**MeteoCal**

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# Politecnico Di Milano

# Computer Science

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# *Installation Guide*

***We followed Prof. Miglierina guide ( can be found here)***

***What you need to download:***

*1*)We used JAVA 7 , downloadable ***here***

*2)*Server used for The system is Glassfish 4.1 , downloadable ***here***

3)For the Database , SQL is needed, downloadable ***here***

4) jdbc connector , downloadable **here**
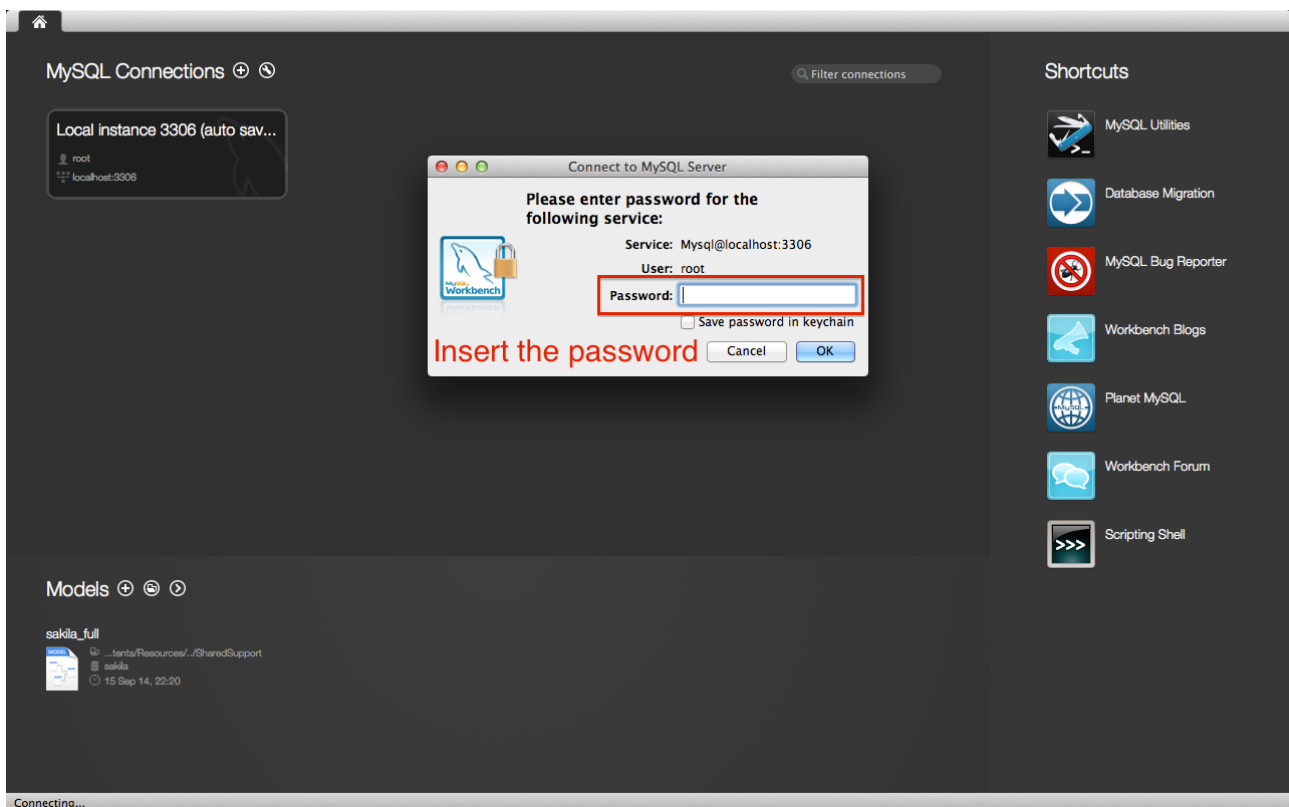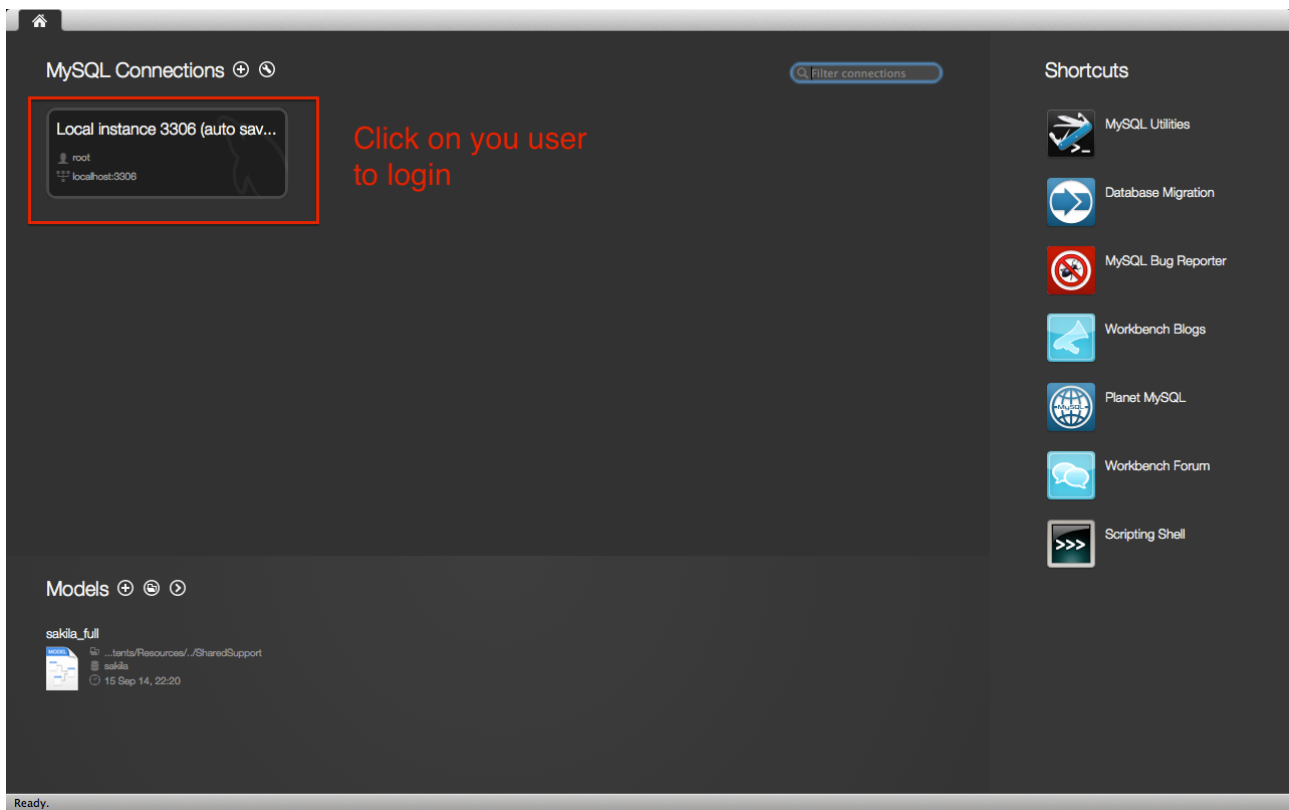
**5)** War File , downloadable here
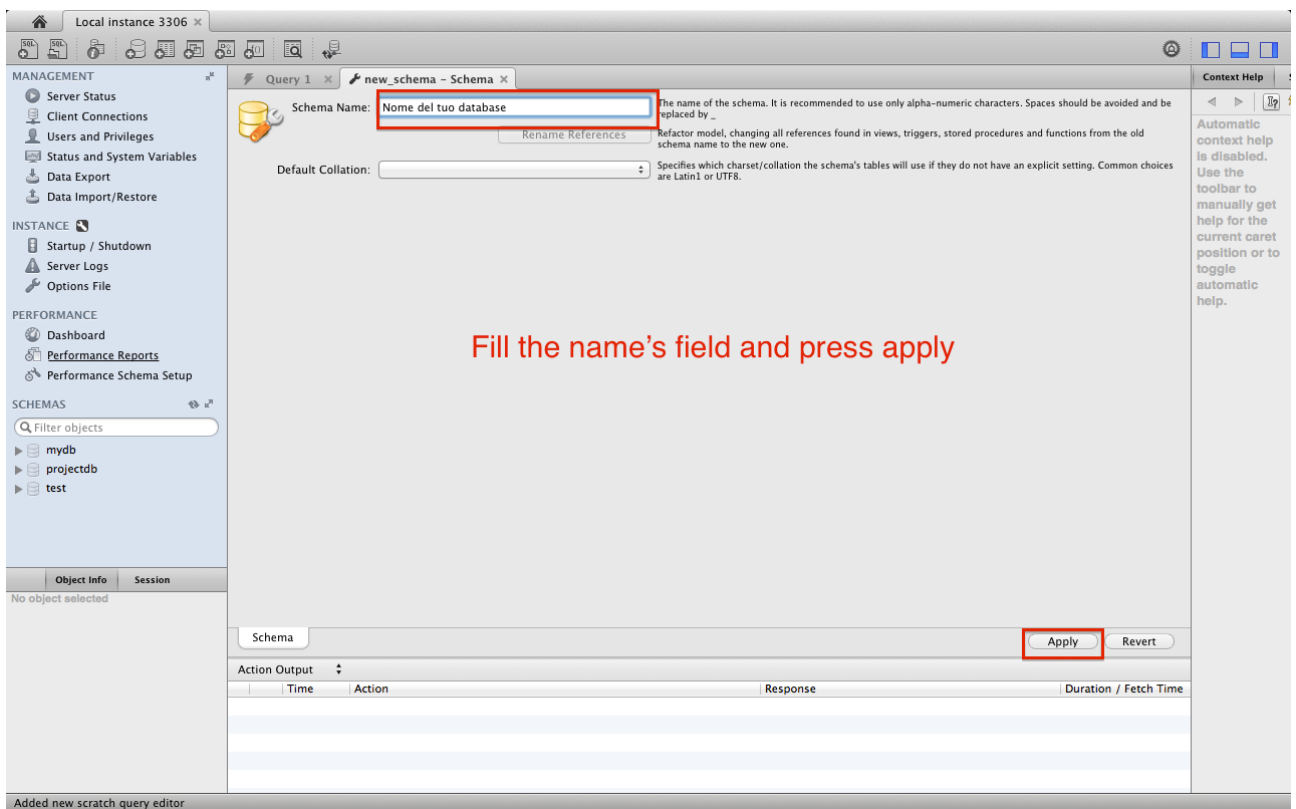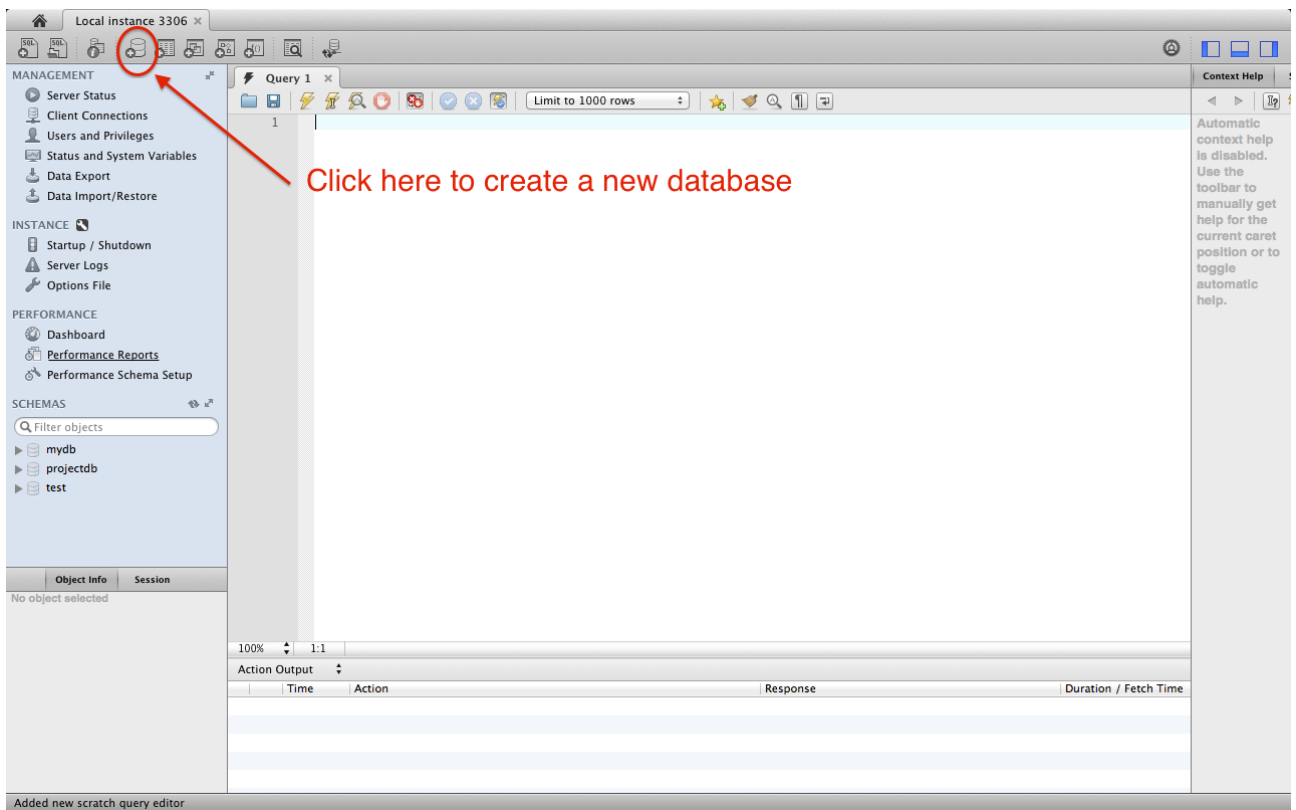
# Instructions

