform authentication logic and so on.

2. What is input validation and bussness validation?

Ans) Input validations checks inputs data entered by user.

Checks the business conditions that may need database communication.

3. Why override service method?

Ans) We create custom ctl in which we write service method to provide generic operation flow. we are not override the service method.

4. What is mvc architecture.?

Ans) MVC is a framework technology. It separates code implementation of an application into three component Model, View and Controller.

5. What is javadoc.?

Ans) Javadoc is a documentation which helps other developer to understand the project.

6. What is customize exception?

Ans) Custom exception is created by developer .we have created own exception classs by extends Exception classe .we have created four customize

Question

exception like

ApplicationException,RecordNotFoundException,DuplicatedException,DataBaseException.

7. What is tomcat directory structure.?

/AppRoot

- 1. /WEB-INF
 - 1.1 /classes
 - 1.2 /tags
 - 1.3 /lib
 - 1.4 web.xml
- 2.JSP Page

HTML ,CSS,JS file ,Images,Media files

8. What is jboss directory structure.?

/AppRoot

- 1. /WEB-INF
 - 1.1 /classes
 - 1.2 /tags
 - 1.3 /lib
 - 1.4 web.xml
- 2.JSP Page

HTML ,CSS,JS file ,Images,Media files

9. What is all tag of jsp?

Ans) 1.Scripting tag

Scripting tag is used to provide the ability to execute java code inside the jsp

2.Derective tag

it is used to inject additional programming statements in source program.

Question

3.Action tag

it is used to perform some action and task.

1.1 Scriptlet tag<% %>

Ans) it is used to write java control statements inside JSP page.

1.2 Expression tag<%= %>

it is used to add result of one line expression in the html response.

1.3 Declaration tag

Ans) it is used to declare variable or methods of Jsp.<% !%>. when Jsp is translated into servlet then contents of declaration tag are copied outside _jspService() method

1.4 JSP comments<%-- --%>

Ans) JSP comment tag is used to add developer's comment for developed jsp code.

2. Directive Elements

2.1 Page directive : it is used to configure properties of current jsp page.

2.2 Include directive : it is used to include content of the file on current jsp page.

2.3 Taglib directive : it is used to create custom jsp tags.

3.1 The jsp:include

3.2 The jsp:forward

3.3 The jsp:useBean

3.4 The jsp:setProperty

3.5 The jsp:getProperty

Question

3.6 The jsp:plugin action tag

10. How many types of session tracking?

Ans) Cookie
HiddenForm
URL Rewriting

Q How many way to destroy session?

Ans) There are three way of destroy session
1.session.invalidate();
2.<session-config>
 <session-timeout>20</session-timeout>
 </session-config>
3.session.setMaxInactiveInterval();

11. How many types of create servlet?

Ans) There are three type to create servlet
1.Servlet Interface
2.GenericServlet Class
3.HttpServlet Class

12. What is servlet lifecycle.?

Ans) init()
service()
destroy()

13. Defference between jboss and tomcat,?

Ans) 1.JBoss is a Application server whereas Tomcat is a WebServer.
2. JBoss follows distributes transations like as EJB where as tomcat follows jsp and servlet.
3.JBoss is havely weight as compare to tomcat.

Question

4.JBoss works as slow as compare to tomcat.

14. Defference between web server and application server.?

Ans) Web server contains only web or servlet container. It can be used for servlet, jsp, struts, jsf etc. It can't be used for EJB.

Application server contains Web and EJB containers. It can be used for servlet, jsp, struts, jsf, ejb etc. It is a component based product.

15. Defference between checked exception and unchecked exception.?

Ans) Unchekek exceptions are optional to handle. RuntimeException and Error classes and their subclasses are unchecked exceptions.

Checked exceptions are mandatory to handle.

The keyword throws is mandatory to propagate checked exceptions and optional for unchecked exceptions.

16. Defference between comparable and comparator.?

Ans) Comparable has default nature of sorting order. it has a compareTo() method.

2. javax.lang

Compartor is customized and it has compare().

2.javax.util

17. Defference between generic servelt and http servlet.?

Ans) GenericServlet defines a generic and protocol independent servlet. it implements Servlet interface that has lifecycle methods of a servlet.

HttpServlet defines an HTTP protocol specific servlet. it inherits the GenericServlet class.

HttpServlet provides service methods such as doGet() and doPost() for handling HTTP specific services.

18. Defference between forward and send redirect.?

Ans) Method forward() of request dispatcher object is used to forward

Question

request from one servlet to another servlet.

Method sendRedirect of request dispatcher object is used to generate new request always and sent to another servlet.

