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Tutorial: MySQL with Java  
Version: 1.0

Hi all, thanks for reading my "MySQL with Java" tutorial.

Before we start the tutorial you need to have I assume you know a little bit about java

like what Java classes are and how to create methods etc, if not, let me know and i'll explain that another time.

Prerequisites:

- You need a MySQL database that you can connect to.
- JDBC driver for java that can be found here:  
<http://dev.mysql.com/usingmysql/java/>
- Java SDK (1.5+) and a compiler.
- include the JDBC driver in your project.

Required file(s):

- the database where I base this tutorial on. (will be included)
- Java class: MainTest.java
- Java class: ConnectToDatabase.java

Recommended tools:

- Eclipse IDE
- Java 1.5 or higher

So how do we make a connection to the MySQL database using Java?

To connect to a MySQL database (or any if that matters) you need to supply a username and password, so in my ConnectToDatabase class

I created a method that takes 4 parameters such as a userName, userPassword, the database url and the sql query you want to execute.

This is the code in the method in the ConnectToDatabase class that will execute your queries:

```
public void connect(String userName, String userPassword, String
databaseUrl, String userQuery){
    try {
        1) Class.forName ("com.mysql.jdbc.Driver").newInstance
();
        1) Connection conn = DriverManager.getConnection
(databaseUrl, userName, userPassword);

        1) Statement stat = conn.createStatement();
        1) String query = userQuery;
        1) ResultSet result = stat.executeQuery(query);

        System.out.println("Result(s): ");
        2) while(result.next()){
        2)     System.out.println("Name:\t"
+ result.getString("userName"));
        2)     System.out.println("Hobby:\t"
+ result.getString("userHobby"));
        2)     System.out.println("");
        2)     }
        conn.close();
    }catch (SQLException e) {    }
    catch (InstantiationException e) {}
    catch (IllegalAccessException e) {}
    catch (ClassNotFoundException e) {}
}
}
```

Basically what this does is making the actual connection to the database and shows the result(s) on the screen.

- 1) this part of the code creates the new "com.mysql.jdbc.Driver" instance and executes the query.
- 2) in this loop the result(s) will be shown. If there are no results nothing will be displayed.

So how does my ConnectToDatabase class know where to connect and to perform what query? Well, the answer is simple. I've created another class that handles that.

So now I'll explain what the MainTest class does.

The code in the main class from the class "MainTest" looks like this:

```
Line 1) ConnectToDatabase CTD = new ConnectToDatabase();
Line 2) CTD.connect(userName, userPassword, databaseUrl, userQuery);
```

1) this line is to make an instance of the ConnectToDatabase class that I made especially for this tutorial.

2) we call the connect method from ConnectToDatabase and pass the arguments we

have in the main class to the public variables.

Let's say we try to login with something like this:

```
static String userName = "root";
static String userPassword = "";
static String databaseUrl =
"jdbc:mysql://localhost:3306/EngineeringserverDotComTest";
static String userQuery = "select * from info";
```

Compile the MainTest and ConnectToDatabase classes and make sure your settings are correct. If everything is correct you should see some result(s).

The result(s) you should be getting is:

Result(s):

Name: Ark  
Hobby: play computer games

Name: Mitty  
Hobby: Tennis

If you get an error check your settings and try again.

Thats it, I hope you enjoyed this tutorial.

If you have any questions or comments let me know and i'll try to answer it.

Regards,

Ark  
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```
/*
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 */
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;

import sql.ConnectToDatabase;

public class MainTest {
    static String userName = "root";
    static String userPassword = "";
    static String databaseUrl =
"jdbc:mysql://localhost:3306/EngineeringserverDotComTest";
    static String userQuery = "select * from info";

    public static void main(String[] args) {
        ConnectToDatabase CTD = new ConnectToDatabase();
        CTD.connect(userName, userPassword, databaseUrl, userQuery);
    }
}
```

```

/*
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 */
package sql;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;

public class ConnectToDatabase {

    public void connect(String userName, String userPassword, String
databaseUrl, String userQuery){
        try {
            Class.forName ("com.mysql.jdbc.Driver").newInstance ();
            Connection conn = DriverManager.getConnection
(databaseUrl, userName, userPassword);

            Statement stat = conn.createStatement();
            String query = userQuery;
            ResultSet result = stat.executeQuery(query);

            System.out.println("Result(s): ");
            while(result.next()){
                System.out.println("Name:\t"
+ result.getString("userName"));
                System.out.println("Hobby:\t"
+ result.getString("userHobby"));
                System.out.println("");
            }
            conn.close();
        }catch (SQLException e) { }
        catch (InstantiationException e) {}
        catch (IllegalAccessException e) {}
        catch (ClassNotFoundException e) {}
    }
}

```

```
SET SQL_MODE="NO_AUTO_VALUE_ON_ZERO";
```

```
CREATE TABLE `info` (
  `userName` varchar(10) NOT NULL,
  `userHobby` varchar(100) NOT NULL
) ENGINE=MyISAM DEFAULT CHARSET=latin1;
```

```
INSERT INTO `info` (`userName`, `userHobby`) VALUES
('Ark', 'play computer games'),
('Mitty', 'Tennis');
```