- ## Db installation and creation

After the installation of SQL workbench open it. click on "+"and create new connection

MySQL Connections ⊕ ⊘

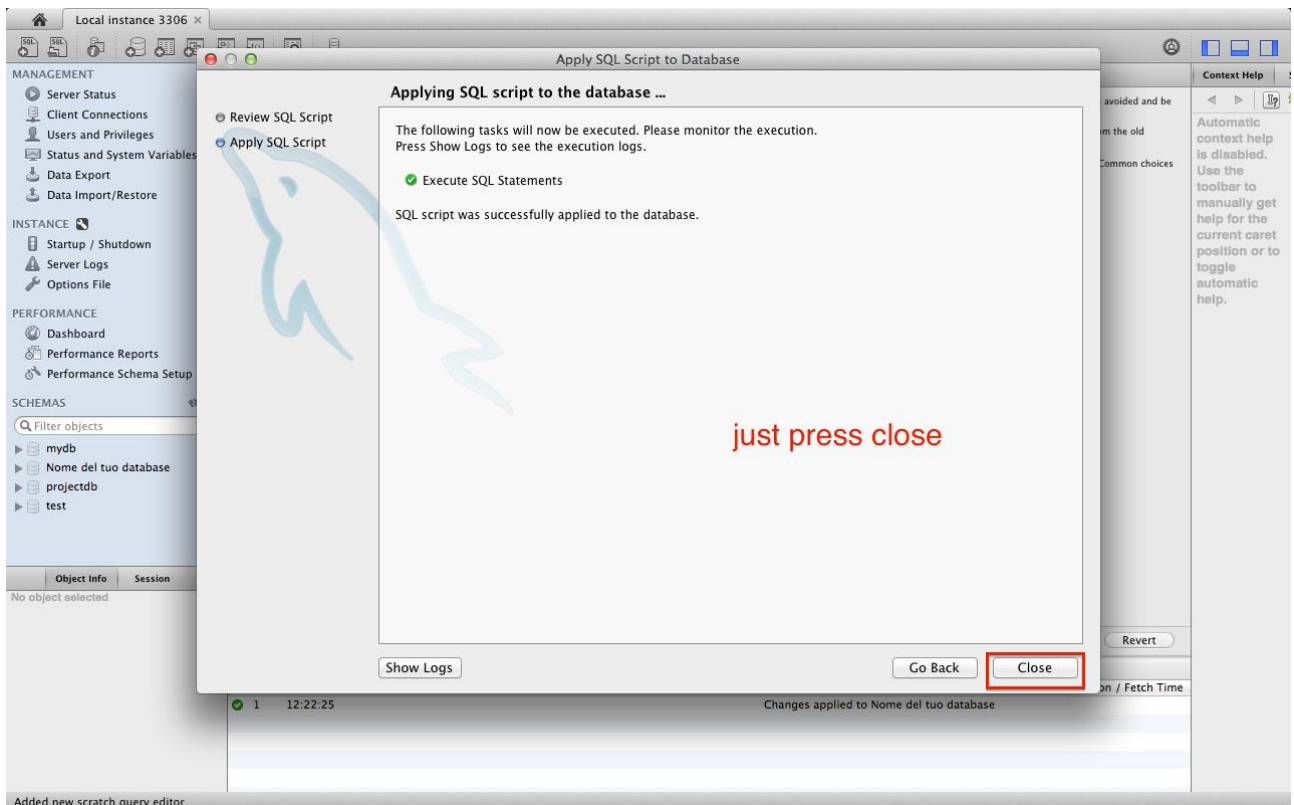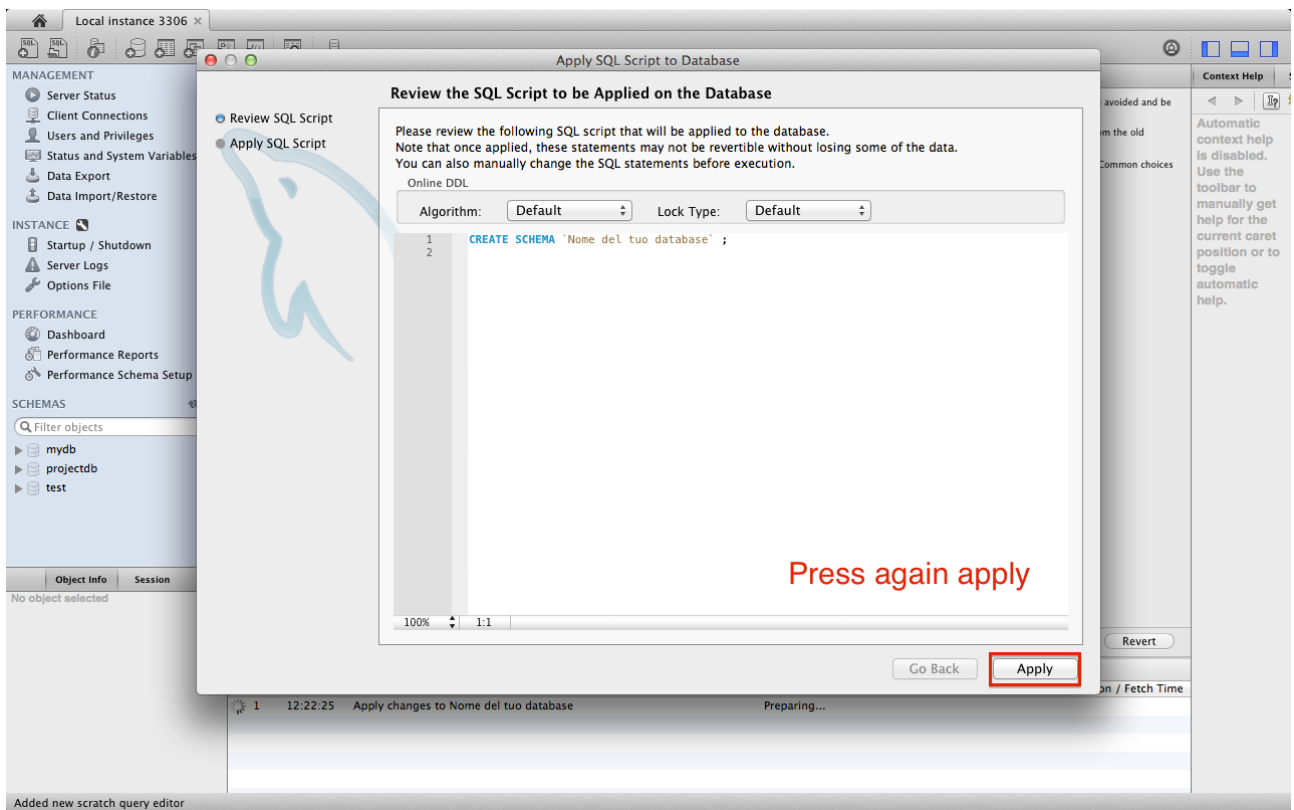Local instance 3306 (auto sav...
👤 root
localhost:3306