19. Defference between string buffer and string builder.?

Ans) StringBuffer is synchronized and thread safe and used in multi user system

StringBuilder is Asychronized and not thread safe and used in single user system

20. Defference between static polymorphism and dynamic polymorphism.?

static is done by overloading and dynamic is done method overriding.

21. Defference between url,uri.?

Ans) URL has a particular resource in request where as URI check only resource is exist or not.

URL brings particular resource where as URI return true and false.

22. What is base bean .?

Ans) BaseBean is a parent class of all bean and it contains generic attributes.

23. What is basectl. And all methods.?

Ans) BaseCtl is parent ctl of all ctl and it contain generic work flow, generic operation, generic constants.

Generic Work flow provides by services method.

Generic Operation provides by basectl method. such as preload, validate, populateBean, getView().

Generic Constants provides by all buttons.

Question

24. What is maven.?

Ans) Maven is a powerful build automation tools.

26. What is log4j.?

Ans) log4j stands for logging message for java. it is open source framework to log message of your Program to final destination like database, file, Network, Console.

27. What is mvc architecture.?

Ans) MVC is a framework which provides codes separation and helps to developer to build project easily. Model, View, Controller

28. What is design pattern.?

Ans) Standard problem has a standard solution.

1. Singleton design pattern : The class which have only one instance in their lifetime are singleton classes.

2. Builder Design pattern :- create complex object using simple object using step by step approach.

3. Factory Design Pattern :- The class that has ability to Create object of another class is called Factory class and follows factory design pattern.

4. FrontController Design Pattern :

29. What is javadoc.?

Ans) it is java documentation which helps other developer to understand the project.

30. What is normalization.?

Ans) To reduce the repetition

Question

-----Q) What is <jsp:useBean>?
Ans) it is a another way to create a bean class object.

32. How many scopes in jsp?
application

Ans) session
request
page (default)

33. How many interface have you used in your project?

Ans) DropDownListBean.java
ORSView.java
AppRole.java

34. How many abstract class have you used in your project.?

Ans) BaseBean (implement ddlb)
BaseModel(getTableName)
BaseCtl(getView)

36. When run service method.? and who called validate method?

Ans) every request of user and service called validate method

37. What is acid properties.

Ans) Atomicity means all or nothing
Consistency means it makes sure that data is in consistent state.
Isolation means Transactions are independent
Durability means Committed data never lost

38. How to call in service method preload and validate.

Ans)

Question

39. What is the build ?

Ans) it is holl complie code of entire application.

How to create a war?

Ans) pom.xml me build ki plugin add karte hai

2. Right click on maven and select the update project and forcefully update project.

3. run as me clean maven

4. run as maven install

5. run as maven build and goal set clean install and select skip test

6. apply and run

crate on two place

1. target folder me

2. c drive me .m2 file ke under

How to deploy war.

target folder se copy karo

then standalone ke deployment folder me paste karo and

bin me standalone.bat file ko run karo

deplymen folder me build file generate hoti hai.

How to create javaDoc?

first we put message on method and classs by Alt + Shift+J and then select project menu and choose generate javaDoc.

then congifure javadoc.exe path and select destination.

select visibility as private

And apply and run

40. Who generates the war file?

Question

Ans) Deployment Lead
14 Fouthnigtly

41. how many environment are there in Log4j framework?

Ans) Development (Debug Level) ,Quality Assurance(Info Level) and
Production environment(Warn Level).

42. why BaseBean is abstract class in your project?

Ans) Because we do not define two method of DropDownListBean
getKey() and getValue().

43. how many layers are present in the mvc architecture?

Ans) there are four layers in mvc

1.presentation layer (view logic)

2.navigation layer (controll logic)

3.business layer (business logic,Data access logic,integration logic)

44. what are the implicit objects in jsp?

Ans) There are some implicit objects in jsp

1.request(HttpServletRequest)

2.response(HttpServletResponse)

3.session(HttpSession)

4.application(PageContext)

5.page(current jsp)

6.pageContext(PageContext)

7.out(JspWriter)

8.exception(Throwable)

9config(ServletConfig)

45. how will you do file attachment along with email?

Multipart mp = new MimeMultipart();

MimeBodyPart file = new MimeBodyPart();

Question

```
file.attachFile();  
mp.addBodyPart(file);
```

46. how many design patterns you have used in your application explain?

Ans) 1. FrontController Design Pattern(FrontController)
2. Singleton Design Pattern(JDBCDataSource)
3. Builder Design pattern(EmailBuilder)
4. Factory Design Pattern(c3p0)

47. write the code for search method?

```
select * from st_user where 1=1 AND NAME  
Like"bean.getName()+"%"  
sql.append(order by id desc)  
sql.append("limit"+pageNo+", "+pageSize);
```

48. write the code to make frontcontroller?

