Assignment 1 Setup Instructions

Requirements:

a. Java JDK version 8 OR 11. If you are using a VM, Java does not come installed.
b. Apache Netbeans:
   https://netbeans.apache.org/download/nb125/nb125.html
c. MySQL Server 8:
   https://dev.mysql.com/downloads/mysql/8.0.html
d. JDBC Connector J (jar file) version 8.0.26:
   https://downloads.mysql.com/archives/c-j/
   Note: Choose the "Platform Independent" zip archive.
e. Glassfish Server 5.0 (Full Platform version):
   https://javaee.github.io/glassfish/download
f. For best results, use Mozilla Firefox as the default browser.

INSTALLATION

1. Install JDK or ensure you have JDK 8 or 11 installed.
2. Install MySQL server - install "server only" - use the following for admin credentials: username: root and password: root.
3. Install Netbeans.

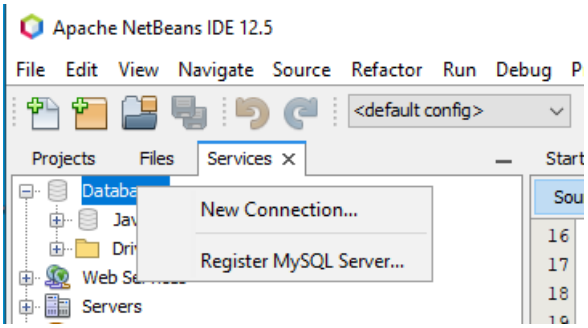
Open Project

- Download *the assignment* source code from Moodle and unzip.
- Start Netbeans.
- Open the project in Netbeans.

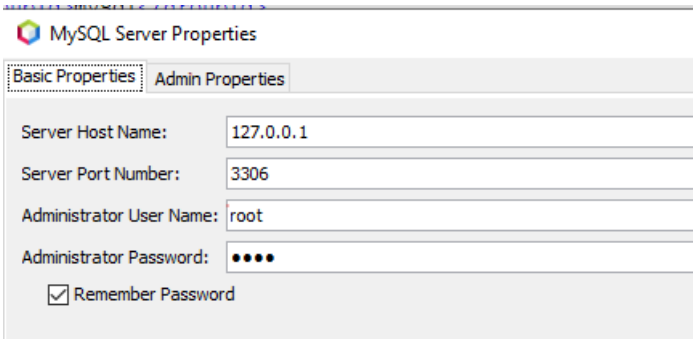
NETBEANS CONFIGURATION

Confgure DB connection

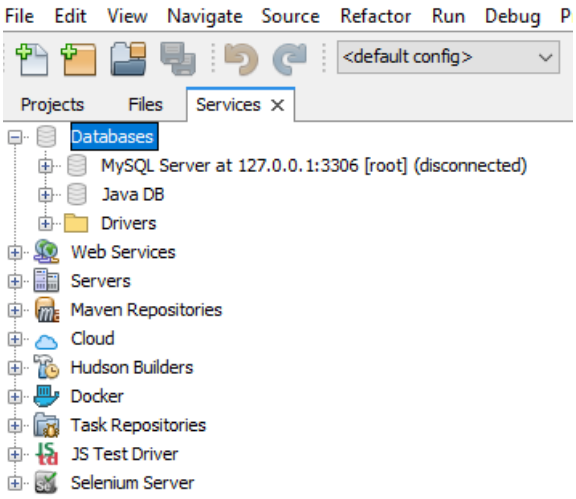
In the left-hand pane, go to Services > Right-click Databases and choose "Register MySQL":



Ensure your basic properties config. looks like the one below:



The admin properties can be left at their default values.