Click on you user
to login

Filter connections

Shortcuts

MySQL Utilities

Database Migration

MySQL Bug Reporter

Workbench Blogs

Planet MySQL

Workbench Forum

Scripting Shell

Models ⊕ ⊜ ⊘

sakila_full
...tents/Resources/../SharedSupport
sakila
15 Sep 14, 22:20

Ready.



MySQL Connections ⊕ ⊘

Local instance 3306 (auto sav...
👤 root
localhost:3306

Filter connections

Shortcuts

MySQL Utilities

Database Migration

MySQL Bug Reporter

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Planet MySQL

Workbench Forum

Scripting Shell

Connect to MySQL Server

Please enter password for the
following service:

Service: Mysql@localhost:3306
User: root
Password: [                ]
☐ Save password in keychain

Insert the password    Cancel    OK

Models ⊕ ⊜ ⊘

sakila_full
...tents/Resources/../SharedSupport
sakila
15 Sep 14, 22:20

Connecting...

Click here to create a new database



Fill the name's field and press apply

**Review the SQL Script to be Applied on the Database**

Please review the following SQL script that will be applied to the database.
Note that once applied, these statements may not be revertible without losing some of the data.
You can also manually change the SQL statements before execution.

Online DDL

Algorithm: Default    Lock Type: Default

```
1   CREATE SCHEMA `Nome del tuo database`;
2
```

Press again apply

Go Back    Apply



**Applying SQL script to the database …**

The following tasks will now be executed. Please monitor the execution.
Press Show Logs to see the execution logs.

✓ Execute SQL Statements

SQL script was successfully applied to the database.

just press close

Show Logs    Go Back    Close

If you want to delete it you can perform the drop schema command

Click drop now

- ## Glassfish Installation

Install downloaded glassfish 4.1 then go to "%Glassfish directory%/bin", right click asadmin.bat file and select "run as administrator". If you are using UNIX Based OS just execute the "asadmin.sh" file.   Then type start-domain and press enter

- ## Install MySQL Java Connector

The MySQL Java Connector is needed to make the Glassfish Server communicate with the MySQL .copy provided connector into "%Glassfish Folder%/Glassfish/lib".

