Database Testing At a Glance

**How To Connect To The Database In Java?**

Connecting the java application with any database using JDBC API involves 5 steps.

Step 1 : Register The Driver Class

Step 2 : Create The Connection Object

Step 3 : Create The Statement Object

Step 4 : Execute The Queries

Step 5 : Close The DB Resources

# Step 1 : Register The Driver Class

**Using Class.forName() Method :**

try

{

    Class.forName("oracle.jdbc.driver.OracleDriver");

}

catch (ClassNotFoundException e)

{

    System.out.println("Class Not Found");

}

**Using DriverManager.registerDriver() Method :**

try

{

    Driver driver = new oracle.jdbc.driver.OracleDriver();

    DriverManager.registerDriver(driver);

}

catch (SQLException e)

{

    System.out.println("Driver Class Can Not Be Loaded");

}

# Step 2 : Create The Connection Object

**Using getConnection(String URL, String username, String password) :**

String URL = "jdbc:oracle:thin:@localhost:1521:XE";

String username = "username";

String password = "password";

Connection con = DriverManager.getConnection(URL, username, password);

**Using getConnection(String URL) :**

String URL = "jdbc:oracle:thin:username/password@localhost:1521:XE";

Connection con = DriverManager.getConnection(URL);

**Using getConnection(String URL, Properties prop) :**

String URL = "jdbc:oracle:thin:@localhost:1521:XE";

Properties prop = new Properties();

prop.put("username", "username");

prop.put("password", "password");

Connection con = DriverManager.getConnection(URL, prop);

# Step 3 : Create The Statement Object

Statement stmt = con.createStatement();

# Step 4 : Execute The Queries

String sql = "select \* from AnyTable";

ResultSet rs = stmt.executeQuery(sql);

while(rs.next())

{

    //Process the records here

}

# Step 5 : Close The DB Resources

try

{

    if(rs!=null)

    {

        rs.close();

        rs=null;

    }

}

catch (SQLException e)

{

    e.printStackTrace();

}

try

{

    if(stmt!=null)

    {

        stmt.close();

        stmt=null;

    }

}

catch (SQLException e)

{

    e.printStackTrace();

}

try

{

    if(con!=null)

    {

        con.close();

        con=null;

    }

}

catch (SQLException e)

{

    e.printStackTrace();

}

References

https://javaconceptoftheday.com/java-jdbc-tutorial/