



Day9: Topics for today!!!!

Database connectivity using JDBC and MySQL

- For start you need MySQL in your system for the links are given below:

- <https://dev.mysql.com/downloads/installer/>

Java Database Connectivity with MySQL

- To connect Java application with the MySQL database, we need to follow 5 following steps.
- In this example we are using MySql as the database. So we need to know following informations for the mysql database:
- Driver class: The driver class for the mysql database is `com.mysql.jdbc.Driver`.
- Connection URL: The connection URL for the mysql database is
- `jdbc:mysql://localhost:3306/sonoo`
- where jdbc is the API, mysql is the database, localhost is the server name on which mysql is running, we may also use IP address, 3306 is the port number and sonoo is the database name. We may use any database, in such case, we need to replace the sonoo with our database name.
- Username: The default username for the mysql database is root.
- Password: It is the password given by the user at the time of installing the mysql database. In this example, we are going to use root as the password.

- Create a database in mysql
create database sonoo;
use sonoo;
create table emp(id int(10),name varchar(40),age int(3));
- Write the below code:

```
import java.sql.*;
class MysqlCon{
public static void main(String args[]){
try{
Class.forName("com.mysql.jdbc.Driver");
Connection con=DriverManager.getConnection(
"jdbc:mysql://localhost:3306/sonoo","root","root");
//here sonoo is database name, root is username and password
Statement stmt=con.createStatement();
ResultSet rs=stmt.executeQuery("select * from emp");
while(rs.next())
System.out.println(rs.getInt(1)+" "+rs.getString(2)+"
"+rs.getString(3));
con.close();
}catch(Exception e){ System.out.println(e);}
}
}
```
- To connect java application with the mysql database, mysqlconnector.jar file is required to be loaded.
- The file is provided to you on whatsapp group and also on github

Two ways to load the jar file:

Paste the mysqlconnector.jar file in jre/lib/ext folder

Set classpath

1) Paste the mysqlconnector.jar file in JRE/lib/ext folder:

Download the mysqlconnector.jar file. Go to jre/lib/ext folder and paste the jar file here.

2) Set classpath:

There are two ways to set the classpath:

- temporary
- permanent

C:>set classpath=c:\folder\mysql-connector-java-5.0.8-bin.jar;;

- remember to give the version as per the mysql version on ur system
- How to set the permanent classpath
- Go to environment variable then click on new tab. In variable name write classpath and in variable value paste the path to the mysqlconnector.jar file by appending mysqlconnector.jar;. as C:\folder\mysql-connector-java-5.0.8-bin.jar;;

Assignment for day9

1. Create a table name student with two columns uid and name in mysql connect the table to java code and enter 2-3 entries in it.
2. For above code now do all the possible CRUD operation using java code.

