**MYSQL**

**Q How we can test Database using a pure Java Code ?/ Connecting MySQL database using Connector in Java**

Data base Testing in Selenium – This is wrong Question . Because Selenium doesn’t have any library which will help to connect with the data base.

* Driver -com.mysql.jdbc.Driver
* Connecting String-“jdbc:mysql://hostname:port/bdname”,”username”,”password”

First we have to install MySQL Then Go to Command line-------------

If you create any data base---MySQL command line

1. Create database **Employee:** Enter // create new Data
2. Show database: Enter // to check data which you create

When you work with this database then Command

1. use Employee : Enter // you will get database changes. Now you are inside the Employee database

Employee database is blanked, you have to create database table like table name **Employee1**

**Now you need to specify which column you want and which will be the database [See w3]**

1. create table Employee1<firstname varchar><20> , email varchar<20>>: Enter
2. show tables: Enter
3. insert into Employee1 values <”Rehana”, “rumabddl123@gmail.com”> : Enter

insert into Employee1 values <”Afsheen”, “afsheenabddl223@gmail.com”> : Enter

insert into Employee1 values <”Taseen”, “taseen123@gmail.com”> : Enter

1. select \* from Employee1: [all data]

Then I need to verify whether this record has been updated or not?

Upto this Whatever thing t have done its manual.

1st Part –You will run using selenium script, that script will create an account

2nd part of the script you will verify whether this record has been updated to the database or not. So I need to connect to the database.

**Automation - Like you are running selenium script, that script is registry a user**

ConnectMySql.java

package database;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import org.testng.annotations.Test;

public class ConnectMySql {

@Test

public void testDB() throws ClassNotFoundException, SQLException{

Class.forName("com.mysql.jdbc.Driver");

System.out.println("Driver loaded");

**Connection con = DriverManager.getConnection ("jdbc:mysql://hostname:port/bdname","username","password");**

[Connection con =DriverManager.getConnection("jdbc:mysql://hostname:port/bdname","username","password");]

// this un and pwd is get when we will install MySql .and Localhost =IP address

System.out.println("Connected to MySql DB");

**Statement stm =con.createStatement();**

ResultSet rs = stm.executeQuery("select \* from selenium ");

while(rs.next())

{ **String firstname = rs.getString("firstName");**

System.out.println("Database record is "+ firstname);

String emailaddress = rs.getString("email");

System.out.println("Database record is "+ emailaddress);}}}

/\*Note- We can explore the area. This code will help you to connect with mySQL part.

**It has only four line -- First- To connect with the Driver**

**2nd - Connect to the DataBase with this particular set of String.**

**3rd- Create object statement using Create statement method.**

**4th - Finally execute the Query which you to execute, it will return you "Result Set Interface"**

**5th -Then call the Next method GetString**.\*/

JDBC

**Java Database Connectivity**

**#How JDBC works?**

JDBC is a process to connect to the database with java.

At first we have to add a jar file (mysql connector java/ ODBC for oracle). As we know java cannot connect with database directly, for that **we need a driver class as** an interpreter, Once we initialize the driver **using the driver manager** class ,it will invoke getConnection() method which will return connection interface , Once i have a connection then using the reference of connection interface will **invoke createStatement() method** which will return statement interface.

once I have the statement, I will send a sql query using execute query method which returns resultSet interface. Once I have my data, I will iterate through in order to store the data into the data structure (array, array list). so that in the future I can use those data into upcoming projects.

\*\*UserID

\*\*Password

\*\*Path

Other/Details:

1. Import the package – java.sql

2. Load the driver – using my sql connector jar(for eclipse) – com.mysql.jdbc.driver

3. Register the driver- forName() method

4. Establish the connection – getConnection() – connection interface

5. Create statement – prepared statement, callable statement – statement interface

6. Execute the query – executeQuery()

7. Process result – resultSet Interface

8. Close