- ## Connection Pool

Start your browser and go to http://localhost:4848/ ,then go to JDBC -> JDBC Connection pool

(NOTICE : DELETE EVERY OTHER PROPERTY NOT NAMED IN THIS GUIDE)

You are now ready to create JDBC Connection Pools and JDBC Resources.

*Creating a Connection Pool*

1. In the GlassFish Administration Console, using the navigation tree navigate to **Resources**, **JDBC**, **Connection Pools**.

2. In the **JDBC Connection Pools** frame click New. You will enter a two step wizard.

3. In the **Name** field under **General Settings** enter the name for the connection pool, for example enter MySQLConnPool.

4. In the **Resource Type** field, select javax.sql.DataSource from the drop-down listbox.

5. In the **Database Vendor** field, select MySQL from the drop-down listbox. Click Next to go to the next page of the wizard.

6. You can accept the default settings for General Settings, Pool Settings and Transactions for this example. Scroll down to Additional Properties.

7. In Additional Properties you will need to ensure the following properties are set:

   - *ServerName* - The server to connect to. For local testing this will be localhost.

   - *User* - The user name with which to connect to MySQL.

   - *Password* - The corresponding password for the user.

   - *DatabaseName* - The database to connect to, for example the sample MySQL database World.

8. Click Finish to exit the wizard. You will be taken to the **JDBC Connection Pools** page where all current connection pools, including the one you just created, will be displayed.

9. In the **JDBC Connection Pools** frame click on the connection pool you just created. Here, you can review and edit information about the connection pool. Because Connector/J does not support optimized validation queries, go to the **Advanced** tab, and under Connection Validation, configure the following settings:

   - *Connection Validation* - select **Required**.

   - *Validation Method* - select **table** from the drop-down menu.

   - *Table Name* - enter DUAL.

10. To test your connection pool click the Ping button at the top of the frame. A message will be displayed confirming correct operation or otherwise. If an error message is received recheck the previous steps, and ensure that MySQL Connector/J has been correctly copied into the previously specified location.

**!PLEASE READ: FOR RESOURCE NAME USE "jdbc/mydb"!**

Now that you have created a connection pool you will also need to create a JDBC Resource (data source) for use by your application.

*Creating a JDBC Resource*

Your Java application will usually reference a data source object to establish a connection with the database. This needs to be created first using the following procedure.

- Using the navigation tree in the GlassFish Administration Console, navigate to **Resources**, **JDBC**, **JDBC Resources**. A list of resources will be displayed in the **JDBC Resources** frame.
- Click New. The **New JDBC Resource** frame will be displayed.
- In the **JNDI Name** field, enter the JNDI name that will be used to access this resource, for example enter jdbc/MySQLDataSource.
- In the **Pool Name** field, select a connection pool you want this resource to use from the drop-down listbox.
- Optionally, you can enter a description into the **Description** field.
- Additional properties can be added if required.
- Click OK to create the new JDBC resource. The **JDBC Resources** frame will list all available JDBC Resources.

## • Jdbc Realm

In Glassfish go to Configuration -> server-config -> Security -> Realms -> NEW and copy this configuration