49. what is debugging?

Ans) Debugging is a process by which developer check the flow of program\operation.

50. how to perform debugging using keys explain?

Ans) ctrl +shift+B = to add and remove break point
F11= to start debugging
F5 source code to source code
F6 Attribute and variable debugging
F7 Single stepping
F8 Breakpoint to Breakpoint
ctrl+F8 to switch prospective window

Question

52. what is service method? is it compulsory to override it?

Ans) service is called at every user request and it is not advisable to override the service method.

53. what is the jsp page life cycle?

Ans) jspInit()(JspPage interface)
 _service() (HttpJspPage)
 jspDestroy()(JspPage interface)

54. what is rolling file appender in Log4J?

Ans) rolling file appender configured to create new log file every day or create a file when given file size is finished.

55. what is appender in Log4j and types of appender?

Ans) Appender is an object that sends log messages to their final destination.

All the possible appender options are:

- 1.Console Appender
 - 2.RollingFile Appender
 - 3.DailyRollingFileAppender
 - 4.ExternalRollingFileAppender
 - 5.FileAppender
 - 6.JDBCAppender
 - 7.NullAppender
 - 8.SMTPAppender
 - 9.SocketAppender
 - 10.TelnetAppender
-

log4j has three component

- 1.Logger : Responsible for capturing logging information.
- 2.Appender :Responsible for publishing logging information to various preferred destinations.
- 3.layouts: Responsible for formatting logging information in different styles.

Question

56. what is layout in Log4j and types of layouts?

Ans) 1.DateLayout
2.HTMLLayout
3.PatternLayout
4.SimpleLayout
5.XMLLayout

57. what is Logger in Log4j and its levels?

Ans) .Logger : Responsible for capturing logging information.

Level of Log4J:

1.Debug Level(Lowest priority and Development phase)
2.Info Level(QA)
3.Warn Level(PE)
4.Error Level (QA)
5.Fatal Level

58. what is the pattern layout in Log4j and its symbolic representation explain?

Ans) layouts: Responsible for formatting logging information in different styles.

log4j.appender.file.layout.ConversionPattern=%d{yyyy-MM-dd HH:mm:ss} %-5p %c{1}:%L - %m%n

59. How many exceptions classes you have in your project?

Ans)

ApplicationException,DataBaseException,RecordNotFoundException,DuplicateException

60. how to create custom exceptions?

Ans) by extends Exception class in our class

62. how to enable session?

Question

```
HttpSession session = request.getSession(true);
```

two method of Session

```
session.setAttributes();
```

```
session.getAttributes();
```

63. difference between session(true) and session(false);

```
HttpSession session = request.getSession();
```

if any session is existed in application it will get otherwise it will create new session.

```
HttpSession session = request.getSession(true);
```

it always create new session.

64. how to format the code?

Ctrl + Shift + F

65. what is release note in build process?

Ans) release note is documentation which contains Applications version, resolved bug, open bug and working functionality. and it is created by development lead.

after creating war.

66. how to disable Log4j messages?

By using OFF by replace DEBUG level

67. what if there is not an entry of welcome file in web.xml explain?

Ans) The index.jsp file is existed in webapp folder so application is run.

68. how to set timeout for session in web.xml?

```
<session-config>
```

```
<session-timeout>20</session-timeout>
```

Question

</session-config>

69. what is the default timeout for session?

web.xml 30 minutes(Server.xml)

70. difference between session and cookies?

Ans) session stored on server side and cookies stored in browser.

71. how to identify user on server?

Ans) by using session

73. list out the name of web server and application server?

Ans) WebServer List

1.Apache Tomcat

2.Resin

3.Klone

4.Oracle Web Tier

Application Server List

1.JBoss

2.WebLogics

3.GlassFish

4.Websphere

4. Jtney

74. how u r performing encapsulation in your project?

Ans) encapsulations means gather all related infomation.

75. how you r using ovveriding concept in your project?

Ans) All basectl method

Question

76. how u are identify ur exception classes are checked aur unchecked?

Ans) Checked exception is mandatory to handle and unchecked not.

77. write the folder structure of Tomcat and JBoss ?

Tomcat

bin\config\library\log\webapps\temp\work

JBoss

.installions\appclient\bin\docs\domain\modules\standlone(configruation)(depl
oyment)\welcome-content

@author

@version

@copyright

@return

@throws

@param

@WebServlet

And @WebFilter

preload means already define data on jsp