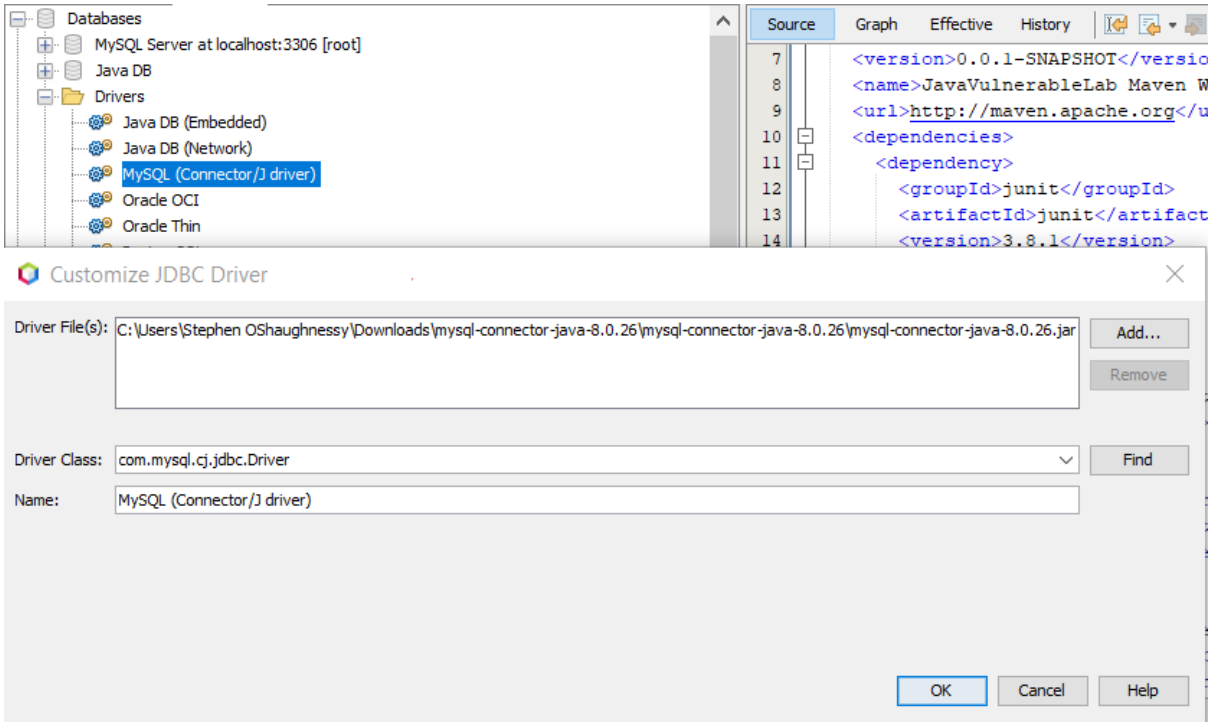


Right-click on the "MySQL Server at.." node and choose "connect".

Adding the JDBC Driver

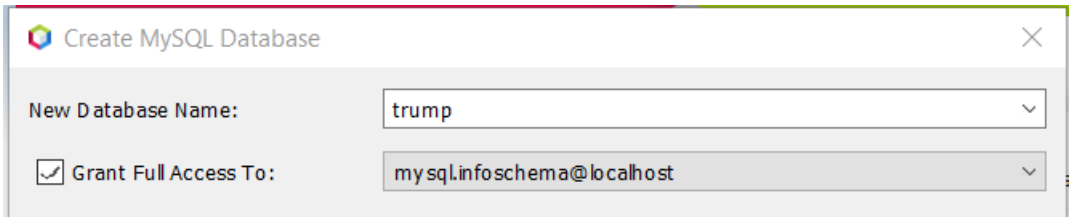
- Expand the "Drivers" node and right-click the MySQL (Connector J Driver) node. Choose "Customize".

- Click on "Add" and attach the Connector /J jar file you downloaded earlier:

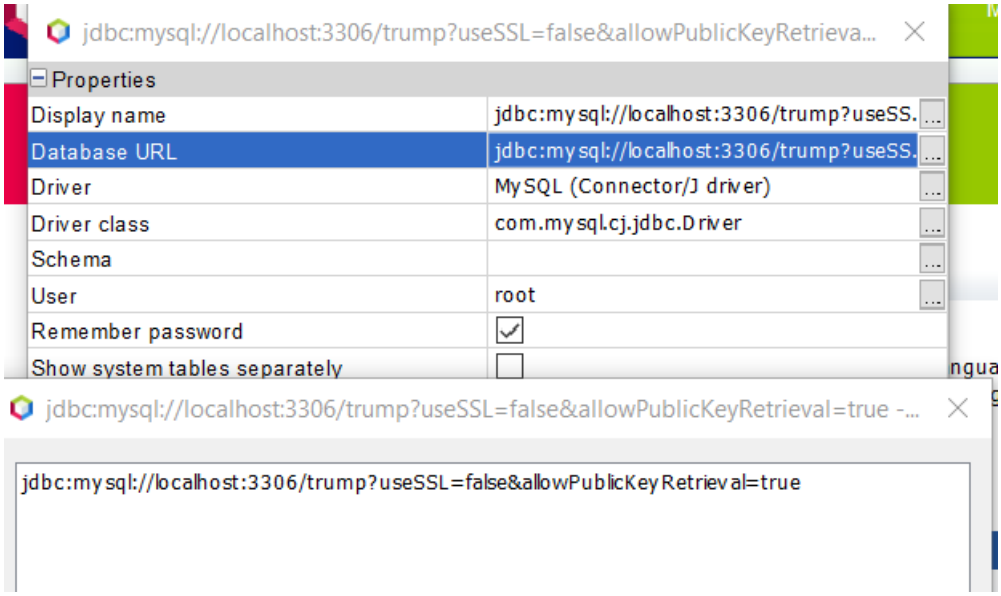


Create the Database and Connection

- Right-click on the "MySQL Server at Localhost.." node and choose "Create Database".
- Create a database called "trump" as below:



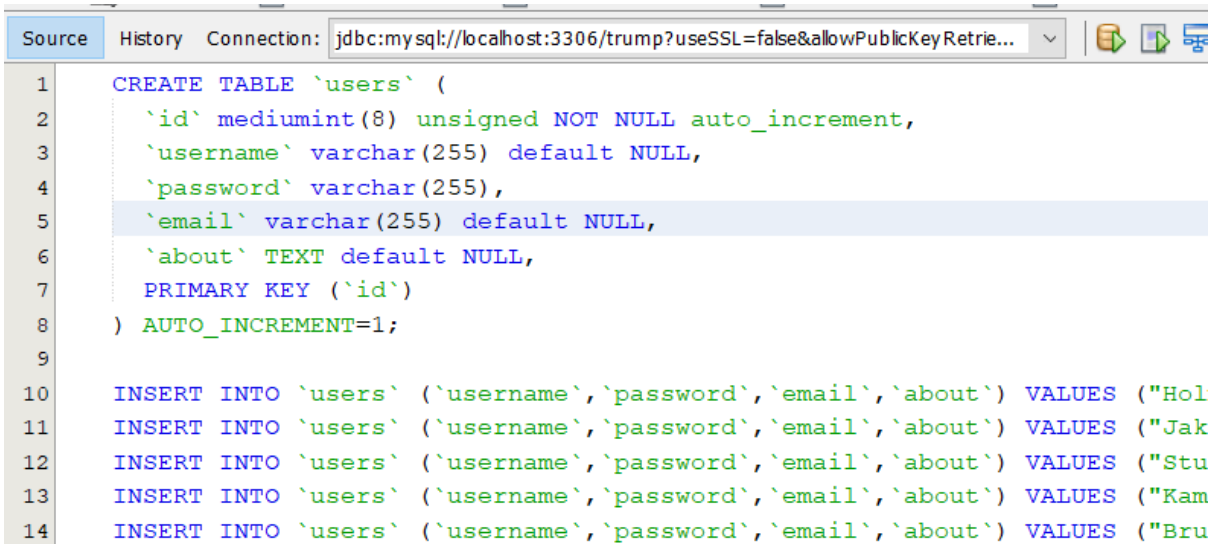
- This will create a JDBC connection, which will be something like:
- **jdbc:mysql://localhost:3306/trump?zeroDateTimeBehavior=CONVERT_TO_NULL [root on Default schema]**
- Right-click on this node and choose "Disconnect".
- Right-click the same node again, this time choosing "Customize".
- Expand the Database URL attribute by clicking the … on the right-hand side of the pane. Change the URL to the one in the screenshot below and click ok:



- Right-click the node again and connect.

