

THEORY :) ORS :) ORS is online web application that manage student and marksheet records .

Which Archyecture is follwed by ORS ?

MVC :) MVC is framework methology . It seperates code implimentation of an application into three component Model , View , Controller .

Model :- Model contain business logic , data acess logic , integration logic to perform business operation and manupulate database .

View :- View component is responsible to render the grafic user inteface .

Controller :- Controller contain navigation logic and are responsible to perform business operation submitted by view with the help of model .

Types of LOGIC :)

Presentation logic :- This is the set of control statement that decide look of user interface .(JSP)

Control logic :- This is the set of control statement that decide Navigation of user inteface.

Business logic:- This is set of control statement that perform business operation.(Change password , ForgetPassword)

Data Acess logic :- This is set of control statement that make changes in database with the help of JDBC.(JDBC,SQL)

Integration logic :- This is set of control statement that integrate application with another application or server .(EMAIL SEND)

Design pattern :)

Standard problem has standard solution .

Singleton design pattern :- The class that has one instance in their lifetime is called singleton design pattern .

Builder design pattern :- Create complex object using simple object using step by step approach .

Factory design pattern :- The class that has ability to create object of another class is called factory class that follow factory design pattern.

Front controller design pattern :- Main controller perform session checking and logging operation before calling any application . Prevent any user to access an application without login .

Which class we make singleton class ? And how to make ?

JDBC datasource class

There are four steps to make single tone class :

1. Make a class Final so that child can not be created for single class.
2. Make a default Constructor Private so that no one other class can instantiate single class .
3. Declare a Static Variable of self type in single class static variable have only one copy in their lifetime .
4. Make a get Instance() Static method in singleton class that will return instance of same single class .

Acid Properties :-

Atomicity means all or nothing .

Consistency means it make sure that data is in consistent state .

Isolation means Transaction are independent .

Durability means committed data never lost .

WebServer name :-

1. Apache Tomcat
2. Resine
3. Klong
4. Oracle web tier
5. jigsaw

Application Server name :-

1. Jboss
2. Websphere
3. WebLogic
4. Jetty
5. GlassFish

DCP :-

It provide connection reusability & limit of maximum connection .

Add c3p0(0.9.5) dependencie

JDBC Datasource class ko singleton bnai ComboPoolDataSource ka object banaya (cpds)

cpds = null kiya

cpds me sare parameter ko set kiya

And connection provide kiya (return getInstance().cpds.getConnection();)

System.properties pr parameter liye hai :-

url = jdbc:mysql://localhost:3306/project4

driver = com.mysql.cj.JDBC.Driver

username = root

password = root

Database = JDBC

Service = javaBean

acquireIncrement = 10

initialpoolsize = 10

maxpoolsize = 100

minpoolsize = 10

timeout = 10

Tool :- Eclips mars

MySql

ER win

Agro UML

Dependencies :- Servlet (3.1.0)

MySql (8.0.29)

Log4j (1.2.17)

c3p0 (0.9.5)

Java Mail (1.4.7)

Technologies :-

JDK (11)

JSP(3.2)

Servlet (4.2)

JDBC (4.2)

MySql (8.0.29)

Java Mail API (1.4.7)

log4j (1.2.17)

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