NOTICE: Use the realm name provided

**Realm Name:** jdbcRealmProject
**Class Name:** com.sun.enterprise.security.auth.realm.jdbc.JDBCRealm

**Properties specific to this Class**      Fill the fields as the slide

**JAAS Context:** * jdbcRealm
Identifier for the login module to use for this realm

**JNDI:** * jdbc/mydb
JNDI name of the JDBC resource used by this realm

**User Table:** * users
Name of the database table that contains the list of authorized

**User Name Column:** * email
Name of the column in the user table that contains the list of u

**Password Column:** * password
Name of the column in the user table that contains the user pa

**Group Table:** * users
Name of the database table that contains the list of groups for

**Group Table User Name Column:** email
Name of the column in the user group table that contains the I

**Group Name Column:** * groupname
Name of the column in the group table that contains the list of

**Password Encryption Algorithm:** * SHA-256
This denotes the algorithm for encrypting the passwords in the

**Assign Groups:**
Comma-separated list of group names

**Database User:**
Specify the database user name in the realm instead of the JE

**Database Password:**
Specify the database password in the realm instead of the JD

**Digest Algorithm:**
Digest algorithm (default is SHA-256); note that the default wa

**Encoding:**
Encoding (allowed values are Hex and Base64)

**Charset:** UTF-8
Character set for the digest algorithm

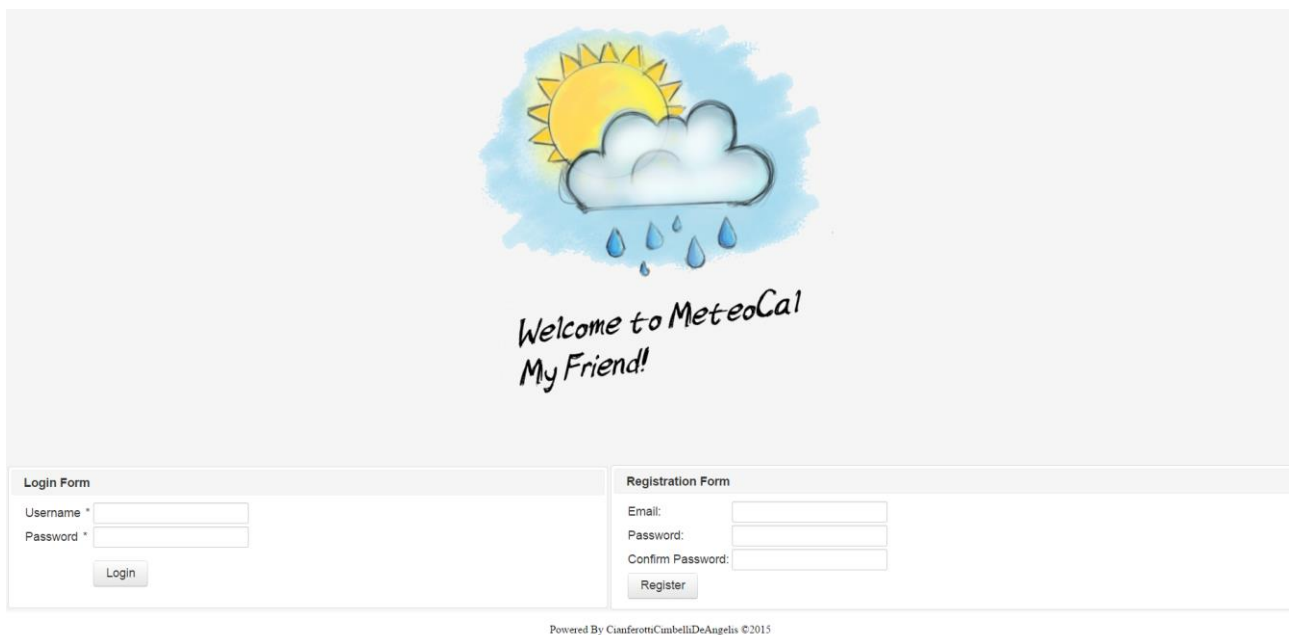- RESTART GLASSFISH with "restart-domain" command

- Final Deployment

Download the "meteocal.war" file from here and go to http://localhost:4848/ to access the Glassfish Server Admin Console and click on "Deploy an Application", select the war file just downloaded

- RESTART GLASSFISH with "restart-domain" command

- Application Start

go to http://localhost:4848/ , go to application , select the deployment then click "launch".

In the address bar of your browser type http://localhost:8080/MeteoCalv1" and enjoy.

You can also use netbeans IDE and clone project from our Repository.



FOR EVERY DOUBT OR PROBLEM WITH CONFIGURATION PLEASE CONTACT US

Thanks,

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