Creating and populating the Database Tables

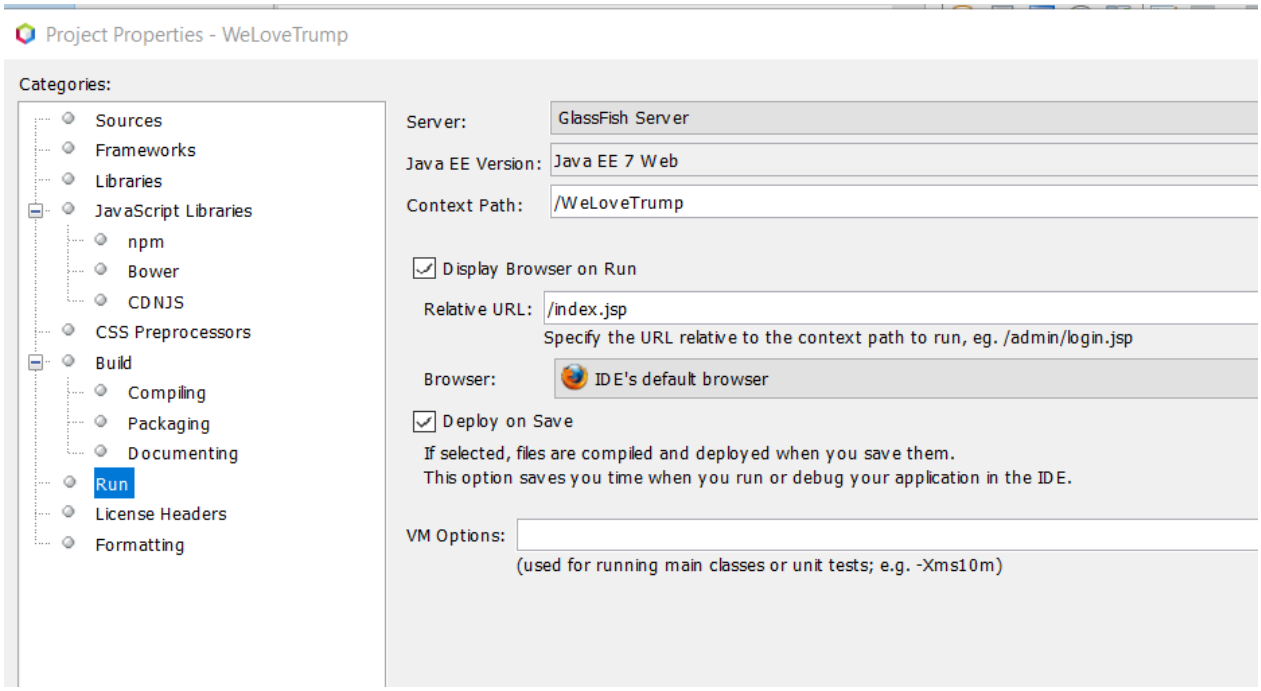
1. Go to *file > open file..* and navigate to the trump.sql file that I included in the zipped application folder. The file will open in Netbeans' SQL editor. Choose the trump connection you made in the previous step from the dropdown list (see below).



2. Execute the SQL script (icon to the right of the dropdown list). This will create and populate the tables required for the assignment.

Adding the Server

- We'll now connect the Glassfish Server to contain our application. In Netbeans go to Tools > Servers > Add Server > GlassFish Server.
- Click next for all default settings. Go to the Services tab and expand the Servers node.
- Right-click on the Glassfish node and make sure the server has started.
- Click on the Projects tab, right-click the root node and choose properties.
- Under the run Tab, add the Glassfish server, if it hasn't already been added:



Running the Application

1. Go to the projects tab, right-click the project and choose "clean & build" (also shift f11).
2. Run the project.

(NB: make sure MySQL server/ Glassfish are running in the services tab in Netbeans prior to running the project)
